

Convenience Goods Shopping: Kirana Store over e-Grocery post Pandemic

Mr. Mandar Khare¹,
Research Scholar,
Ms. Jyoti Chaudhari, Research Scholar
Dr. C. Sunanda Yadav²,
Research Guide,
Dr. Pranati Tilak³, Dean,
Tilak Maharashtra Vidyapeeth, Pune, Maharashtra, India

ABSTRACT

Convenience goods are daily requirements of households like dairy products, vegetables, fruits, grocery etc which are purchased very frequently. Most of these items are available at next door Kirana store and could be purchased from online grocery shop or e-Grocery shop. Due to internet adaption there is an increase in purchasing these products on e-Grocery. Another reason being the lockdown which was imposed by government of India.

As many customer found it difficult to reach the Kirana store to procure convenience goods, had to buy them from e-Grocery shops. Tech savvy family could adapt to this model very easily and even enjoyed many benefits including price, time convenience etc over local Kirana Store. This model had its own merits and demerits. In this study researchers have attempted to find the preference between Kirana store and e-Grocery specifically post pandemic, as during pandemic there was compulsion to use either due to prevailing challenges. It is important to understand whether consumers have continued the practice of mixed purchase even post pandemic or gone back to Kirana Stores. Researchers have compared the consumers shopping experiences at Kirana store and e-grocery and their preference post lock down. In India e-Grocery is at nascent stage with very few players yet consumers have their choice.

KEYWORDS: Convenience Goods, Kirana Store, e-Grocery shop, Online, Offline, Pandemic

I. INTRODUCTION

Past two years have created history in mankind. While pandemic has thrown some problems, it has also given opportunities. Many industries including retail has seen extreme shift in terms of operations. Though there has been reduction in volume of purchases there is increase in value of the purchase. Uncertainty compelled stocking of goods and were bought by who could afford.

Since pandemic had major concern of spread of disease by coming in contact with people. Hygiene became center stage for all transactions. With evolving environment of internet, e-commerce was already used by

many and pandemic became a necessity as the only means to contact less deliveries. E-grocery was no different. Many well-known brands like amazon, flipkart, Big Basket etc. made a strategic entry and made all efforts to increase the customer base by giving good offers and benefits of buying online over offline stores. Offline stores like Kirana stores also benefited during the pandemic, they did big business in limited time slots. As consumers started stocking goods due to uncertainty of lockdowns, demand for convenience goods surged compared to supply.

Drivers of online shopping after Covid 19 pandemic

Online shopping has given many advantages to consumer like comparing products, convenience of buying, no physical queues at stores, wide range of products as compared to Kirana stores

- **M-Commerce – Smart phones** With smart phone becoming handy it has further gone with ease of operating as well. E-Commerce has completely changed how today consumers want to purchase. Today almost all homes are having smartphones. This has given big boost to the m-commerce that is mobile commerce.
- **Consumer Behavior -** While online shopping is not new now & was there even before pandemic, post pandemic many factors compelled the consumer to continue their buying behavior. Consumer adapted to the new purchasing patterns and these habits got imbibed in few months and continued to some extent. Hence post Covid-19 lockdown it was interesting to find what the current scenario was and whether the traditional offline Kirana store has made a strong come back.
- **Scarcity of products in physical stores -** Due to sudden lock down there was acute shortage of goods at offline stores as supply eroded from manufacturers. Also due to fear of non availability, consumers started over stocking of goods which also made demand supply crisis for some time. Online were able to binge on this and increased their turnover by introducing online grocery shops.
- **Convenience and Time saving -** Due to restricted time for movement was declared by government for shopping from physical stores it became cumbersome for consumers to manage with the given mandates. E-Grocery again proved boon by offering time convenience to consumers.

Many companies also explored the Omni-Channel approach like D-mart where customer can buy online and pick up from offline store of D-Mart. This emerged more during recent time of pandemic in last two years as the demand from customer to have Omni experience increased. As per latest Nielsen report, there is a rapid increase in online demand of India's FMCG goods that increased nearly 50% year-on-year in the March quarter due to shoppers increasingly purchased from e-grocers.

Factors Influencing the Growth of Online Sale of Groceries

1. **No limitation of distance** - With evolution of internet the best gift it has given to seller & buyer in e-commerce stores is limitless reach. One can buy in Kanyakumari from shop at Kashmir. In real sense even with city at times customer might hesitate to travel and shop longer distance shop but in case of online e-Grocery there is no need to think from which warehouse the goods will come as it is limitless. The delivery is at door step.
2. **Branded Products** - Another benefit of e-Grocery is world has come down to sell in a window. Those customers who are more quality cautious and prefer particular brand only. National or international there is no limit for e-Grocery to list them in the bucket.
3. **Better time convenience** - During pandemic it was more significant to realize the consumer that online is only option if someone wants to buy products at any time of the day or night. As for offline shop the time restriction from government made it more significant to realize.
4. **Discounts** - New startups and e-commerce unicorns got backed up with lot of venture capitals to acquire the customer base. Though it can be loss making spree of discounts made common feature of most of the online stores across industries. This eventually benefited customers only.
5. **Pandemic** - There can't be more than pandemic any better influencer for online e-grocery to grow. As countless reasons like touchless deliveries, no ques, time convenience, larger brand availability were few to name which added with pandemic making restrictions for consumer to buy from offline Kirana stores.

Times of India conducted a study recently which revealed that online shopping of groceries will double in this year. Already whopping 76% growth in online shopping observed last year. This has compelled many industry giants to focus on this segment like Grofers, BigBasket, Amazon, flipkart to name the few. At same time food delivery companies like Zomato, swiggy have also started selling grocery online.

Business Models of e-Grocery stores - Prominently there are 4 types of business models in e-grocery on the basis of inventory management.

1. **Inventory Model** - As name suggests in this model e-Grocery store keeps inventory of the goods which are to be supplied and manages. In these category shopper may ship or even engage with third party for shipping the goods depend on further delivery strategy for last mile. As expertise of this model is keeping all perishable and nonperishable inventory up to date and offer to customers just in time is managed with shipping agency.
2. **Multi-Vendor Model** - This model has option to give platform to suppliers to place a shop on the platform crated by the e-Grocery store. Hence e-Grocery platform acts a just providing platform to multiple vendors to display and sell the products to consumers. The role of e-Grocery store is restricted

to make flawless experience for consumer when they use the platform. At same time ensure the enroll of good vendors on platform to attract more and more consumers on the platform.

3. **Last mile Model** - In this category e-Grocery store focus on the delivery of goods to the consumers directly. They ensure the same is picked up from the store and delivered to consumer end to end.
4. **Click and Collect** - New Omni-Channel concepts of offering the offline as well as Online benefits to consumers by this model are abandoned. Stores like D-mart have already started this and they offer consumer to buy online and pick up offline. Recently Jio-Mart is planning to tie up with offline Kiaran store to make them enable with this platform is another way of doing the Omni-Channel approach. This will grow in coming time for sure.

II. RESEARCH METHODOLOGY

Researcher used random sampling technique for the research. Basis literature review questionnaire was prepared & circulated to random consumers. Being the simple topic of Kirana store over e-Grocery almost everyone was connected to the subject. Finding the samples was not that difficult at all. Total 50 samples collected considering the short span of time. While Kirana store purchase & e-Grocery purchase have different reasons for preference & as well may have different reasons for satisfactions. Questionnaire was aimed to find which format of the grocery Kirana store or e-grocery is preferred and more satisfactory post pandemic or post lock downs. Questions relevant to post lockdown could give sense of uninfluenced situation of pandemic at same time to understand does pandemic /lockdown left over the influence on the behavior of the consumer.

Data collected then was tested with help of hypothesis to find the insights of the data.

III. HYPOTHESIS TESTING

Below section deals the testing of hypothesis. The proposed hypothesis of the study has been provided below.

H₀: In post pandemic situation Preference & Satisfaction for Kirana store & e-Grocery are independent of each other

H₁: In post pandemic situation Preference & Satisfaction for Kirana store & e-Grocery are dependent of each other

This hypothesis has been tested by using Chi-Square test as the data generated is dichotomous in nature. Thus, testing an assumption that satisfaction and preference are not related in case of purchasing grocery items in post pandemic situation may provide logical significance to arrive at the desired conclusions. Thus two variables have been used for this purpose, namely; (1) preference for purchase of grocery with options such as

‘E-Grocery (Online)’ and ‘Kirana Store (Offline)”; and (2) satisfaction of purchase with options such as ‘E-Grocery (Online)’ and ‘Kirana Store (Offline)’. The two ways cross table has been provided below.

Table No. 1.9

Distribution of respondents with Preference and Satisfaction of purchasing grocery

Preferred Mode of purchase	Satisfaction of purchase		
	E-Grocery (Online)	Kirana Store (Offline)	Grand Total
e-Grocery (Online)	5	4	9
Kirana Store (Offline)	1	40	41
Grand Total	6	44	50

Above table shows that almost 40 respondents from total 50 respondents are satisfied with Kirana store over e-Grocery. At the same time 41 out of 50 prefer to buy from Kirana store compare to e-Grocery post pandemic/lockdown.

The necessary calculations have been provided below. The calculations of observed frequencies and expected frequencies have been provided with the help of *Table No. 1.10*.

		Satisfaction		Total	
		Kirana Store (Offline)	e-Grocery (Online)		
Preference	Kirana Store (Offline)	Count	40	1	41
		Expected Count	36.1	4.9	41.0
	e-Grocery (Online)	Count	4	5	9
		Expected Count	7.9	1.1	9.0
Total		Count	44	6	50
		Expected Count	44.0	6.0	50.0

The calculations of chi-square test statistics have been provided with the help of *Table No. 1.11*.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	19.718^a	1	.000		
Continuity Correction ^b	15.008	1	.000		

Likelihood Ratio	14.925	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	19.323	1	.000		
N of Valid Cases	50				
a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 1.08.					
b. Computed only for a 2x2 table					

Interpretation: The chi square statistic appears in the Value column of the Chi-Square Tests table immediately to the right of “Pearson Chi-Square”. In case of present hypothesis, the value of the chi square statistic is 19.718. The *p*-value appears in the same row in the “Asymptotic Significance (2-sided)” column (0.000). As software has given the result of *p* value 0.000 which is round off due to calculation it can be assumed that *p* value is even less than 0.001 which is significant. Thus, the null hypothesis may be rejected that asserts the two variables are independent of each other. To put it simply, the result is *significant* – the data suggests that the variables preference and satisfaction are associated with each other. Ultimately it is to be stated that, Kirana Store (offline) is more preferred by the customers that provides higher satisfaction.

IV. FINDINGS

Questionnaire helped to exhibit few more results and findings which are listed below

- 1) Preference for purchase – As seen in the table 82% of the consumers prefer to buy from Kirana store over e-grocery post lockdown/pandemic.

Table No. 1.1

Distribution of respondents according to preference for purchase of grocery products

Row Labels	No. of Respondents	Percentage
e-Grocery (Online)	9	18.00%
Kirana Store (Offline)	41	82.00%
Grand Total	50	100.00%

- 1) Preferred e-Grocery store

While every day new e-Grocery shop is getting opened, researcher had listed prominent 10 e-Grocery shops as preference of choice to consumers. While there was possibility that few consumers at all don't purchase through e-Grocery as well. Considering the results obtained Big Basket emerged as a most preferred e-Grocery shop among consumers to purchase with 36% of consumers voting for same.

Table No. 1.2
Distribution of respondents according to preference online grocery store

Grocery store	No. of Respondents	Percentage
Amazon Pantry	10	20.00%
Big Basket	18	36.00%
DMart	12	24.00%
Flipkart Grocery	1	2.00%
Grofers	2	4.00%
JioMart/Reliance Store	5	10.00%
Nature's Basket	1	2.00%
Spencers	1	2.00%
Grand Total	50	100%

2) Advantages of Kirana store (Offline retail)

Researcher enquired about ranking of advantages for Kirana stores over e-Grocery basis literature review done.

Convenience of time is most advantageous to Kirana store while better visibility along with feel & touch was second most advantage to kirana stores as per cocnsumers. Bargaining option was ranked as 3rd advantage. Impulse shopping was least rank advantage to Kirana store.

Table No. 1.3- Kirana Store- Below Advantages

Sr. No.		Convenience of Time	Better visibility	Bargaining option	Feel & touch	Impulse shopping
1	Rank1(Highest)	32.00%	24.00%	10.00%	30.00%	4.00%
2	Rank 2	18.00%	40.00%	10.00%	32.00%	0.00%
3	Rank 3	18.00%	22.00%	34.00%	10.00%	16.00%
4	Rank 4	8.00%	12.00%	20.00%	26.00%	34.00%
5	Rank 5 (Lowest)	24.00%	2.00%	26.00%	2.00%	46.00%
	Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%

1) Advantages to e-Grocery store

Similar to Kirana store e-Grocery also has some advantages over kirana stores and they were ranked by consumers as below. Though we have seen Kirana store was also most convenient option for consumers when the compare to e-Grocery, the same consumer when is inclined to e-Grocery prefers as most convenient which was natural. Wider choice was ranked 3rd and very close to rank 2 as well. Availability of branded product was chosen as 3rd rank advantage also. There is always hue and cry about discounts by e-commerce over offline stores but it was observed that consumer only ranks 4th or 5th rank for this advantage. One stop shop to a surprise was least ranked in advantage by consumer.

Table No. 1.4- e-Grocery (Online) has below advantages

Sr. No.		Convenience of time	Wider Choice	Branded products	Discount & offers	One stop shop
1	Rank1(Highest)	56.00%	14.00%	10.00%	14.00%	6.00%
2	Rank 2	16.00%	28.00%	28.00%	10.00%	18.00%
3	Rank 3	4.00%	30.00%	36.00%	24.00%	6.00%
4	Rank 4	6.00%	20.00%	18.00%	26.00%	30.00%
5	Rank 5 (Lowest)	18.00%	8.00%	8.00%	26.00%	40.00%
	Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%

2) Post lock down preference to buy grocery

Kirana store with 66% consumer choice remained the preference for buying grocery good.

Table No. 1.5 Post lockdown preference for convenience goods shopping

Row Labels	No. of respondents	Percentage
E-Grocery (Online)	17	34.00%
Kirana Store (Offline)	33	66.00%
Grand Total	50	100.00%

1) Shopping satisfaction of consumer

There can be discounts no discounts or convenient or non-convenient, finally it's important to know which mode of buying most satisfactory for consumer. 88% of consumers voted for Kirana store.

Table No. 1.6 Shopping satisfaction is better at

Row Labels	No. of respondents	Percentage
E-Grocery (Online)	6	12.00%
Kirana Store (Offline)	44	88.00%

Grand Total	50	100.00%
--------------------	-----------	----------------

2) Challenges to buy from Kirana store

Specifically pandemic revealed many challenges to buy the grocery or convenience goods from Kirana store for consumers. When it comes to pandemic, hygiene issue was the concern for consumers followed by limited choice of products when compared to e-Grocery and last not least the waiting time in the que.

Table No. 1.7 Challenges to buy from Kirana store (Offline)

Sr. No.	Row Labels	Hygiene issue	Limited choice of products	Waiting time in Que
1	Rank 1 (Highest)	42.00%	26.00%	32.00%
2	Rank 2	32.00%	42.00%	26.00%
3	Rank 3 (Lowest)	26.00%	32.00%	42.00%
	Grand Total	100.00%	100.00%	100.00%

2) Challenges to buy from e-Grocery

As Kirana store has some dis-advantages similar to that e-Grocery also has some lacuna. Consumers felt that wrong deliveries was among highest rank followed by quality of products as rank 2 and lastly issues of returns was considered as another challenge to consider.

Table No. 1.8 Challenges to buy from e-Grocery store (Online)

S.N,	Row Labels	Wrong deliveries	Quality of the products	Issue of returns
1	Rank 1 (Highest)	34.00%	30.00%	36.00%
2	Rank 2	34.00%	48.00%	18.00%
3	Rank 3 (Lowest)	32.00%	22.00%	46.00%
	Grand Total	100.00%	100.00%	100.00%

V. CONCLUSION

It was observed with the help of questionnaire and further hypothesis testing that Kirana store are more preferred and satisfying over e-Grocery post pandemic or post lockdown. Also it was concluded that preference and satisfaction are dependent of each other. There are few advantages and challenges as well for both Kirana store and e-Grocery observed during survey. These advantages and challenges can be situation oriented as they are more specific towards the post pandemic consideration.

It was noteworthy that e-grocery is growing at good speed and may have given dent to Kirana store to certain extent still Kirana store has a steam which is attracting more consumers towards them.

Researchers has also ranked various advantages and challenges towards Kirana store or e-Grocery which gives certain clarity to analyst on the most preferred reason for Kirana store or e-Grocery and at same time most hindrance for kirana store or e-Grocery.

This study can be useful for understanding of consumer behavior in case of convenience goods which are day to day purchased.

VI. SUGGESTIONS

This study can be done for larger sample size. Also this study can be done for various different time periods. While researcher focused on convenience goods, study also can be conducted on other products as well. For e-Grocery shops its good research to introspect on the possible improvements to match the preference and satisfaction of Kirana stores. While for Kirana stores can look upon the growing likes of e-grocery due to obvious advantages e-grocery has. In fact as also mentioned in literature review its time for Kirana store as well as e-Grocery to look upon mutual advantages and challenges to collaborate towards Omni-Channel.

VII. REFERENCES

- LenkaSvajdova, Consumer Behaviour during Pandemic of COVID-19, Journal of International Business Research and Marketing, Volume 6, Issue 3, 2021.
- Tilak, G. (2020). A Review of Using Business Intelligence (BI) in Digital Marketing.
- Dr. SundaramMeenaSenthil, M. Mahalakshmi, M.Malathy, P.Deepaa, Impact Of Covid-19 Pandemic: Consumer Buying Behaviour Towards Food Items, Turkish Journal of Computer and Mathematics Education, Vol.12 No.11 (2021), 5816-5819
- BhartiAggarwal, DeepaKapoor, A Study on Influence of COVID-19 pandemic on customer's online buying behavior, MDIM Business Review, Volume I, Issue II, Dec. 2020
- Nikita Kashyap, Online Grocery Shopping in India: Anticipating Trends Post-Pandemic, Symbiosis Institute of Management Studies, Pune, European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 10 , 2020
- PriyadarshaniTyagi, Dr. VanishreePabalkar, IMPACT OF COVID-19 OVER PURCHASING BEHAVIOUR OF THE CONSUMERS, European Journal of Molecular & Clinical Medicine, ISSN 2515-8260 Volume 08, Issue 02, 2021
- Moon, J.; Choe, Y.; Song, H., Determinants of Consumers' Online/Offline Shopping Behaviours during the COVID-19 Pandemic. Int., J. Environ. Res. Public Health 2021, 18, 1593.
<https://doi.org/10.3390/ijerph18041593>

- Jamunadevi, S Deepa, Dr K T Kalaiselvi, R Sugunaand A Dharshini, An empirical research on consumer online buying behaviour during the COVID-19 pandemic, C IOP Conference Series: Materials Science and Engineering, 2021
- Laato, S., Islam, N.A.K.M., Farooq, A., Dhir, A., (2020), Unusual purchasing behavior during the early stages of the COVID-19 pandemic: the stimulus-organism-response approach. J. Retailing Consum. Serv.
- Pantano, E., Pizzi, G., Scarpi, D., Dennis, Ch, (2020), Competing during a pandemic? Retailers' ups and downs during the COVID19 outbreak. J. Bus. Res.