



IMPACT OF ONLINE GROCERY SHOPPING APPS ON CONSUMPTION

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ABSTRACT

Online shopping apps have shown tremendous growth over the years, especially after the advent of the covid-19 pandemic, they are known for their speedy services and for reaching every corner of the world. Many surveys and research studies have been conducted, and predictions regarding their further growth in the upcoming years have been made, leading to consumerism.

Our study is focused on examining the consumption pattern of various generations after the launch of these online grocery shopping apps pre and post covid times too. Online shopping seems to be the most convenient way to shop online for all wants in just a few simple clicks. Consumers have moved from traditional street shopping to online shopping and there is a change in the consumption patterns of people.

Various online shopping apps like Blinkit, Zepto, Reliance Fresh, Big Basket, etc. that ensure quick deliveries, fresh produce, discounts/coupons, a wide variety of products and ranges, time-saving, social distancing, authenticity, and easy exchange policies are gaining popularity. It is because of these advantages that we see some percentage of consumption shift from traditional offline Kirana shops to online shopping. In our study, we have compared these criteria with departmental stores, supermarkets, and Kirana stores and narrowed them down to what incentivizes consumers to pick their preferred modes of grocery shopping. It was found that people generally spent less than 20% of their income on shopping for groceries online, they order items that are of urgent need and feel online shopping has easy accessibility and there is a change in buying patterns post-pandemic. They also feel that in the future they will replace Kirana stores too.

INTRODUCTION

Using a web-based shopping service, online grocery shopping is a method of purchasing food and other household essentials. People can purchase these items online by ordering them from a local grocery store that participates in online shopping. A customer can then arrange for a home delivery directly from the store, or he/she can pick up the order at the store once an employee has assembled it. Another common practice is to order groceries from a large company, such as Amazon or Net Grocer, that will ship the items to one's home.

The study is focused on examining the consumption trends in various generations after the launch of online grocery shopping apps like Blinkit, Zepto, Big Basket, etc. given the convenience of online shopping which has enabled people to buy groceries in just a few simple clicks. We will be making a comparison between buying groceries from departmental stores/supermarkets/local shops and buying groceries online with the help of these apps, based on price, quality, discounts, etc.

Nowadays, there is a shift in the buying methods of people because now they are getting used to buying groceries online rather than going physically to the market, and purchasing them. Since the launch of online grocery apps, it has become much easier and more convenient to buy grocery items in just a few seconds. Online markets have come into existence for the benefit of the people, and have come to stay with the society of today as most financial transactions can be attained online. Today, the availability of internet connection has significantly increased throughout the world, enabling connectivity even in the most isolated regions. The shift to online buying has been tremendous and is predicted to increase even more. This study is conducted on qualitative as well as quantitative research inquiry and hence is an amalgamation of utilizing statistical measures as well as a structured description of what has been interviewed. The basic idea revolves around the paradigm, of whether people belonging to varying age groups have seen a change in their buying behaviour after the launch of these apps. 18-30, 30-50, and Above 50 are the age group categories under study. This paper will focus on how after the launch of M-Commerce or applications like Blinkit, Zepto, and Jio Mart, people are shifting to online buying of groceries from traditional methods.

KEYWORDS

- Grocery shopping
- Online shopping
- Online m-commerce apps
- Departmental stores
- Supermarkets
- Internet access
- Time-efficient
- Cost efficient
- Cheap prices
- In-store offers

AIM/OBJECTIVE OF THE STUDY

The objective of this paper is to study the trends of grocery consumption amidst the growing prevalence of m-commerce applications. Through the primary survey, the paper intends to find consumption patterns across various age groups and income groups. It will also compare online grocery shopping with accessible traditional Kirana shops and the price-competitive supermarkets, why people prefer each of these different grocery shopping methods and what are the reasons why people haven't fully embraced the digitization of grocery shopping. Amongst the people that do use m-commerce applications, the study aims to test the hypothesis that offering a "free delivery" after a certain cart value incentivizes customers to order products worth at least that value.

RESEARCH QUESTION

What have been the trends in consumer behavior of diversified generations before and post-launch of online grocery shopping apps like Blinkit, Zepto, Big Basket, etc?

REVIEW OF LITERATURE

- The projected increase in online shopping can be explained by the positive experience of shopping from the comfort of home at any time and having the product delivered (Kim et al 2020).
- (Hansen et al 2005) identified that consumers who purchase groceries online perceive that this mode of purchase is different from purchasing the same products from a brick-and-mortar store. The experience consumers receive while shopping for groceries online is quite different as it provides consumers with several benefits including convenience, time-saving, and any time ordering facility from anywhere.
- A shift to online shopping generates significant additional consumer surplus. This is due to an increase in the variety of supply and greater convenience (Dolmen et al., 2019)
- Online shopping could essentially restructure customers' access and choice for the immediate future and in the times to come (Ellison, 2021)
- Findings depicted that shopping attitudes were predicted by subjective norms, ease of use, and usefulness (Hossain et al., 2021)
- As online franchises and stores become more sophisticated, online shopping continues to mark its existence in the market (Liang Lin, 2008)
- KAVITHA R (2017) has made a study that investigates consumer acuity towards online grocery shopping in Coimbatore City. The expectations of a consumer while buying groceries online and in physical mode is different, most of the respondents get to know about the brand from the internet.
- Mrs. Chitra Sharma (2005) explains that from the data collected, we can observe that most of the respondents would agree to buy groceries online rather than shopping for groceries through traditional means.
- Muhammed Muntaqheem (2019) Online shopping has grown tremendously due to the number of benefits that users perceive the mode of shopping to have.

SCOPE AND METHODOLOGY

- The scope of this paper extends to the extent of targeting 3 generations of age groups:
 1. 18-30
 2. 30-40
 3. 40-60
- The total sample size is going to be 90, consisting of 45 females and 45 males.
- This paper will focus on how after the launch of M-Commerce or applications like Blinkit, Zepto, and Jio Mart, people are shifting to online buying of groceries from traditional methods.

- The methodology that this paper will follow is the conduction of surveys and questionnaires (Primary Survey Method) to comprehend consumer behavior and buying platforms they generally use. The target audience is going to be the same as mentioned above.
- The survey will discuss how often people of different generations buy groceries through online or traditional methods and why they consider that buying method good for them. A comparison is going to be made between departmental stores/supermarkets/Kirana stores and online grocery shopping applications these days.
- The impact of the COVID-19 pandemic will be added, to better understand consumption trends before and after the pandemic.
- We will be referring to some past research papers, articles, and data to get better results.

- **RESEARCH DESIGN** - Exploratory
- **SAMPLING TECHNIQUE**- Convenient sampling technique
- **TYPE OF DATA**- Primary and secondary data both
- **RESEARCH TOOL**- Questionnaire
- **SAMPLE SIZE**- 85

SOME DATA

The times of weekly or monthly trips outdoors to the neighbourhood Kirana or the little grocery stores are long gone. Additionally, 21% of India's economy was comprised of grocery spending. Snacks and groceries may now be delivered with a simple click of an app button. However, India's megacities exhibit rapid change. Thanks to a year of heavy marketing, strong sales from online retailers like Amazon and Flipkart, the COVID-19 pandemic, and lockdowns, urban middle-class families are dependent on online buying. The market value of online groceries across India was 396 billion Indian rupees in 2022. Despite this, Kirana, or tiny grocery stores, make up more than 95% of Indian supermarkets. Online groceries are nothing near the 4% of total grocery sales that are accounted for by supermarkets. The majority of India's population—about two-thirds—lives in rural areas unaffected by contemporary retail models.

Source-<https://www.statista.com/aboutus/our-research-commitment>

HYPOTHESIS

Through this Research Paper, we primarily expect the following conclusions to be built and arrived upon:

- Observing and analyzing primary as well as secondary data, conclusions will be drawn on how the mode of online shopping has shifted people from buying groceries through offline methods to online ones, especially

after the pandemic. The impact of online grocery shopping on the consumption of people shall be taken into account while concluding the paper.

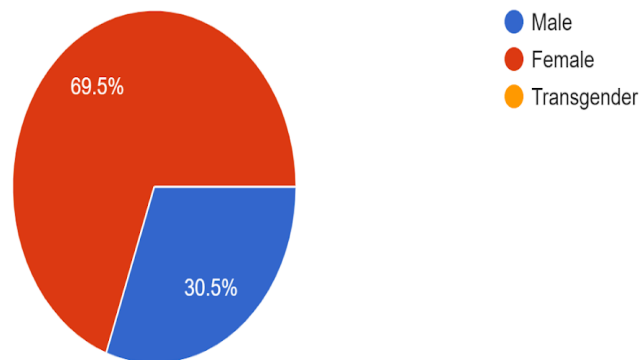
- We shall draw broad conclusions about the future of grocery shopping as buyers are drastically shifting to online methods of grocery shopping. Online mode of grocery shopping might replace the traditional methods of grocery shopping due to its advantages.

DATA ANALYSIS

Q1. Gender

Gender

118 responses

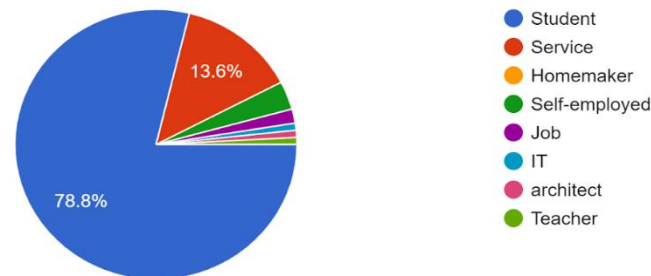


Interpretation: Out of 118 respondents males are 30.5% of the total and 69.5% are females of the total. Female respondents are more than males, most of them fall under the 18-30 age category.

Q2. Occupation

Occupation

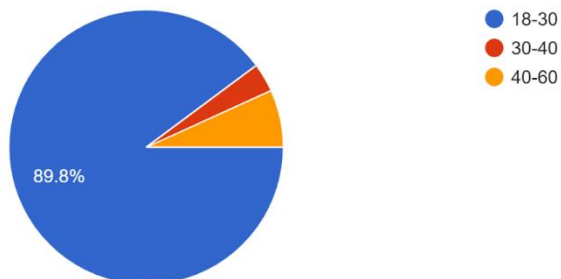
118 responses



Interpretation: Highest number of respondents are students (78.8%) then we have the population under the service category (13.6%). The rest belongs to the remaining categories.

Q3. Age group category

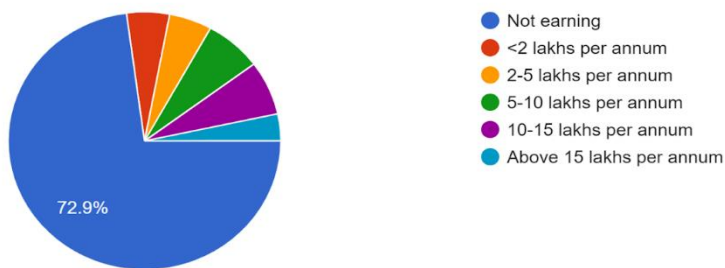
Age group category
118 responses



Interpretation: Around 89.8% of the respondents belong to the age group 18-30 then 40-60 and last, we have 30-40.

Q4. Personal income (in Rs.)

Your Personal income. (if earning)
118 responses

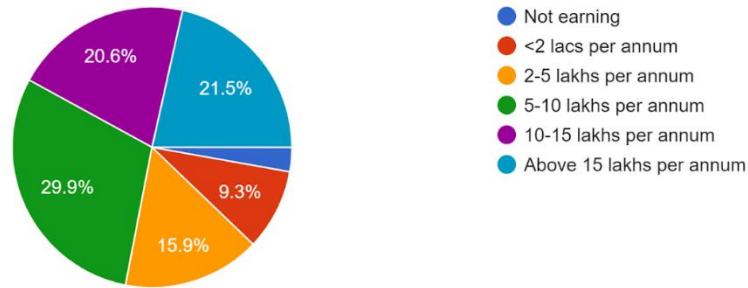


Interpretation: Our findings reveal that 72.9% of the respondents are not earning belonging to the age group 18-30 and are students.

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Q5. Family income (in Rs.)

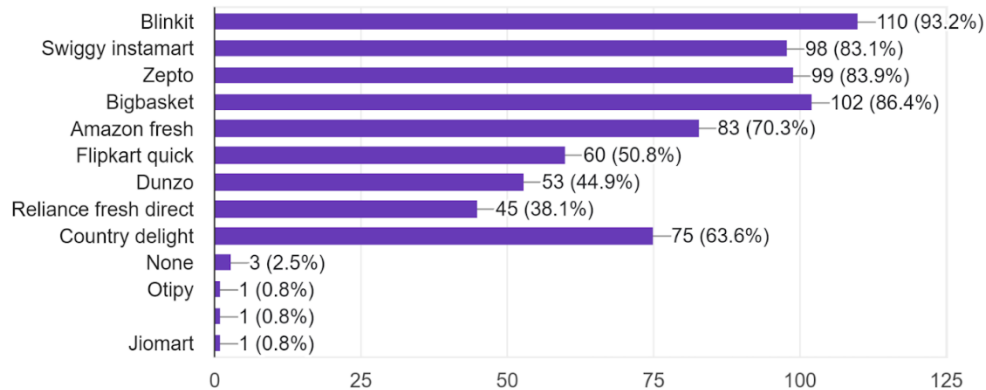
Select your family income.
107 responses



Interpretation: Out of the total respondent’s average family income it comes out to be 5-10 lakhs per annum.

Q6. Which of the following online shopping apps are you aware of?

Which of the following online shopping apps are you aware of? (multiple select)
118 responses

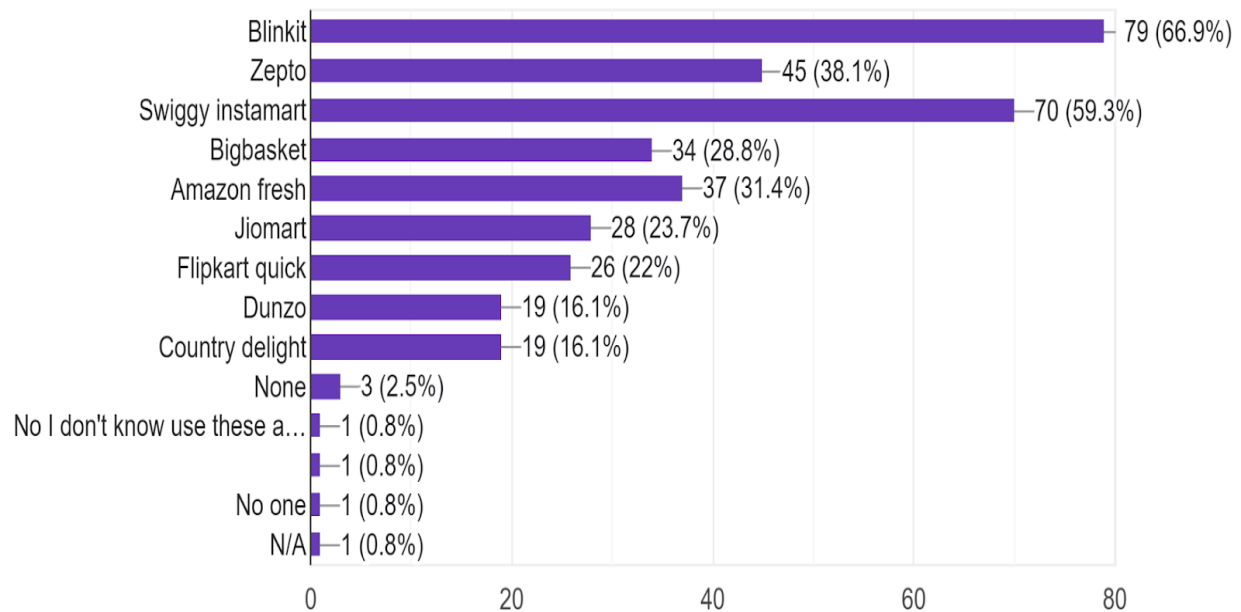


Interpretation: We can see from the above bar graph that out of the 118 respondents, 110 are those who are aware of the Blinkit grocery app, and only 3 are there who are not aware of any of the online grocery shopping apps. This shows that consumers are well aware of online grocery shopping apps, and are well informed about the online method of grocery shopping.

Q7. Which of the following apps do you have on your phone?

Which of the following apps do you have on your phone?(multiple select)

118 responses



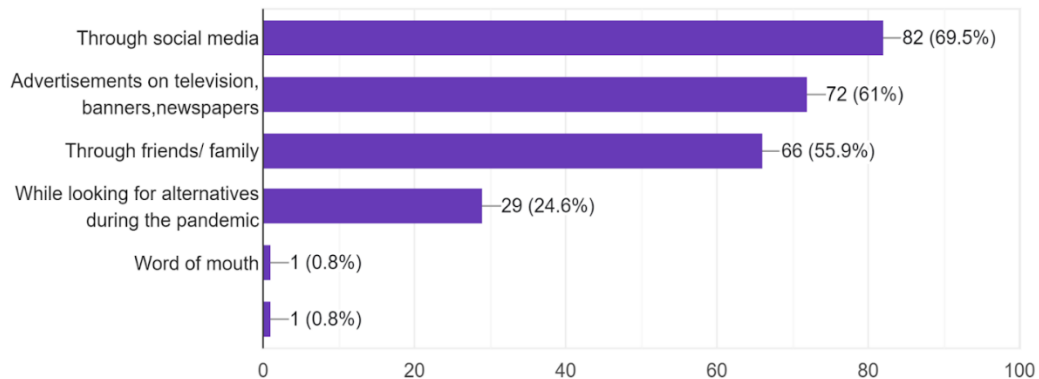
Interpretation: Out of the 118 respondents, 79 are those who have Blinkit on their phones, and only 3 are there who do not have any grocery app on their phones. 70 respondents have the Swiggy Instamart app on their phones, and 19 respondents have the Country Delight app on their phones. This shows that people use online grocery apps regularly through the applications on their respective phones.

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Q8. How did you get to know about these apps?

How did you get to know about these apps?

118 responses

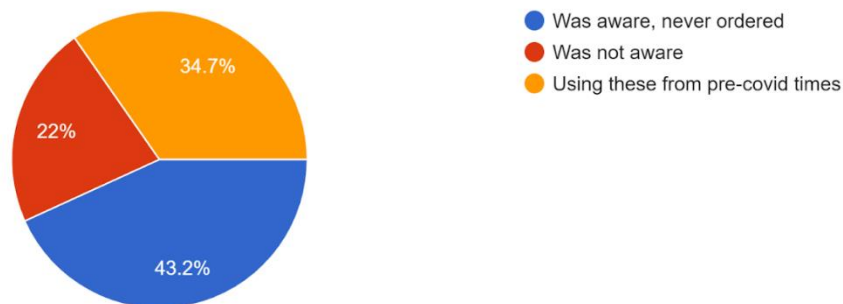


Interpretation: 82 respondents out of 118 got informed about these grocery shopping apps through social media, and 29 are those who got to know about the online grocery shopping apps while looking for alternatives during the pandemic. This clearly shows that most consumers search online and get the required information about any such thing while very few are there who heard about these apps through word of mouth.

Q9. Were you aware of these apps before the covid-19 pandemic?

Were you aware of these apps before the covid-19 pandemic?

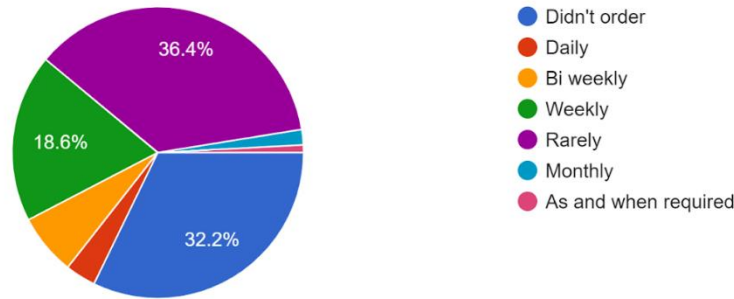
118 responses



Interpretation: The maximum percentage of 43.2% shows that respondents were aware of the online grocery shopping apps but they never ordered from these apps, while 34.7% were using these apps from pre-covid times. Only 22% of the total respondents were not aware of these online grocery shopping apps. This means that most consumers started ordering from these apps after the pandemic which they were not doing before the advent of the pandemic.

Q10. How frequently did you order groceries online during pre-covid times?

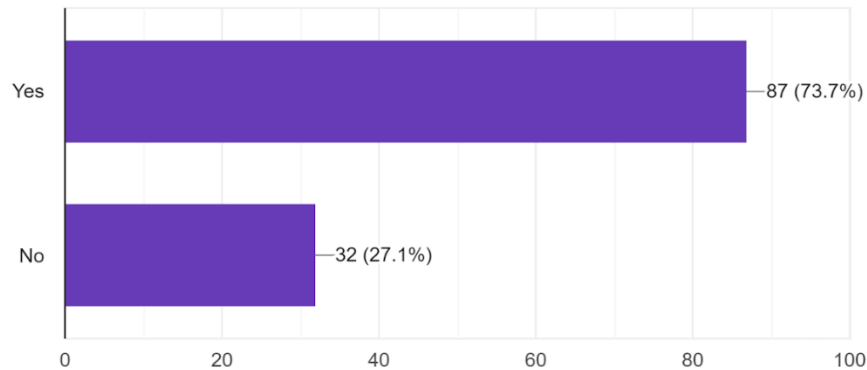
How frequently did you order groceries online during pre-covid times?
118 responses



Interpretation: 36.4% of the total respondents ordered groceries rarely from online apps during the pre-covid times, while 32.2% did not order at all. Only 18.6% of the total respondents ordered weekly from online grocery apps. This means that maximum consumers did not order groceries online before the pandemic and were mostly using offline methods of grocery shopping.

Q11. Is there any change in the frequency of buying after the pandemic?

Is there any change in the frequency of buying after pandemic?
118 responses

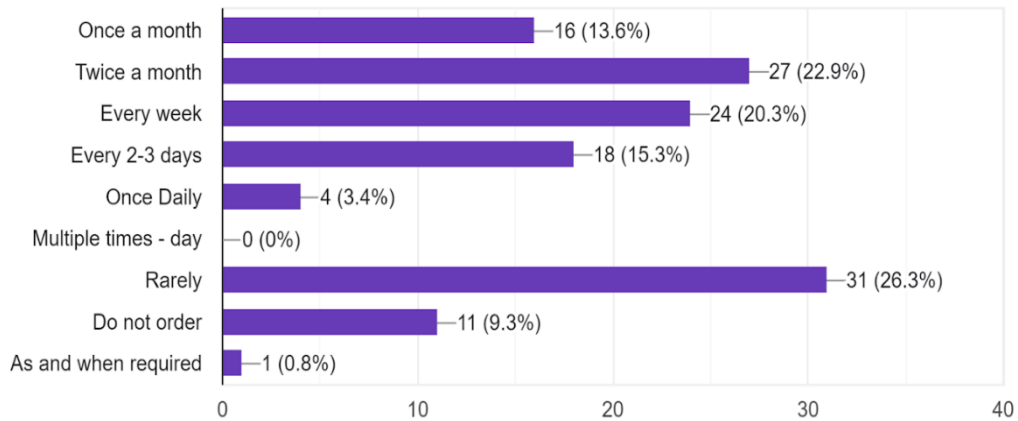


Interpretation: 87 respondents out of 118 respondents believe that there is a change in the frequency of buying groceries online after the pandemic, while only 32 disagree. This shows that most people feel that the use of online methods of grocery shopping has seen a change after the onset of the pandemic.

Q12. What is the frequency of buying groceries online now?

What is the frequency of buying groceries online now?

118 responses

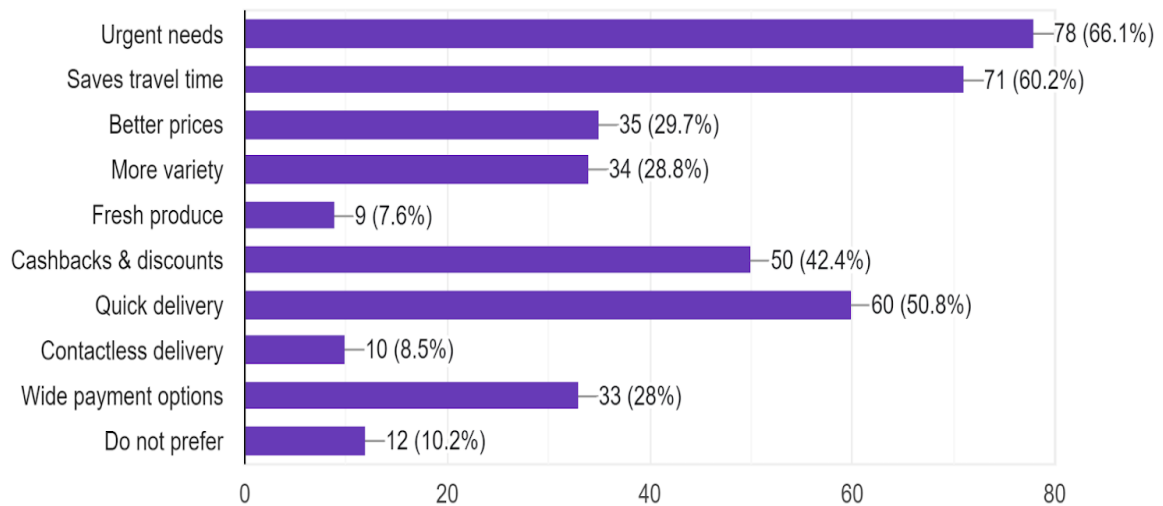


Interpretation: 31 respondents out of 118 rarely order groceries online while 27 of them order groceries online twice a month. 24 respondents order groceries online every week, while only 11 do not order at all.

Q13. Why do you prefer online apps for grocery shopping over supermarkets and Kirana shops?

Why do you prefer online apps for grocery shopping over supermarkets and kirana shops? (multiple select)

118 responses

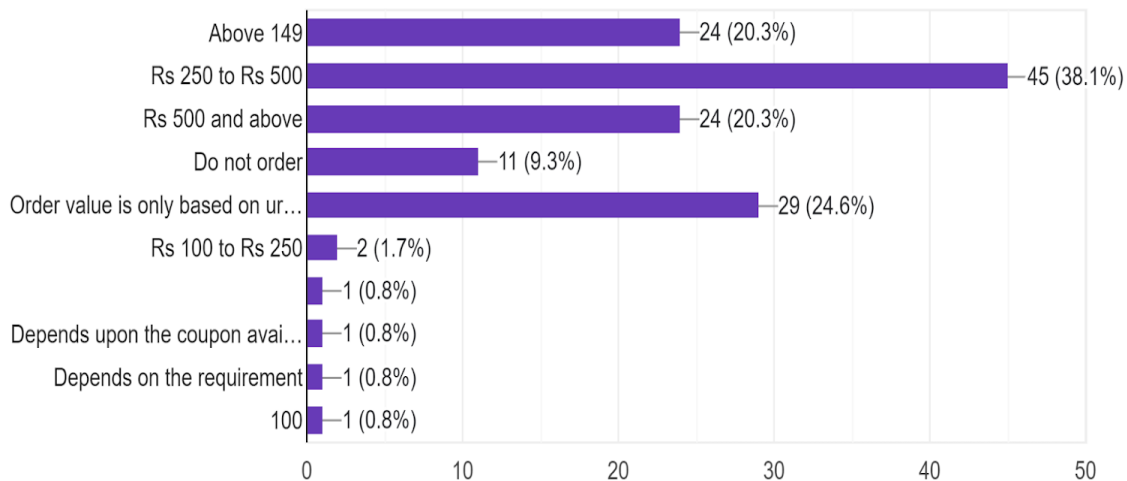


Interpretation: The most common advantages of online shopping over supermarkets and Kirana shops are urgent needs, saving travel time, and quick delivery out of these three urgent needs comprise 66.1% of the total which is the highest.

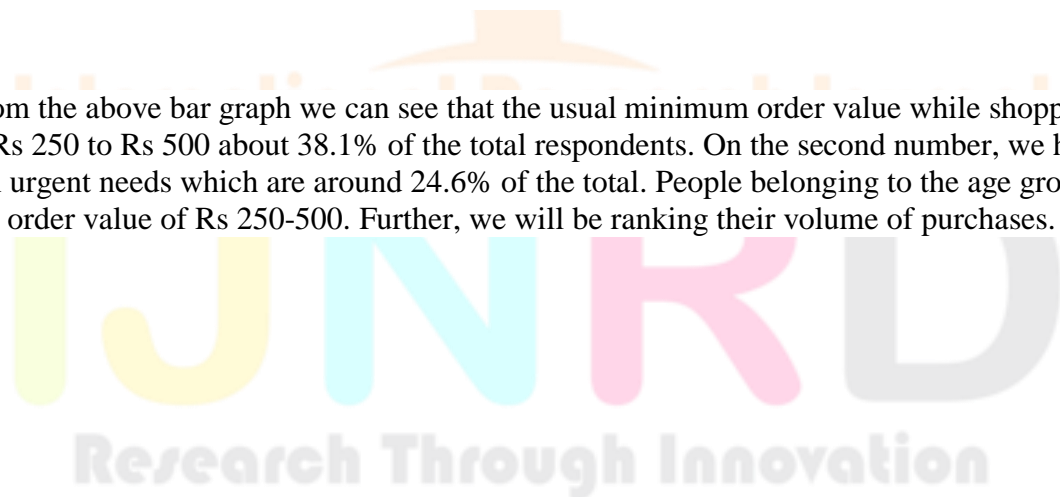
Q14. What is your usual minimum order value while shopping for groceries online?

What is your usual minimum order value while shopping for groceries online?

118 responses



Interpretation: From the above bar graph we can see that the usual minimum order value while shopping for groceries online is Rs 250 to Rs 500 about 38.1% of the total respondents. On the second number, we have order value only based on urgent needs which are around 24.6% of the total. People belonging to the age group 18-30 showed a minimum order value of Rs 250-500. Further, we will be ranking their volume of purchases.



Q15. Rank the following in order of your volume of purchases.

Rank the following in order of your volume of purchases.

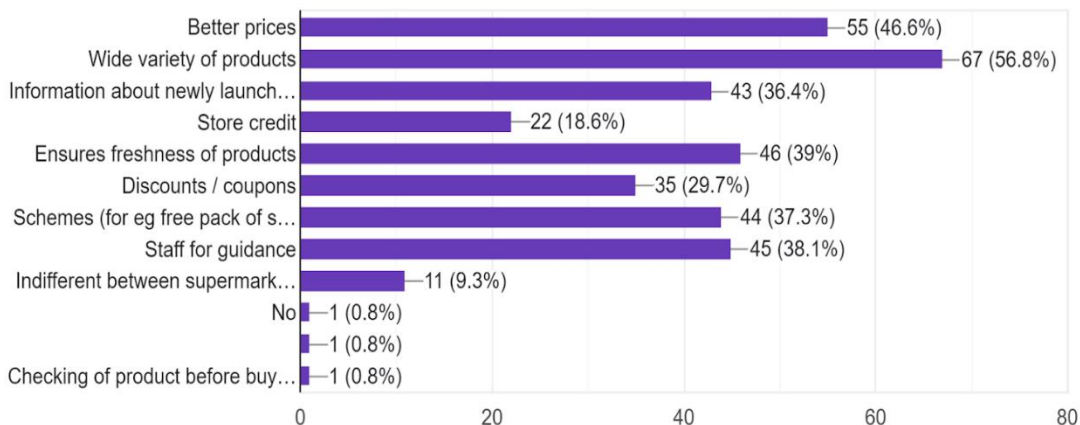


Interpretation: From the above graph we can see that in the most preferred section, respondents order from supermarkets, Kirana shops, and then online shopping. Then in the second most preferred section, we can see that people buy from supermarkets, online, shopping, and then Kirana stores. Then the last we have the least preferred section in which people have ordered from online, Kirana stores, and then supermarkets. Supermarkets are the most preferred in the first and second sections. The majority of respondents buy groceries from supermarkets as compared to rest two options.

Q16. What is your opinion are the advantages of department stores/ supermarkets over shopping online or from Kirana shops?

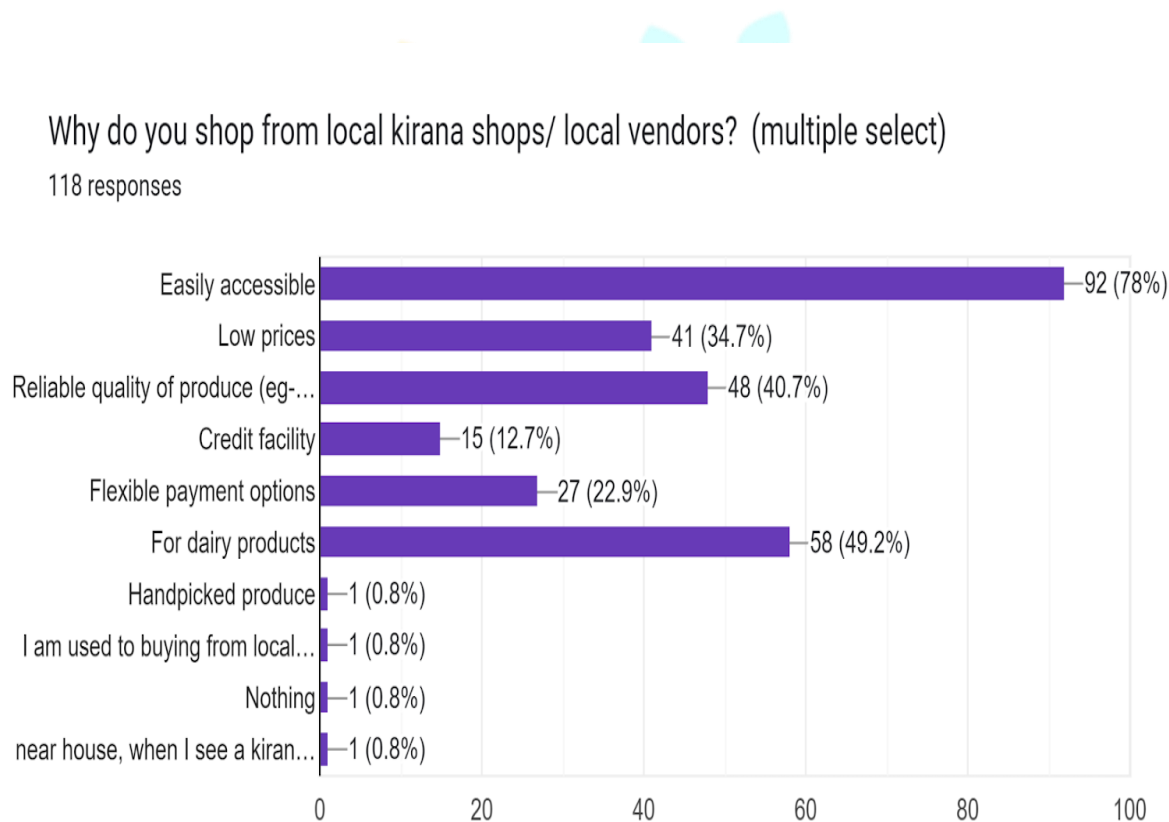
What in your opinion are the advantages of department stores/ supermarkets over shopping online or from kirana shops (multiple select)

118 responses



Interpretation: The advantages of department stores/ supermarkets over shopping online or from Kirana shops are being questioned above and the findings say that most of the respondents feel that they get a wide variety of products (56.8%), then they feel that they get better pricing (46.6%), which shows that they are the prime advantages of buying from a big physical outlet.

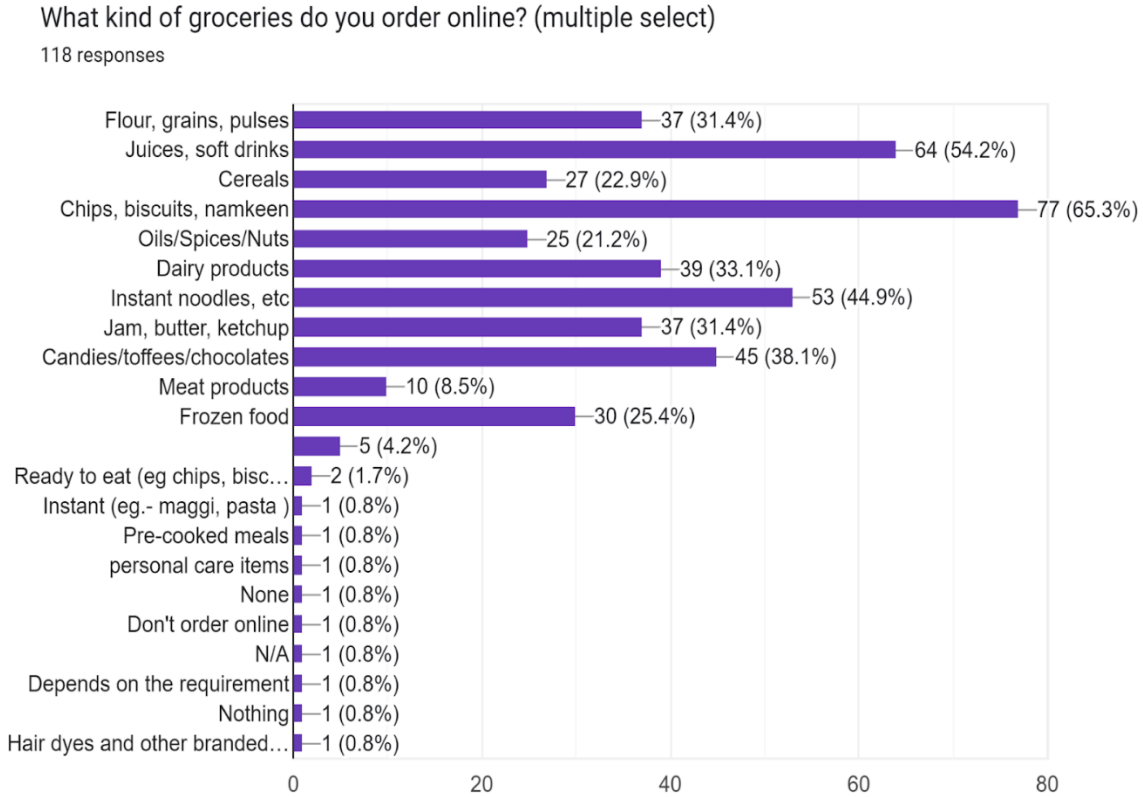
Q17. Why do you shop from local Kirana shops/ local vendors?



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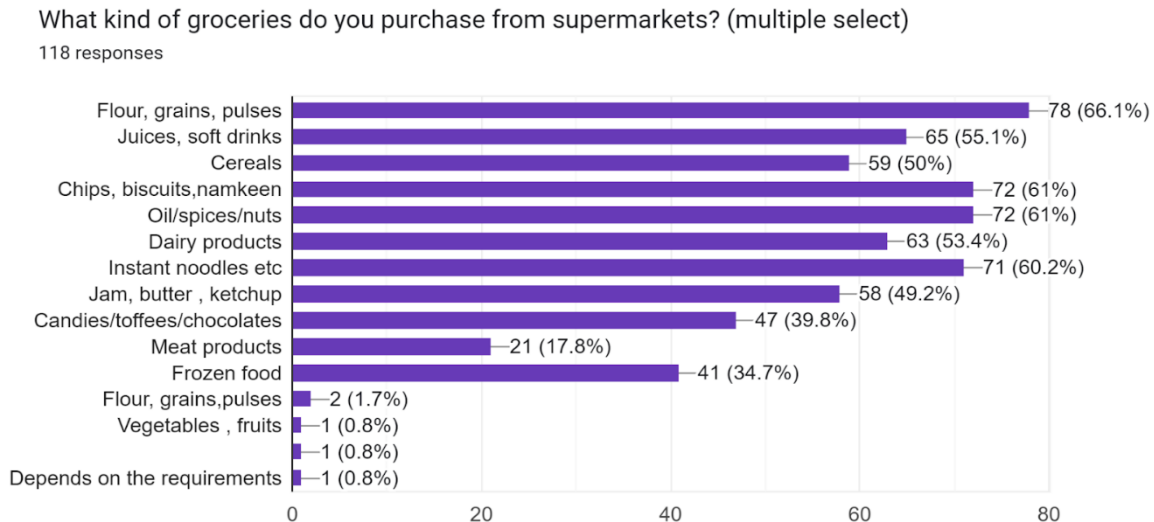
Interpretation: Then we asked them about why they shop from local Kirana shops or local vendors then we get to know that they get easy accessibility (78%). It's one of the biggest reasons for shopping from local vendors. We found that they mostly buy dairy products from them (49.2%). So, we can conclude that local vendors are a source for buying day-to-day need products like milk, butter, etc rather than being a source for buying items in bulk.

Q18. What kind of groceries do you order online?



Interpretation: Generally, people under the age category 18-30 buy chips, biscuits, and namkeen online counting to (65.3%), then juices and soft drinks (54.2%), then instant noodles, etc. (44.9%). From the above-obtained results, we can conclude that people generally prefer to buy snacks online rather than buying general grocery items like wheat, flour, cereal foods, etc.

Q19. What kind of groceries do you purchase from supermarkets?



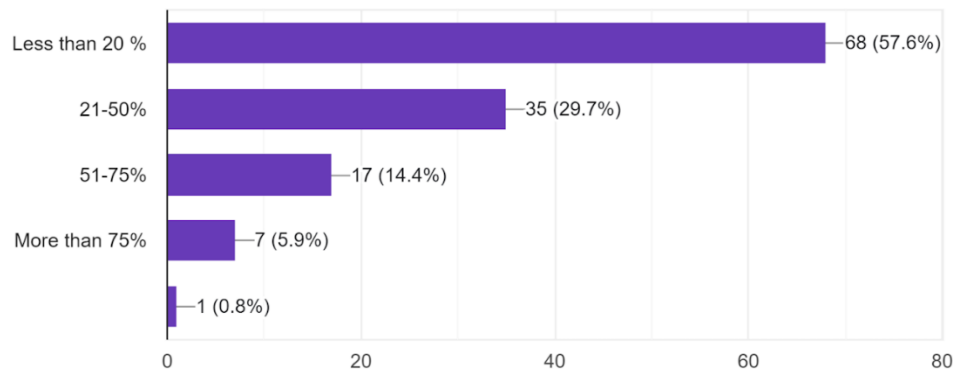
Interpretation: The above question gave the respondents multiple options for what groceries they buy from supermarkets. 66.1% of the sample buy flour, grains, and pulses. We can interpret that; respondents prefer checking the quality of the above-mentioned items by themselves. 61% of the sample prefer buying dry fruits, spices, and oil. Whereas 60.1% of the sample buys only instant noodles. Other ingredients such as juices, soft drinks, chocolates, dairy products, butter, jam, meat products, and frozen foods lie on a scale of 40-55% of the sample.

We can interpret that ingredients such as vegetables, fruits, and other things that depend upon the requirements have received the least responses which are less than 2%.

Q20. How much percentage of your expenditure on groceries is through online shopping?

How much percentage of your expenditure on groceries is through online shopping?

118 responses



Interpretation: Through the above bar graph we can analyze that 57.6% of the sample agrees that less than 20% of their expenditure goes on online shopping. Whereas 29.7% of the respondents spend 21-50% of their income on online shopping.

Whereas 24 respondents answered that they spend more than 50% of their income on online purchasing.

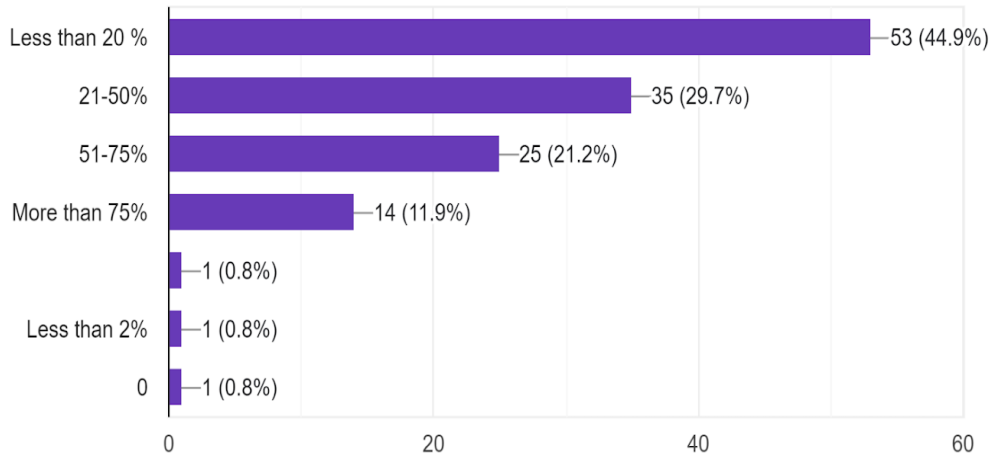
This shows most of the respondents of the sample collected spend less on online shopping.



Q21. How much percentage of your expenditure on groceries is through supermarkets?

How much percentage of your expenditure on groceries is through supermarkets?

118 responses



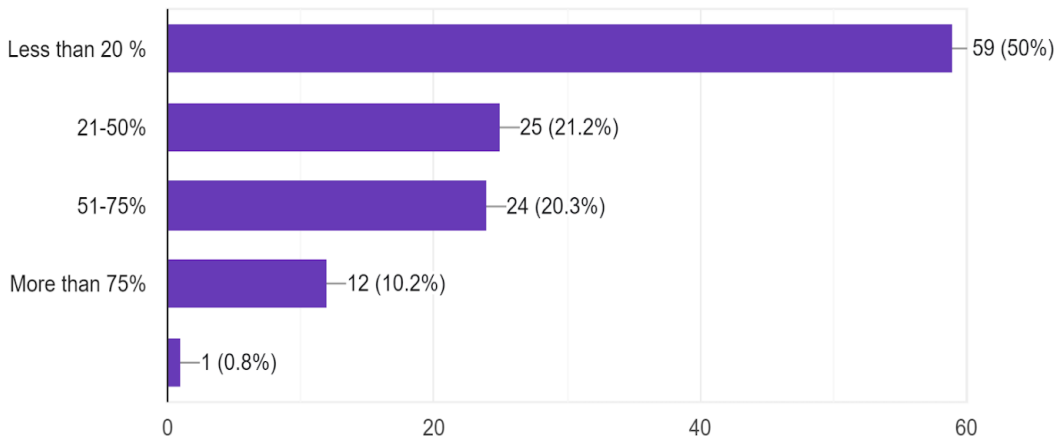
Interpretation: Through the above bar graph, we can analyze that 44.9% of the sample agrees that less than 20% of their expenditure goes on purchases from supermarkets. Whereas 29.7% of the respondents spend 21-50% of their income on purchases from supermarkets.

Whereas 39 respondents answered that they spend more than 50% of their income on buying groceries from supermarkets. We can also interpret that only 3 respondents spend less than 2% of their income on the expenditure of groceries through supermarkets.

Q22. How much percentage of your expenditure on groceries is through Local Kirana shops?

How much percentage of your expenditure on groceries is through Local kirana shops ?

118 responses



Interpretation: Through the above bar graph, we can analyze that 50% of the sample agrees that less than 20% of their expenditure goes on purchases from local Kirana stores. Whereas 21.2% of the respondents spend 21-50% of their income on the purchase of groceries from local Kirana stores.

Whereas 36 respondents answered that they spend more than 50% of their income on buying groceries from local Kirana stores. We can also interpret that only 1 respondent spends less than 2% of their income on the expenditure of groceries through Kirana stores.

CONCLUSION

The responses have revealed that during the pre-covid times, even though 78 percent of the sample population was aware of grocery shopping apps, only 34.7 percent of the population turned to online apps for grocery shopping. We see a shift in these statistics after the pandemic, when a large 67.8 percent of the population, in varying frequencies, has opted for online grocery shopping. In the pre-pandemic world, while only one-third of the sample population placed online orders, we can observe a complete reversal in the figures in the post-pandemic world where only one-third did not order from these apps. The data is in line with the general public opinion of 73.8 percent of the sample population that the covid-19 pandemic has impacted their modes of grocery consumption.

The most popular apps were: Blinkit, Swiggy, Zepto, Big Basket, and Amazon Fresh, with about 66.9 percent of the sample having Blinkit installed on their smartphones, and most of the respondents having one or more of these applications installed. There were many reasons why people preferred online shopping. The most common ones were because it saved travel time, and promised quick deliveries. Almost 66 percent of the people were on the side of online grocery shopping for its ability to cater to urgent needs. Upon questioning a few selected individuals, a respondent gave an example of how useful this quick delivery guarantee has been by saying that “Suppose you are cooking food for the family, and you realize, oh we’ve run out of tomatoes, and then you think no worries we’ll just order it from Blinkit or Zepto.”

It can certainly be said that the groundwork for digitization is laid in large metros like Delhi however there is still a long way to go before people fully embrace online shopping methods. The most popular methods of shopping remain supermarkets and local Kirana shops. Online shopping apps have not yet been able to compete with supermarkets in terms of better prices and a wider variety of products, which are primary pull factors for supermarkets. Discounts, availability of staff for guidance, and personally ensuring product quality before purchases remain advantages distinctive to supermarkets. Kirana stores are mostly preferred due to their easy accessibility and for the purchase of dairy products.

We questioned the sample if they believed that online shopping would eventually replace Kirana shops and received mixed views. While some believed that Kirana shops couldn’t be replaced keeping in mind the entire nation: *“I don’t think so, even though India is moving towards it, but still I believe these shops will never be replaced by these online shopping apps due to accessibility, mutual trust with the shopkeepers and in Tier 2 and 3 cities major business is being captured by them (Kirana shops) only.”*, others simply felt them be indispensable because of the interpersonal relations and trust that is built with the shop owners and stated

“Kirana shops offer convenience and personal relationships with consumers that online shopping can’t provide. Additionally, shops often offer products that are not available online and also provide a monthly credit system which is preferred by many”

Some highlighted the ease and accessibility of physical shopping for older age groups by saying *“I don’t think so. It’s a hobby and time passes for elders to shop for groceries”*

There were also people more hopeful for the future: *“Yes, because of the hectic lifestyle, people don’t get the time to go to shops to purchase their essentials, they simply order, it saves their time and energy both.”* and suggested that a transition is possible. This may however take time.

One of the respondents concluded lucidly that *“Online and Supermarkets together will probably dominate the sector much more than they do now. It also depends on the time horizon that we are looking at. It will probably depend on and correlate with India's banking (internet banking, UPI, etc.) penetration as well as the level of income of the bottom 40% of consumers too. But most certainly, it disrupts the number of Kirana shops viable(profitable) in an area because part of the consumer demand is now met through online shopping and supermarkets.”*

Thus, even though we are not sure about online shopping replacing Kirana shops we see more and more people getting comfortable with digital methods of shopping, because of their sedentary lifestyles people are prioritizing ease and time-saving. These grocery apps can fill the gaps in the shopping experience by introducing wider products, fresher products, and better discounts. As we head into a ‘Digital India’, there is nothing but a bright future for all online avenues.

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