A Study of Consumer Perception Towards Online Grocery Shopping : Challenges and Prospects

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Abstract

Online shopping is a common phenomenon for today's customers even in small cities but there are some specific markets that are still facing challenges for growth and opportunities to a large extent. One such market is the online grocery shopping segment. The paper studies various dimensions of online grocery shopping ranging from its characteristics, its processes and present consumer perception towards online grocery shopping, Indian players in the market, and the different variables around which the study revolves. The research methodology of the paper includes literature review, formulation of a structured questionnaire, survey conducted in the city of Allahabad, Uttar Pradesh, India. The data was analyzed with the help of statistical software SPSS and statistical tools like frequency tables, Factor Analysis etc. The major findings and recommendations of the research paper provided foundation for reasons behind expanding the market of online grocery shopping, the challenges as well as the future business prospects in Tier II. The study concluded that factors like wide variety of products, offers and discounts, free home delivery, time saving and convenience, cost effective, easy terms and conditions, user friendliness, authenticity and genuineness, ease of ordering and cash on delivery should be taken as strengths and pillars of online grocery shopping and these can be improvised or modified to extract maximum advantage for business.

Keywords: Consumer behavior, consumer perception, e- commerce, online grocery shopping, online shopping.

I. INTRODUCTION

Internet purchasing is defined as an actual buying transaction that takes place after browsing for products. Internet shopping is the act of purchasing merchandise through the internet. Purchasing may require browsing activity. Internet shopping is often called 'online shopping,' where people purchase merchandise from a computer network. The meteoric growth of e-commerce can be derived from the new consumer need for convenience and comfort in their purchasing process. Even though a significant percentage of consumers today choose to purchase products online, there are still specific markets that struggle to get consumers to adapt and change their behavior. One of the markets that still experience this struggle is the online grocery market. There can be two possible aspects that are causing this. Firstly, there is a lack of willingness from grocers since the business model is not yet profitable enough to implement. The aspects of the business model that challenge the grocer are: managing stock, presenting groceries, channel of delivery of goods, time of delivery of goods, and managing returns of goods. Secondly, there seems to be a problem with consumer attitudes which directly influence consumer intentions and behavior. However, it is still believed that the market has great potential for growth due to the market size of traditional grocery.

A. Online Grocery Shopping

Since all the sectors of the retail market are influenced by the online shopping revolution, it is now possible for the humble hometown grocery store to become digitized and have online presence through devices such as smart phone, tablet, and computer. Online grocery shopping is dramatically changing the consumer's relationship with the food market and making a service that may have once been luxurious into an everyday convenience. While ordering food items on the internet, the desired items can be searched for or one can browse through lists of products or sections like the sections one might walk through at an actual grocery store. When one finishes shopping, checkout is done with a credit card, and the

buyer may specify certain hours when he will be available to receive the food items delivered. Since internet groceries must be delivered to the customer at their specified address, delivery fee is charged based on the amount of products purchased. The paramount benefit of online grocery shopping is convenience and time saving. By ordering online, one can speedily search products and can order them without having to physically walk through expansive aisles. It saves travel expenses and time looking into the grocery stores. Considering the wide availability of the internet, it also means that grocery shopping can be done from remote locations or in the middle of doing other tasks. For instance, using an online grocery store can allow a person to do all the grocery shopping during short breaks at work. It is also very useful for those without personal conveyance or those who may be physically incapable, since the food items are delivered at the doorstep. The use of online grocery stores is increasing in popularity as more and more people are becoming comfortable with using the internet to make purchases. Perhaps the largest stumbling block of shopping online is extra cost since food must be supplied immediately. If someone is making a certain recipe and discovers he needs an additional ingredient, he would probably not be able to order it online and get it quickly enough to finish the dish. In the same way, it forces a person to plan food purchase in advance or when he needs it. If delivery takes a day or two, a person needs to plan to have an extra day or two of essential foods items available before the supplies run out. Another pitfall is that online shopping forces the customer to be at home during a certain period to collect the food when it is delivered. Also, online grocery stores often extend to specific delivery areas.

B. Functioning of Online Grocery Shopping

The basic framework of the functioning of online grocery shopping is discussed below:

1) Creating the website

The most important and primary step of online grocery shopping is the setting up of a website. The website should have a complete list of groceries that are available for sale along with their prices. The website should have a 'shopping cart' where a user can add items to a list of things to be ordered, as well as view and edit items that one is planning to purchase. Additional offers, discounts and personal details, delivery address of the user, and payment mode should be well incorporated in the website.

2) Preparing the order and shipping

The next step is to take the submitted order, accumulate it, and deliver the items on the list. Generally, fulfillment of the grocery ordered is done manually by a stock boy or other personnel. This process can be made trouble free by having a well-organized room where the products can be easily and efficiently located. The stock person should cross check the order with the user list that was created on the website. Subsequently, the order is compiled and items get placed in a vehicle and are delivered to the customer.

3) Restocking and processing payments

It is important to ensure that all the items listed on the website are in stock and ready to be shipped. The stock room needs to be carefully checked to ensure inventory levels are sufficient. Also, it is fundamental to have the ability to obtain and process payments made by plastic cards. In order to encourage online shopping, each customer should be provided a username and password, which would protect account information.

II. INDIAN PLAYERS IN ONLINE GROCERY SHOPPING

A. Grofers

It is an on demand delivery service that connects consumers with local stores. It was founded on 27 December 2013 by Saurabh Kumar and Albinder Dhindsa. At the time of launch, the company worked on a B2B model. In November 2014, the company switched to the hyper local B2C model with offerings to the end customer. Currently it is operating in 17 Indian cities like Agra, Chennai, Jaipur, Mumbai, Vadodara, Ahmedabad, Delhi/NCR, Kanpur, Nagpur, Bengaluru, Hyderabad, Kolkata, Pune, Chandigarh, Indore, Lucknow, and Surat. It offers a wide range of categories and more than 1, 75, 000 products in different stores.

B. Bigbasket.com

It was started in December, 2011 by Hari Menon, Vipul Parekh, and V.S. Ramesh. It is India's online food and grocery store. It offers over 18,000 products and over 1000 brands in its catalogue. Right from fresh fruits, vegetables, rice, cereals, spices, seasonings to packaged products. Selecting a time slot for delivery and order delivers orders to the doorstep anywhere in Bangalore, Hyderabad, Mumbai, Pune, Chennai, Delhi, Noida,

Mysore, Madurai, Coimbatore, Vijayawada-Guntur, Kolkata, Ahmedabad, Gandhinagar, Nashik, Lucknow, Kanpur, Gurgaon, Vadodara, Visakhapatnam, Surat, Nagpur, Patna, Indore, and Chandigarh. Payment can be made online using debit/credit card or by cash Sodexo passes on delivery. They guarantee timely delivery, and the best quality.

C. Zopnow.com

It is an online retail store that exclusively aims to cater to grocery and FMCG needs of people and launched its services in Bangalore. Zopnow with the punch line "Be Lazy, Buy Easy" plans to deliver grocery items at consumer's doorstep in less than 3 hours or at a predefined time .However, currently Zopnow is offering 1501 products to some selected areas of south Bangalore. Zopnow was founded by entrepreneurs B. K. Birla and Mukesh Singh, erstwhile CTO of Makemytrip. According to the company website, it wants to build a customer centric online store that will leverage the hybrid model of online, call centre, mobile application, and physical touch. Zopnow claims to deliver great customer experience by providing customers a convenient way to shop and in the process cut down the time at the checkout counter, traffic, and parking.

D. Aaramshop.com

New-Delhi based start-up Aaramshop.com has launched an e-commerce site for buying groceries. The website only caters to New Delhi residents and is yet to be commercially launched. Daily essentials such as laundry supplies, cereals, butter, jam, rice, flour, cooking oil, biscuits, chocolates, sweets, milk, spices, coffee, and tea are available on the website. The website allows you to search for the nearest local grocery stores either by name, by pincode, location, maps or view all the 'Aaramshops' available and select one. Once this shop is selected, delivery timings can be chosen. Once the user selects the items needed, adds them to the shopping bag and checks out, a confirmation e-mail, and text message are sent with the payment amount and time of delivery. No online bank transaction is involved and the user has to pay cash on delivery for the items delivered.

E. PepperTap

PepperTap is changing the way people buy groceries. The founders of this company are Navneet Singh and Milind Sharma. They are replacing visits to the super market with a few taps on phone. They started their operations in November 2014 serving a limited area in Gurgaon. Focused on accurate and on time deliveries, they are now available throughout the city. Simplicity and effectiveness are the key drivers of their products and services. They believe that buying groceries online should not be just for early adopters and they strive to make their services more accessible to the masses.

III. LITERATURE REVIEW

Perception is the process by which our five senses are organized and interpreted. Perception can be defined as the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world.

Online grocery shopping refers to ordering grocery products via the internet and the subsequent delivery of ordered goods at home. Online grocery stores offer an electronic ordering interface, and the retailer takes care of picking and delivery of goods to the customer. Perishable grocery goods often need to be stored in a refrigerator or a freezer (e.g. fruits, meat), have limitations in delivering sensory input through the Web, They require reliable ways of transportation and thus, have less appeal to online customers. Durable grocery goods, on the other hand, are items that have a long shelf life, do not require inspection before buying (e.g. beverages, canned goods, candy, etc) and involve less transportation sensitivity, and are thus, being sold more successfully than perishables. Due to the expiration risks and inability to touch and feel certain grocery products, online consumers generally prefer to buy durable grocery items over perishable goods.

Online retailers provide diverse sales promotions, such as free gifts, discounts or free shipping to attract shoppers to their websites. A promotion serves as an immediate economic incentive to purchase a product. Online shoppers tend to believe that product prices in online stores are often lower than in physical retail stores. Promotions are important to inform consumers about the availability of a product, to generate public awareness of the marketing activities of a retailer, to encourage revisits to the retailer, and to increase customer loyalty.

Perceived website reputation is defined as "the degree of website popularity which a consumer perceives". However, website popularity and credibility is usually a function of its visibility, distinctiveness, authenticity, transparency, and consistency. In the digital world of business, website reputation plays a significant role and positively affects the website's profitability and success. From consumers' perspectives, reputed

websites are more readily accepted than the unknown ones.

IV. RESEARCH OBJECTIVE

1) To study the attitude of customers towards online grocery shopping in Tier II cities.
2) To find out the preferences of consumers regarding the attributes of online grocery shopping website.
3) To identify the issues faced by users while online grocery shopping.
4) To determine whether online grocery shopping will be beneficial in Tier II cities.
5) To gauge the expectation of customers on different factors to improve the overall online grocery shopping experience.

V. RESEARCH METHODOLOGY

For the purpose of the study a structured questionnaire was devised to test the factors which affect the need to shop online grocery, the features of online grocery shopping website which attract customers, the features of online grocery shopping that affect customer satisfaction the most, and issues which restricts online grocery shopping, to know if a consumer would buy groceries online if given an option. Basically the questionnaire intends to judge the perception of consumers towards online grocery shopping and its scope in Tier II cities like Allahabad, Kanpur, and Varanasi. Likert scale of 1-5 with ends points of "strongly agree" and "strongly disagree" were used to measure the constructs. In the study, convenience sampling was used with a sample size of 150 respondents who were online shoppers from across the country. The respondents were those who shop online and have not shopped grocery. The study was primarily conducted during May 2016 in Allahabad city located in the northern State of Uttar Pradesh in India. Some responses were recorded online covering different regions like Varanasi, Kanpur, and Lucknow using Google form.

SPSS 16 was used to conduct data analysis and statistical techniques like factor analysis and regression analysis were used to analyze data. Factors that were identified as independent variables were put to test using factor analysis. From factor analysis and using rotation component matrix seven factors were derived as independent variables. These were promotions, product, services, issues, price, place, and time.

Regression analysis was done on independent and dependent variables to find out the impact of independent variables (promotions, products, services, issues, price, place, and time) on the dependent variable perception towards online grocery shopping. Linear regression analysis was done for the items. The result concluded that overall model was significant but three factors (product, services, and price) that were identified in factor analysis were not found to be significant. Regression model has been made from factor loading table prepared in factor analysis.

A. Research Hypothesis

H_1- Promotions do not have a significant impact on the perception of a consumer while purchasing groceries online.

H_2 – Products do not have a significant impact on the perception of a consumer while purchasing groceries online.

H_3 – Services do not have a significant impact on the perception of a consumer while purchasing groceries online.

H_4 – Issues in online shopping have a negative impact on the perception of a consumer while purchasing grocery online.

H_5 – Prices do not have a significant impact on the perception of a consumer while purchasing groceries online.

H_6 – Place does not have a significant impact on the perception of a consumer while purchasing groceries online.

H_7 – Time does not have a significant impact on the perception of a consumer while purchasing groceries online.

B. Data analysis and interpretation

Interpretation: If given an option to buy grocery items online, 80% of the respondents said they would buy grocery items online.

Factor Analysis

KMO measure of sample adequacy is done to check whether the sample is adequate for factor analysis or not. Since the value is 0.607 which is greater than 0.5, it was appropriate to run factor analysis in this case. According to Bartlett's Test of Sphericity, factor analysis is applicable when some items are co-related. The

Fig. 1. Proposed research model

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| PRODUCT |
| • wide range of variety |
| • unique and special |

| PRICE |
| • Value for money |

| PLACE |
| • Easily available |
| • Avoid long queues |

| PROMOTION |
| • Discounts and offers |
| • Advertisement |

| SERVICES |
| • Cash on delivery |
| • Easy to order |
| • Return policy |
| • Free shipping |

| ISSUES |
| • No guarantee |
| • Physical examination |
| • Possibility of forgery |
| • Product high price |

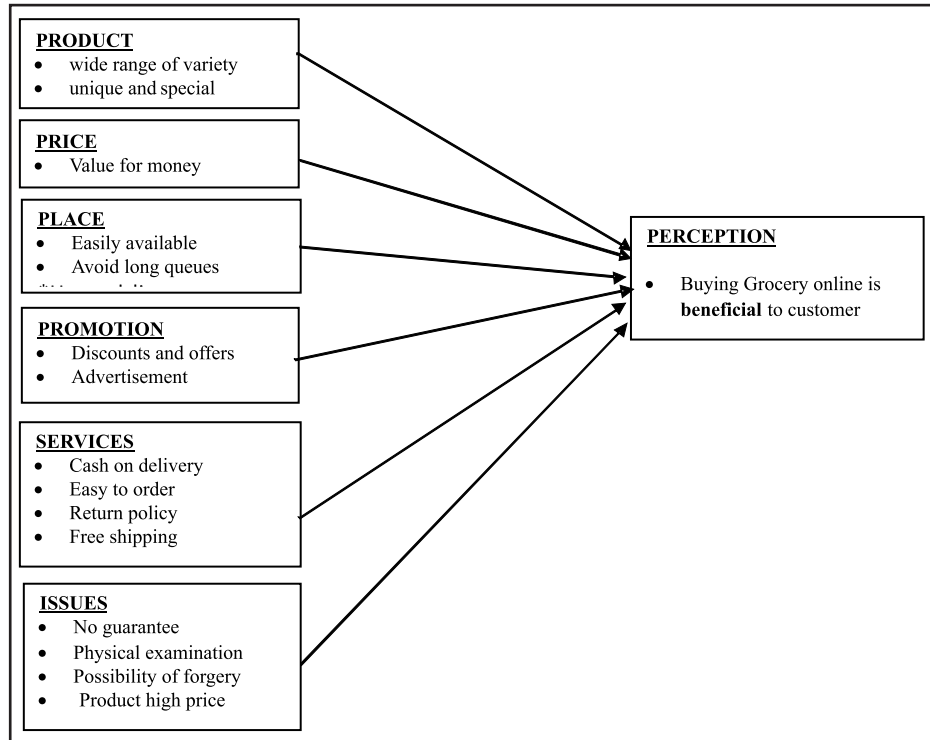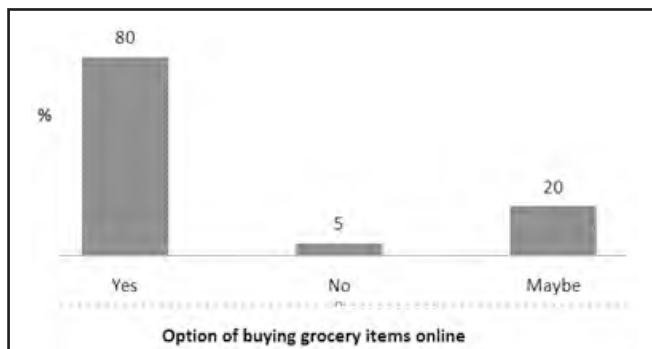| PERCEPTION |
| • Buying Grocery online is **beneficial** to customer |

Fig. 2. Option to Buy Grocery Items online

significance is 0.000 which is less than 0.05. Thus, we infer that it is appropriate to run factor analysis.

KMO measure of sample adequacy: Since the value is 0.503 which is greater than 0.5, it was appropriate to run factor analysis. Bartlett's Test of Sphericity-factor analysis is applicable when some items are co-related.

TABLE I.
KMO AND BARTLETT'S TEST

(Independent Variable Table)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.607
Bartlett's Test of Sphericity	Approx. Chi-Square	2.628e3
	df	325
	Sig.	0.000

The *p*-value is 0.000 which is less than 0.05. It is small enough to reject the null hypothesis.

TABLE II.
KMO AND BARTLETT'S TEST

(Dependent Variable Table)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.503
Bartlett's Test of Sphericity	Approx. Chi-Square	52.002
	df	3
	Sig.	0.000

Factor Analysis
Factor 1- Promotions

H_1- Promotions do not have a significant impact on perception of a consumer while purchasing groceries online.

H_0- Promotions have a significant impact on perception of a consumer while purchasing groceries online.

Factor 2- Products

H_1: Products do not have a significant impact on the perception of a consumer while purchasing Groceries

Factors	Variables	Factor Loading
Factor 1	Discount offered attracts customer the most	0.778
Promotions	Advertisement attracts me the most	0.699
	Return policy satisfies me the most	0.782
	Physical examination is an issue in online shopping	0.618
	Online shopping is beneficial because it offers discounts and offers.	0.863
	Online shopping is beneficial because it saves time	0.808
Factor 2	I shop online when I want something unique and special	0.744
Product	Variety attracts me the most	0.688
	Online shopping is beneficial because it is easy to order.	0.760
	Online shopping is beneficial because it offers a wide range of variety.	0.772
Factor 3	Website user friendliness satisfies me the most	0.736
Services	COD satisfies me the most	0.727
	Free shipping satisfies me the most	0.879
Factor 4	No guarantee is an issue in online shopping	0.781
Issues	Forgery is an issue in online shopping	0.733
	High price is an issue in online shopping	0.702
Factor 5	I shop online when i want value for money	0.912
Price	Payment option satisfies me the most	0.621
Factor 6	I shop online when i need to compare prices of product	0.644
Time	I shop online when i don't have time to search in market	0.88
Factor 7	After sale service satisfies me the most	0.518
Place	Security is an issue in online shopping	0.637
	Online shopping is beneficial because it enables me to avoid long queues	0.546

online.

H_0: Products have a significant impact on perception of a consumer while purchasing groceries online.

Factor 3- Services

H_1: Services do not have a significant impact on perception of a consumer while purchasing groceries online.
H_0- Services have a significant impact on perception of a consumer while purchasing groceries online.

Factor 4- Issues

H_1-Issues in online shopping have a negative effect on the perception of online shopping.
H_0- in online shopping does not have a negative effect on the perception of online shopping.

Factor 5- Price

H_1-Prices do not have a significant impact on perception of a consumer while purchasing groceries online.
H_0- Prices have a significant impact on perception of a consumer while purchasing groceries online.

Factor 6- Place

H_1-Place does not have a significant impact on perception of a consumer while purchasing groceries online.
H_0- Place has a significant impact on perception of a consumer while purchasing groceries online.

Factor 7- Time

H_1- Time does not have a significant impact on perception of a consumer while purchasing groceries online.
H_0- Time has a significant impact on perception of a consumer while purchasing groceries online.

VI. FINDINGS OF THE STUDY

1) It was found that among apparels, books, electronics, food, games, music, maximum purchased item is apparels.
2) 42% of the respondents purchase groceries from local kirana.
3) 80% of the respondents said if given an option to purchase groceries online, they will buy.
4) 8% of the respondents think that buying groceries online is beneficial.
5) 54.5% of the respondents think it is beneficial because it will save time.
6) The significance value of promotion, issues, place, and time is 0.000, which means that these factors have a significant impact on the perception of consumer with respect to online grocery shopping.

VII. RECOMMENDATIONS

1) Since consumers appreciate the convenience of shopping anytime and anywhere, e-commerce should be

fully exploited for online shopping of groceries.

2) Consumers state that they get better access to information online. Therefore, a broader section of products can be presented in the range of groceries.

3) Online grocery is an expanding business, so companies should try to diversify in cities where people shop online but this facility is not available to them.

VIII. LIMITATIONS

1) The primary limitation experienced during the market research was finding respondents who shop online. The sample consisted of respondents who have shopped online but do not have experience in grocery shopping.

2) The survey could only be conducted on the internet, mainly by emails. Thus, it was difficult to check whether the survey has been completed by the right person.

IX. FUTURE SCOPE OF RESEARCH

1) Further research can be conducted on the same research topic with a bigger sample size.

2) Different respondents from different cities and can be included in the sample size.

3) Other dimensions that affect perception of consumers to shop for grocery items can be included in further research to get more insights.

X. CONCLUSION

Consumers procure goods from online shopping websites on the basis of determinants like offers and discounts, variety, range of products available, free home delivery, website user friendliness, and cash of delivery payment option. It can be said that most of the respondents would agree to buy grocery online rather than shop for grocery the traditional way. Most of the respondents who agreed to buy online grocery were of the view that it would be beneficial to shop grocery online on the basis of factors like ease of order, variety, discounts/ offers and time saved by avoiding long queues.

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