"Click to Pick the Groceries You Need": A Study of Top Indian E-grocery Platforms and Consumer Preferences Before, During, and After the Pandemic

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Abstract

The paper's primary objectives are to examine how consumer preferences for e-grocery websites mainly Bigbasket, Grofers, Reliance Fresh/JioMart, and Amazon Pantry among others changed before, during, and after the pandemic, as well as the change in the mentioned websites' cash flows and market distribution during this time. It also analyses whether the findings indicate a promising future for such platforms. A questionnaire was constructed and distributed to the online grocery shoppers in Rohtak and Delhi through snowballing techniques and the obtained data were subjected to factor analysis using SPSS. Customers' demographic profiles, online grocery shopping attitudes, buying frequency, monthly expenditure, time spent, product choice, website preference combined and location-based, and future attitudes toward e-grocery shopping are all part of the study. As a result, these studies, taken together reveal the factors that influence consumers' choices for e-grocery platforms, as well as whether these platforms have an optimistic future.

Keywords

Online grocery shopping, Indian websites, Pandemic, Consumer preferences, Delhi, Rohtak, and Factor analysis.

1. Introduction

Grocery shopping is a fundamental part of daily life, and choosing the appropriate grocery is just as important as choosing the appropriate place to buy it. When it comes to grocery shopping in India, consumers have a variety of options, ranging from a local Kirana store in the neighbourhood to grocery stores in malls to large e-platforms. Although during the global pandemic, these alternatives were limited to a single option, with the existing and developing e-platforms for grocery shopping, consumers have an array of choices just a click away when it comes to addressing their grocery requirements. People are even more cognizant of online grocery shopping as a result than they were previously. Indian consumers have been offered numerous options to choose from when it comes to e-grocery shopping. "Major Indian online grocery retailers include Amazon India, BigBasket, Grofers, Jio Reliance, and Flipkart, along with emerging retailers such as More, DMart, Nature’s Basket, Milk Basket, and Easy Day", (USDA Report, 2021). Some of these platforms were being used by Indian consumers long before the outbreak, and their use has grown throughout the pandemic. This was not the case in India before the pandemic as concluded by (Jayshree, 2017), “Grocery shopping will reach maturity and saturation in near future, but we can’t see the rise of grocery e-commerce models for a country like India, for a demise of brick-and-mortar supermarkets, but reconfigure the role of the grocery store for the digital food.” Initially, people were more concerned to identify online shopping websites for various products like clothes, make-up, electronics, etc., but the pandemic made them aware of other possibilities like grocery shopping by online means which were not much recognized by them earlier. As a result, “India's online grocery market grew by 80 percent to $2.66 billion in 2020, largely as a result of Covid-19 and the ensuing lockdown. It is predicted to grow exponentially over the following few years as a result of growing internet connectivity and escalating consumer demand for convenience, value, safety/hygiene, ease of payment, and a wide range of products.” (USDA Report, 2021). As the three phases of the pandemic-before, during, and after-have shown a lot of alterations in the lives of customers, them being aware of and welcoming to online grocery websites now is a start that brings out the opportunity for both already established brands in the business to up their game and for new ones to enter a productive market.

2. Objectives of the Study

The objectives of this research are twofold:

2.1 To determine the cash flows, market distribution, and future scope of BigBasket, Grofers, Reliance Fresh/JioMart, and Amazon Pantry before, during, and after the pandemic.

2.2 To analyse the factors that influenced customers' decisions to visit the aforementioned websites before, during, and after the pandemic.

3. Problem Statement & Scope of Study

With the epidemic, online e-grocery websites have seen a significant productivity improvement. As there was a significant increase in the sales of e-grocery websites during the pandemic compared to before it, consumers' decision to use these websites after the pandemic is somewhat uncertain. These considerations raise the following inquiries: Will customers back out, or will they continue to fulfil their grocery requirements online? What considerations prompted people to choose a specific website for grocery shopping before, during, and after the pandemic? Which products were purchased the most during the three stages of the pandemic—before, during, and after? What do consumers expect from the online grocery industry in the future? What are the prospects for the e-grocery sector in the future? In light of the foregoing, it is critical to comprehend customer choices about e-grocery websites before, during, and after the pandemic, as well as to analyse the productivity of these websites throughout the same period. This is critical in determining whether the future of the e-grocery market is bright or bleak. As a result of the global pandemic, this study will examine several factors that influence consumers' preferences for online grocery shopping websites (BigBasket, Grofers, Reliance Fresh/JioMart, Amazon Pantry, and Others) in Delhi and Rohtak before, during, and after the pandemic. Furthermore, the study will analyse the cash flows and market distribution of the aforementioned as well as emerging e-grocery platforms to assess their financial position and growth before, during, and after the pandemic to estimate the websites' future situation and ascertain whether the existing and upcoming e-grocery websites future is prospering in this industry or not.

4. Review of the Literature

According to (Yadav, 2021), "It is evident that consumers as well as the e-retailers all faced setbacks in some or the other way. However, Covid-19 became the new norm, more and more people are no more hesitant in buying their groceries from their favourites e-retailers." The study analyses data from 150 respondents in Delhi NCR, to conclude that Bigbasket was the most preferred website during the pandemic. However, this may not be the case if the website does not reach consumers in other minor cities. (Grashuis, Skevas and Segovia 2020), did a survey of 900 grocery shoppers in the United States to study the preferences of grocery shopping during the Covid-19 Pandemic and concluded that an increase in cases and fear of the virus affect consumers' decision to shop in-stores? However, the study limits its findings based on the increasing, constant, and decreasing number of Covid-19 cases and does not involve additional factors that can influence buying grocery decisions.

(Kaur and Shukla, 2017), in their study analysed various factors that can influence the attitude of consumers to do online grocery shopping. The important implication of the study was that Indian grocery retailers need to ensure that websites developed for them should be useful and easy to use. According to

(Saleem, Khan, and others 2018), the 4 major primary factors to ascertain the attitude of consumers towards online grocery, shopping choices are perception, awareness, readiness, and willingness. Among these, they included other individual factors that influence buying groceries online and factors that make consumers avoid online grocery shopping. They concluded that the next step for online grocery shopping platforms is to understand how relevant their offerings are to the audience. (Li and Ohlson, 2017), concluded in their study to investigate the factors that influence shopping for groceries online v/s offline product quality, time-saving, and offers/discounts by websites to lower prices influence the consumers to buy online. Further, they added that dry groceries are likely to purchase more online compared to fresh groceries. (Hand, Riley, Harris, Rettie, and Singh, 2009), in their study comprehended the triggers that influence online grocery shopping and found that both the qualitative and quantitative data led to the importance of situational factors (having a baby or having health problems) being the main trigger for consumers to buy groceries online and reduced online shopping once the initial trigger disappeared or they experienced a problem with service. (Budhiraja and Mittal, 2016), concluded in their study that the main reason to buy groceries online included saving time and effort, quality of products, and the option of replacement. In addition to this, they concluded that the popularity of buying online groceries was mainly among the service profession and working women. (Rajesh, 2019), concluded in her study that, "Study shows that product descriptions, delivery, and replacement of products and product choice & availability online were the major factors for online shopping." (A.V. and Nagendra, 2016), in their study included various factors discovered that there is no substantial influence of return policy on consumer attitudes regarding online grocery shopping, and that website design has no favourable impact on people shopping for groceries online. Furthermore, they concluded that females between the ages of 39 and 45, undergraduates, and employed professionals constitute the majority of those who buy groceries online. (Kashyap, 2020) in her study to identify whether the consumers will continue shopping their groceries, online post-pandemic concluded that 95 percent of the respondents agreed to shop online favouring 2 factors accessibility and time efficiency and do not consider the option of return/exchange, price, and quality of products that important. (Chandani and Trivedi, 2021) their study about grocery shopping preferences in the post-covid world concluded that convenience seems to be the primary reason for a customer to opt for online shopping of groceries and physical inspection of products impacted this decision and led them to offline stores. The study also identified that sales of grocery sites like Grofers and BigBasket increased during the pandemic and aggregators like Zomato, Swiggy and JioMart joined the trend of delivering groceries. (Tyrväinen and Karjaluoto, 2022) in their study of e-grocery shopping and the impact of Covid-19 on consumers' intentions to buy groceries online reveals a rise in online grocery buying throughout the pandemic. However, all these studies do not identify the preferred e-grocery website by the consumers and whether the e-grocery market will bloom in the future.

5. Research Methodology

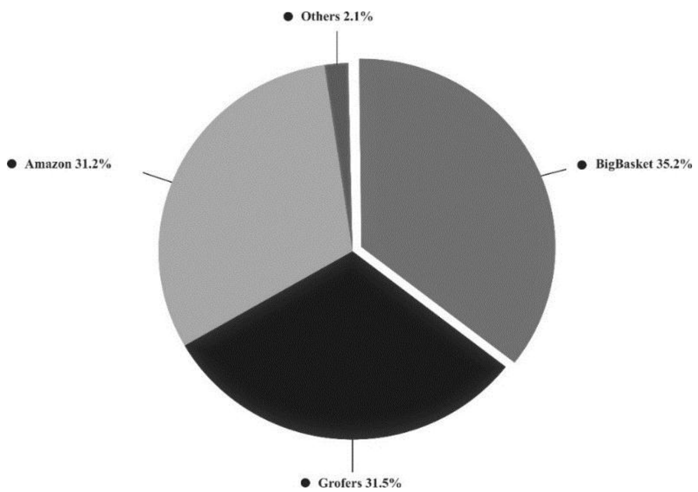
The study employs both qualitative and quantitative methods. Data on E-grocery website revenues, and market share during specific periods were gathered online. Data regarding consumer preferences were gathered by providing a questionnaire to online grocery shoppers in Delhi and Rohtak, combining convenience and snowball sampling. Multiple-choice questions were asked in the questionnaire to measure the fundamental information regarding their purchase pattern, preference for websites, and various grocery products before, during, and after the epidemic, and a 3-point Likert scale was used to measure the factors influencing consumers' choice of a certain grocery website. Within the timeframe, 103 respondents completed questionnaires, and their responses were analysed using SPSS software and interpreted in tables, and figures and Mean and Standard Deviations were used to determine significant differences in various individual factors in choosing a particular website and their future considerations about online grocery shopping.

6. E-grocery Websites Revenues, Market Share, and Future

Table 1: E-grocery Websites Revenue, Expenses, Losses, and Future Aims

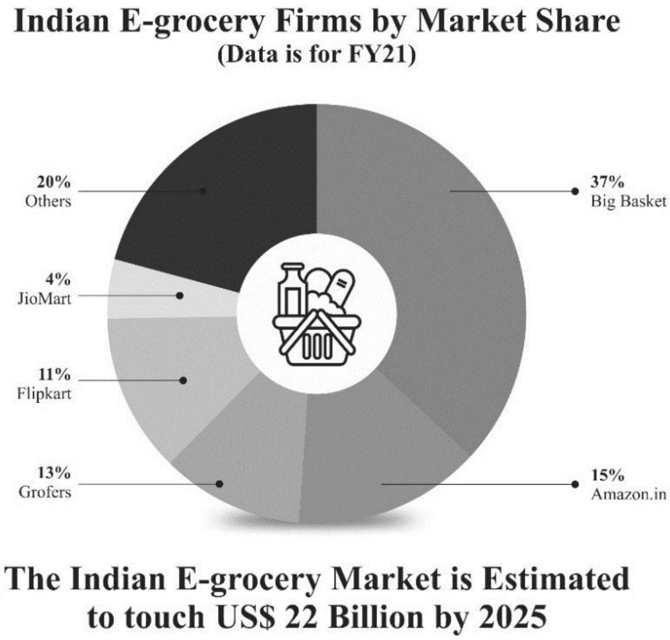
Particulars	Bigbasket	Grofers	Amazon Pantry	Reliance Fresh/Jio Mart
Sales	36% increase in sales from 2019-2020 (Bhalla, 2021).	84% increase in revenue from 2019-2020 (Bhalla, 2021).	414% increase in operating revenue from 2019-2020	• In 2014, a new website called "RelianceFreshDirect.com" was launched to deliver goods to customers' homes (Anand, 2014). • Following the global pandemic and shifting consumer demands, Reliance Retail launched JioMart in 2020. JioMart claimed to provide free
Expenses	31% increase from 2019-2020 (Bhalla, 2021).	53% increase from 2019-2020 (Bhalla, 2021).	281% increase in total expenses from 2019-2020	
Losses	INR 709.9 Cr. loss in 2020 from INR 562.6 Cr. in 2019 (Bhalla, 2021).	42% increase from 2019-2020 (Bhalla, 2021).	131% increase in total loss from 2019-2020	

Future/ Results	• Company increased by 80% in 2021 compared to 40-45% before pandemic (Bhalla, 2021). • TATA group has expressed interest in buying the company (Bhalla, 2021). • As a result, the company has not only begun but will also be moving forward in a positive direction.	• Grofers will now be operated as Blinkit with a new goal statement- instant commerce indistinguishable from magic. • Grofers grew in popularity as a result of the pandemic and recently was backed by Zomato. As a result, Grofers is stepping up its game and is poised to achieve some excellent goals in the future (Business Insider India, 2021).	• As the Retail unit does not give separate break-ups for grocery sales, the five-fold increase in the Operating revenue of Amazon’s Food Retail unit in FY 2020 tells that the grocery business is likely to have grown at a similar pace (Vardhan and Tyagi, 2021). • Amazon pantry as a part of Amazon having business over 300 cities across India have gained popularity during the pandemic and ensures a bright future (Singh 2020).	home delivery, no minimum purchase, and rapid delivery in over 200 Indian cities (Shubham, 2021). • In FY 2022 Reliance Retail's consolidated sales was $1, 99,704 crores and its net profit was $7,055 crores (FORTUNEINDIA.COM, 2022).



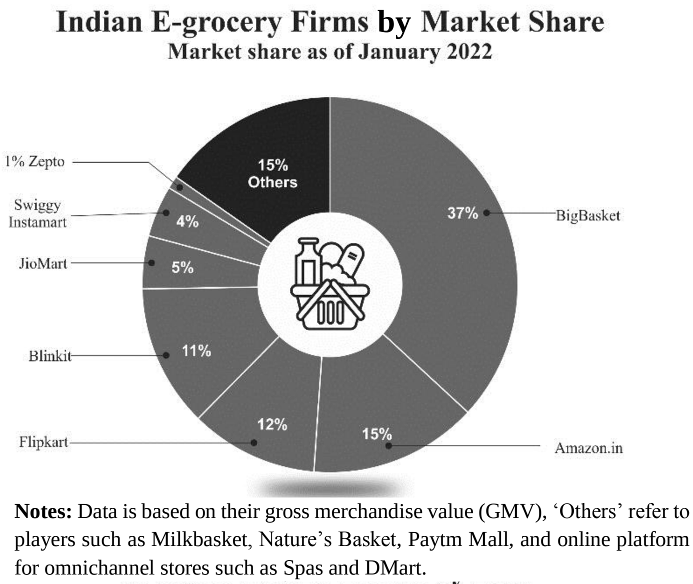
Source: Statista Research Department [21]

Figure 1: Market Share of E-grocery Platforms across India in 2019



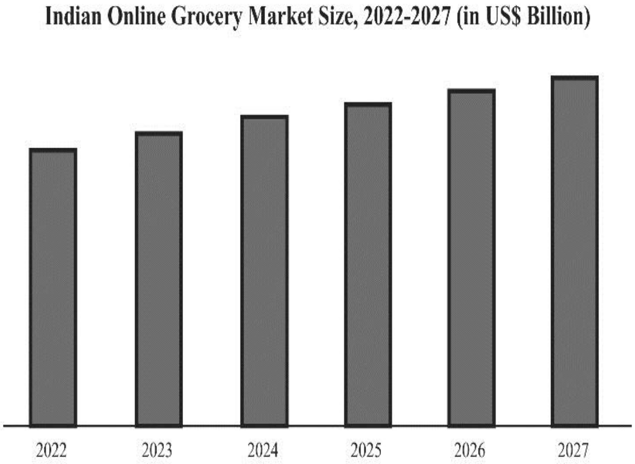
Source: PGA Labs – the market research arm of Praxis Global Alliance [6]

Figure 2: Market Share of E-grocery Platforms across India in 2021



Source: PGS Labs Competitive Intelligence [14]

Figure 3: Market Share of E-grocery Platforms across India in 2022



Source: www.imarcgroup.com [9]

Figure 4: Future Market Size of E-grocery Platforms

7. Market Share Analysis and Future Scope

Figure 1 illustrates the distribution of e-grocery platforms in 2019, before the pandemic, with Bigbasket leading the way, followed by Grofers, Amazon, and Others. Figure 2 illustrates the market share of e-grocery platforms in 2021 when the epidemic was in full swing. Bigbasket was still in first place, followed by Amazon and Grofers. Additionally, several new players, such as Flipkart and JioMart, were added to the market share. Figure 3 shows the market share of e-grocery platforms in 2022 after the pandemic has passed. BigBasket continues to be the most popular, followed by Amazon and Flipkart, Blinkit (the new name for Grofers), JioMart, Swiggy Instamart, Zepto, and many Others. Figure 4 depicts the e-grocery market's future from 2022 to 2027.

According to secondary statistics for e-grocery platforms acquired from numerous internet sources, established companies have a bright future since, despite losses, sales have increased, and new players joining the field are also vying for customers. As a result, the e-grocery industry appears to be rapidly expanding to ensure a bright future.

8. Demographic Data Analysis and Interpretation

Table 2: Demographic Profile on Online Grocery Shopping

Demographic Variables		N	%
Age Group	15-24	27	26
	25-34	46	45
	35-44	23	22
	45-54	4	4
	55 & above	3	3
	Total	**103**	**100**
Resident of	Delhi	52	51
	Rohtak	51	49
	Total	**103**	**100**
No. of family members	1	2	2
	2	3	3
	3	21	20
	4 or more	77	75
	Total	**103**	**100**
No. of working members	1	40	39
	2	35	34
	3	18	17
	4 or more	10	10
	Total	**103**	**100**

Demographic Variables		**N**	**%**
Family income (Monthly)	Less than 50,000	22	21
	50,000-1,00,000	36	35
	More than 1,00,000	45	44
	Total	**103**	**100**

***Note:** Only those who purchased groceries online responded to the survey, Income is presented in Rupee, Percentage is rounded to the nearest tenth.*

Table 2 displays the demographic characteristics of 103 online grocery shoppers from Delhi and Rohtak. According to the percentage values, respondents in the age group 25-34 are the most likely to buy online groceries 45 percent Table 2 next displays the number of respondents' family members. Out of 103, the findings show that the majority of respondents have 4 or more family members. Table 2 also indicates how many members of the respondent's family work. The case for this variable is exactly contrary to the case for the number of family members, with the highest percentage of working members in the family being 1 (39 percent). And table 2 shows the monthly family income of the respondents. The result shows that 44 percent of the respondents have more than 1, 00,000 monthly family incomes.

9. Online Grocery Shopping Attitude

Frequency of Purchase

Figure 5 presents the frequency with which people bought groceries online before, during, and after the pandemic. In three stages, the findings demonstrate that, while purchasing groceries in 30 days was highest before the epidemic, it fell afterward, and consumers purchased groceries more quickly during and after the pandemic, which is in 15 days.

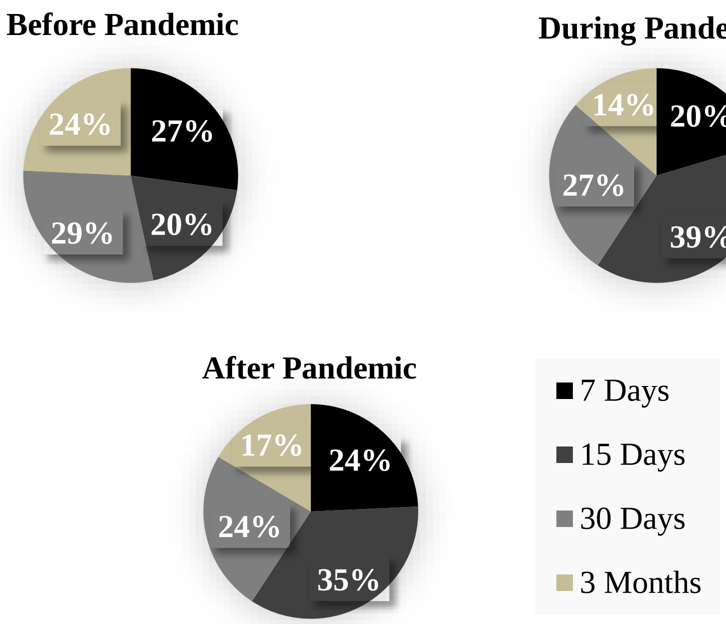


Figure 5: Frequency of Consumers Purchasing Grocery Items Online
***Notes:** Percentage rounded to the nearest tenth.*

10. Monthly Expenditure

Figure 6 presents the monthly expenditure by consumers for online grocery shopping before, during, and after the pandemic. In three stages, the findings show that while spending less than 5,000 was highest before the pandemic, it decreased during the pandemic, whereas other consumer spending climbed throughout the outbreak. Although spending more than 15,000 dollars increased in all cases, the rise was minor. As a result, consumers took the lead, paying 5,000 to 10,000 during and after the pandemic.

11. Time Spent

Figure 7 presents the time spent by consumers buying groceries online before, during, and after the epidemic. In three stages, according to the findings, it can be concluded that even though 1-2 hours saw a good amount of rising from the beginning and spending less than 1 hour saw a great decrease during the pandemic, increasing very little after, it was the most desired period by consumers during all three phases of the pandemic.

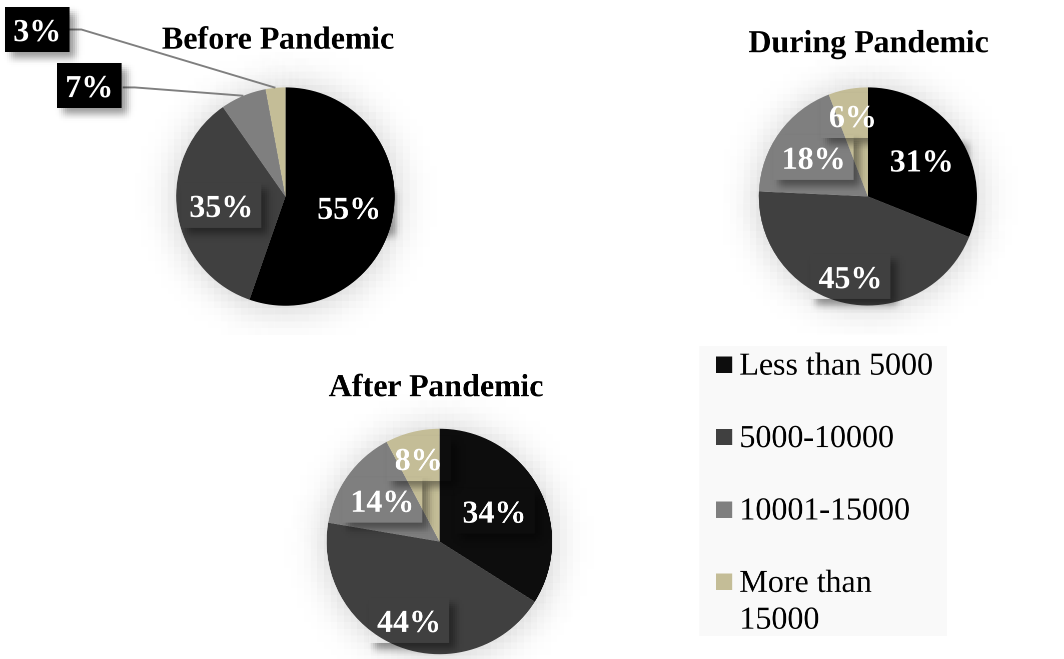


Figure 6: Monthly Expenditure by Consumers for Online Grocery Shopping

***Notes:** Figures are in thousands and the Percentage is rounded to the nearest tenth.*

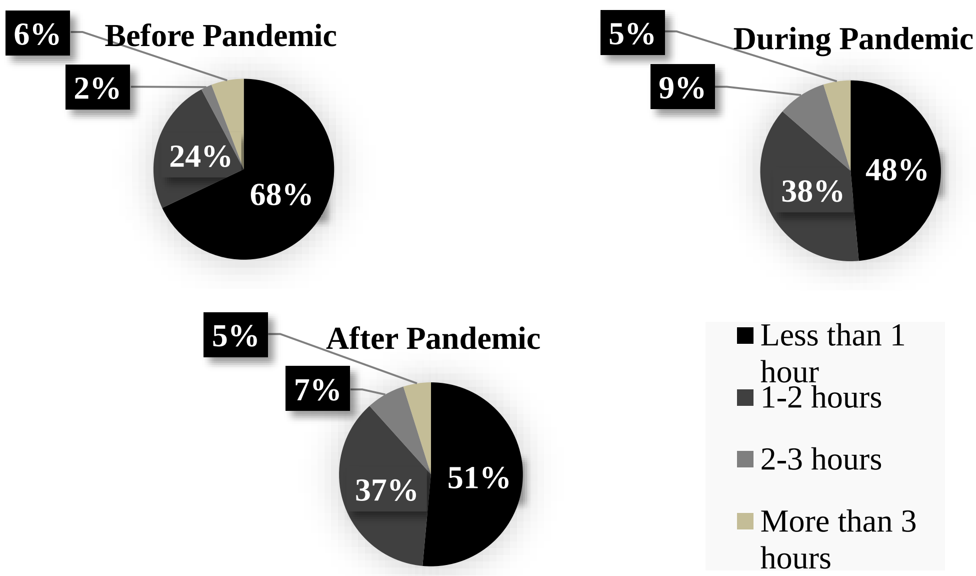


Figure 7: Time Spent by Consumers for Online Grocery Shopping

***Note:** Percentage rounded to the nearest tenth.*

12. Choice of Grocery Products Online

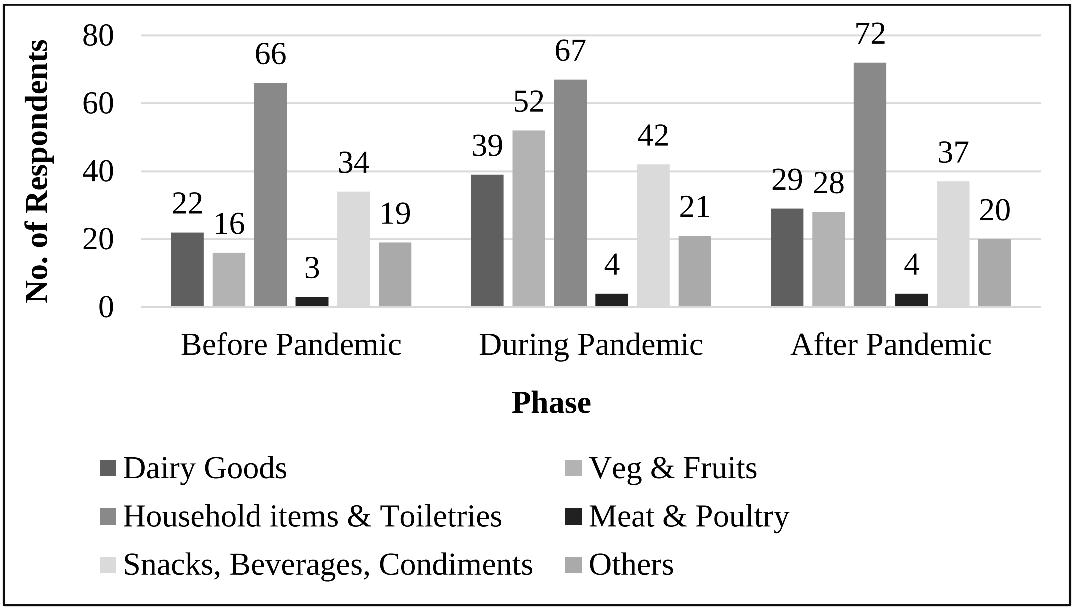


Figure 8:- Choice of Products by Consumer in Online Grocery Shopping
***Note:** Multiple Responses Allowed*

Figure 8 illustrates the frequency with which buyers purchased various grocery products online before, during, and after the epidemic. In each of the three stages of the pandemic, respondents were asked to select their preferred product category. Dairy products, Vegetables and Fruits, Household items and Toiletries, Meat and Poultry, Snacks, Beverages and Condiments, and Others were among the products presented to the respondents. It is observed that:

- During the epidemic, people were more interested in buying all types of products than they were before the pandemic.
- Although demand for dairy products, vegetables and fruits, snacks, beverages and condiments, and others increased during the epidemic, it fell subsequently. However, it was still higher than it had been prior to the pandemic.
- Consumers' preferences for buying household items and toiletries have continued to rise.
- Meat and poultry saw a modest uptick during the pandemic but thereafter remained unchanged.

13. Most Preferred Website for Grocery Shopping

Combined Analysis

Figure 9 illustrates the most preferred website by consumers for their grocery needs among Amazon Pantry, BigBasket, Grofers, Reliance Fresh/JioMart, and Others before, during, and after the pandemic. In the three stages of the pandemic, the results reveal that Reliance Fresh was the most popular before the epidemic, then dropped to second place after Grofers during the outbreak, and then rose to first place again after the pandemic.

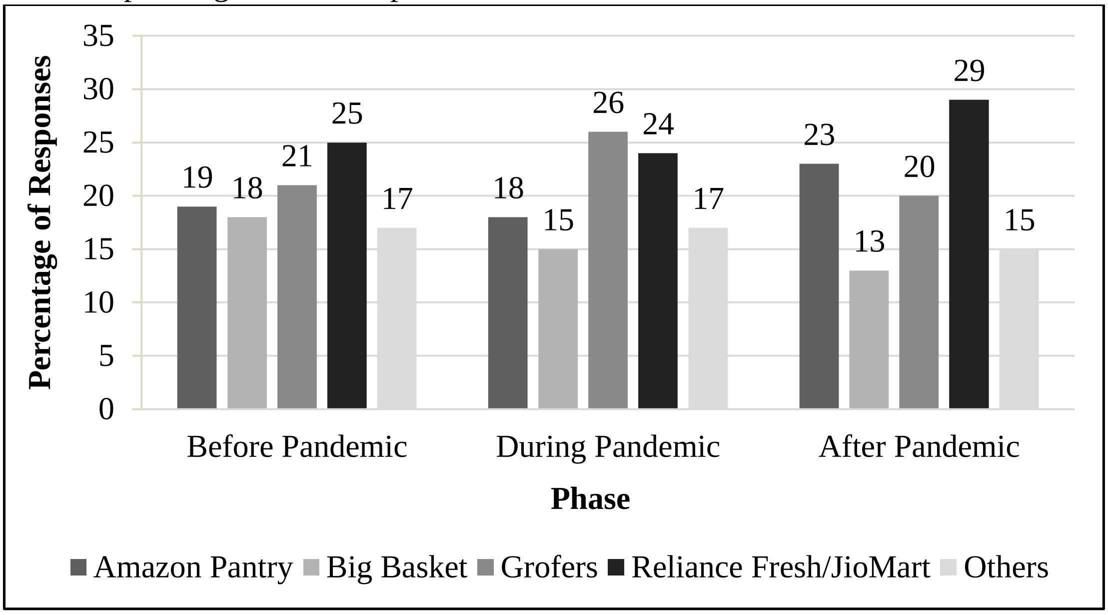


Figure 9: Most Preferred Website by Consumers for Online Grocery Shopping

Notes: *The Percentage is taken of the total responses, that is, 103. Percentage is rounded to the nearest tenth*.

Location Based Analysis

Figures 10 and 11 illustrate respondents' preferences for e-grocery websites in Delhi and Rohtak, separately.

- Residents of Rohtak favoured Amazon Pantry, Reliance Fresh/ JioMart, and Others over Delhi in all scenarios.
- In all circumstances, Delhi residents preferred BigBasket and Grofers to Rohtak residents.

The findings show that when preferences for website choice are analysed based on location, distinct outcomes are obtained. As a result, while buying groceries online, the customer's location is a crucial factor in the choice of a website.

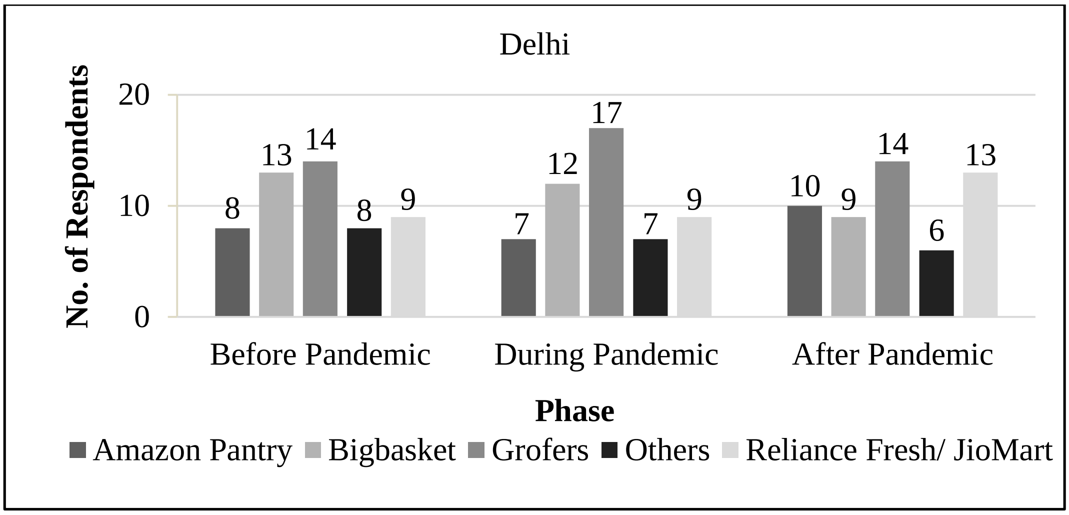


Figure 10: Most Preferred Website by Consumers for Online Grocery Shopping in Delhi

Notes: *The Number of respondents of Delhi are 52 in total.*

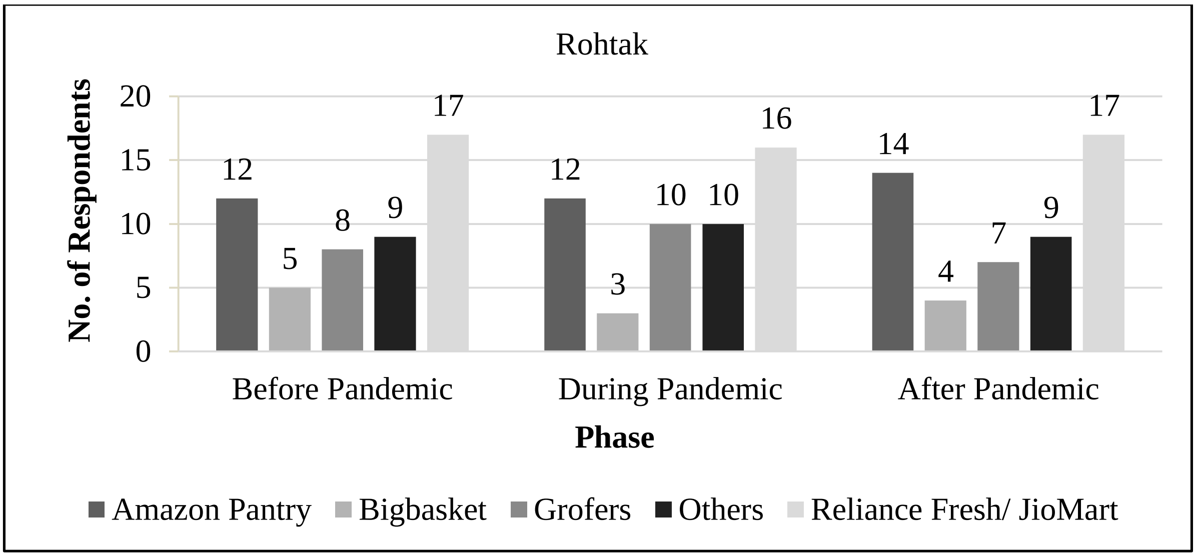


Figure 11: Most Preferred Website by Consumers for Online Grocery Shopping in Rohtak

Notes: *The Number of respondents of Rohtak are 51 in total.*

14. Mean and Standard Deviation of Individual Factors

Table 3: Mean and Standard Deviation of Individual Factors for Choosing a Particular Website

Measurement Factors	Mean	S.D.
User-friendly website	2.55	.573
Variety of products availability	2.49	.575
Pictorial representation of products	2.45	.59
Easy to find products	2.59	.532
Easy ordering process	2.67	.512
Quality of products	2.8	.428
Refund option	2.78	.463
Return of wrongly delivered items	2.78	.441
Safety of personal & payment credentials	2.8	.428
Delivery available to my location	2.8	.428
Out-of-stock products availability as soon as possible	2.76	.431
Free delivery	2.67	.512
Discounts/Offers	2.59	.532
Same-day delivery availability	2.43	.604
Customer-care services	2.76	.474
Tracking of placed orders	2.68	.546
Availability of mobile applications	2.68	.546
The popularity of website	2.38	.673
Positive reviews of website	2.6	.548

**Likert Scale 1 = Not Important, 2 = Neutral, 3 = Very Important*

Table 3 displays the Mean and S.D. of individual factors for selecting an online grocery shopping website. After analysing the data, it was discovered that customers place the most importance on three factors: product quality, security of personal and payment credentials, and delivery to their location (Mean=2.8, S.D.=.428). Aside from that, customers appear to be concerned about incorrectly delivered things being returned (Mean=2.78, S.D.=.441), refund options (Mean=2.78, S.D.=.463), customer-care services (Mean=2.76, S.D.=.474), and out-of-stock products being available as soon as possible (Mean=2.76, S.D.=.431).

Order tracking and availability of mobile applications (Mean=2.68, S.D.=.546), Easy ordering procedure and free delivery (Mean=2.67, S.D.=.512), positive website reviews (Mean=2.6, S.D.=.548) were some issues that consumers were concerned about. Consumers believe the criteria listed above to be considered when choosing a grocery shopping online. Other than that, variables such as easy-to identify necessary items and Discounts/Offers (Mean=2.59, S.D.=.532), user-friendly website (Mean=2.55, S.D.=.573), and product variety (Mean=2.49, S.D.=.575) appear to be fairly essential in customers picking a grocery website to satisfy their grocery demands.

Consumers do not appear to appreciate factors such as product presentation (Mean=2.45, S.D.=.59), same-day delivery availability (Mean=2.43, S.D.=.604), and website popularity (Mean=2.38, S.D.=.673) when shopping for groceries online.

15. Mean and Standard Deviation of Consumer Attitude in Future

Table 4: Consumer Attitude towards Online Grocery Shopping in Future

Preference	Mean	S.D
Prefer to buy grocery items online	2.26	.7
Prefer to change my website on the recommendation of others	2.15	.706
Prefer to try existing websites popular than my choice of a website if in reach	2.42	.603
Prefer to try new websites introduced for online grocery shopping if in reach	2.4	.662

**Likert Scale 1 = Least Likely, 2 = Neutral, 3 = Most Likely*

Table 4 shows the Mean and S.D. of customer preferences for online grocery shopping in the near future. Consumers are more likely to attempt to buy from existing websites that are more popular than their current preference if they are within reach (Mean=2.42, S.D.=.603). The majority of respondents (Mean=2.4, S.D.=.662) would test new grocery websites to fulfil their grocery needs if they were within their reach and would prefer to buy groceries online in the future (Mean=2.26, S.D.=.7). The majority of respondents are undecided about changing their website choice based on recommendations from others (Mean=2.15, S.D.=.706). Given customer preferences in the future and their willingness to try new platforms if delivery is available to their location, existing and new e-grocery platforms appear to have a promising future.

16. Conclusion and Discussion

Consumers in India have changed their preferences as the world changes, starting with local Kirana stores and progressing to e-grocery websites. Pandemic have played a significant role in recent times, which is why this study's findings are based on three phases viz. before, during, and after the pandemic. First, an examination of e-grocery websites revealed that BigBasket, which had suffered a loss prior to the pandemic, had a positive impact on its sales during the pandemic. Grofers, which had suffered a loss prior to the pandemic, had gained in sales and popularity during the pandemic. Amazon Pantry, which is part of Amazon Retail, made minor profits and can be considered a competitor to other popular brands, and Reliance Retail can be considered as having observed changing preferences and acting accordingly, as seen by Reliance Fresh being online well before the pandemic and the introduction of JioMart with large claims during the outbreak. Understanding the functions of the aforementioned e-grocery platforms in the e-grocery sector independently, it can be inferred that with the growing need for e-platforms, both existing and future entrants will be a part of a booming sector. This is supported by data gathered on the market distribution of these e-grocery platforms, which shows how much the e-grocery sector has developed between 2019 and 2022 and promises to do more.

Secondly, an examination of demographic data revealed that the most attentive age group to shop for groceries online is 25-34, the majority of respondents have four or more family members, majority of working members are one, and the average monthly income of the family members are more than 1, 00,000. This concludes that the number of family members has the least influence on online grocery shopping selections when compared to working members and monthly income. The study's findings on consumers' grocery shopping attitudes show that when comparing before, during, and after pandemic periods, the frequency of buying groceries decreased from 30 days to 15 days, and the majority of consumers preferred to pay 5,000-10,000 while spending less than 1 hour for buying grocery products online across all three periods. The study also found that during and after the pandemic, there was a considerable increase in consumer purchasing behaviour for products such as dairy goods, vegetables and fruits, snacks, beverages, and condiments as compared to before the epidemic. Throughout the three periods, products such as home items and toiletries, as well as meat and poultry, showed a modest increase. According to the survey, Reliance Fresh/JioMart was the most favoured website before and after the epidemic, however during the pandemic, Grofers gained the lead, while other e-grocery platforms evaluated in the study were in tight competition. The outcomes of the second examination of Delhi and Rohtak respondents for their favourite websites were different, indicating that location plays a significant impact on e-grocery platform preference. When researching the specific criteria that influence website selection, the top three were product quality, security of personal and payment credentials, and delivery to selected locations. Finally, the future attitudes of customers toward online grocery shopping were researched, and it was discovered that they are more inclined to test current popular websites other than their preferred ones, as well as new websites introduced in the sector if they are within their reach. All of the paper's results, including research on customer preferences for online grocery shopping websites and e-grocery platforms present situation analysis, indicating that the e-grocery industry will be thriving in the future for both existing and upcoming e-grocery platforms.

17. Future Scope

Consideration of only two cities for consumer responses with a sample size of 103 stands as one of the major limitations of this study. The inclusion of more cities and respondents may differ from the most preferred website by the consumers as location plays a vital role. Also, the factors included in studying the choice of websites are limited, as there can be many other factors that are not included in the study because consumers' preferences and tastes are always changing. The study analyses the overall significance of the three phases- before, during, and after the pandemic and not a detailed study of each period. Considering all limitations, future studies can extend the sample size to more cities and include more individual factors to determine why people opt for a particular website to fulfil their grocery needs.

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