

A Study to Measure Impact of Convenience Factors and Situational Factors on Online Purchase of Grocery Products in Pune Region

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Abstract: Internet and Information Technology have made major changes in form of business all over the world. Use of telecommunication networks and internet promoted use of Ecommerce through which several purchase activities happen in business. Growth of Ecommerce in India is because of convenience and large customer choice. Online retail is about 15% in India, India has 10 million shoppers and is growing at an estimate of 40-45%.

The purpose of the research is to study and measure impact of convenience factor and situational factors on online purchase of grocery products in relation to information Technology employees in Pune region. This research relies on primary and secondary data. Based on Literature review of past research, Primary data is collected by way of responses to a structured questionnaire from IT sector employees in Pune. Data analysis is conducted using statistical tools like SPSS, MS Excel etc. Statistical tests, correlation, tabulation, charts etc. Findings of the study reveal significance to online players/sellers for i) development and sale of online grocery products in targeted segment ii) understand preference of online buyers iii) To know behaviour of customers in various situations.

Keywords: Online grocery shopping, grocery products, convenience, situational factors.

I. Introduction

Grocery shopping is considered as one of the important and frequent activity of every house. People may avoid luxuries like restaurants, movies, vacation/foreign tours but they can't stop buying basic goods like vegetables, fruits, oil floor etc. Because of busy schedule people are not willing to spend time on shopping of groceries they find it tiresome and stressful. Long queues at billing counters and heavy traffic on roads/market place make people uneasy and feel to complete the task as fast as possible. With development of e-commerce and internet facility online is buying is the convenient way. (Anckar et al. 2002). Different e-grocery portals like big basket, grofers, zopnow, Aaramshop are providing service for selected metro cities in India.

Online grocery shopping refers to ordering grocery products via the Internet and the subsequent delivery of the ordered goods at home (Burke, 1998). It is also defined as a number of experiences including information search, web site browsing/navigation, ordering, payment, customer service interactions, delivery, post-purchase problem resolution, and satisfaction with every purchase (Ha/Stoel 2009). Online shopping is a mode of purchasing products and services by ordering them via the Internet-based stores, which provides consumers with an easy access to products and price information, and

facilitates product comparison (Chu, 2010) Electronic grocery (e- grocery) is the process of ordering groceries from home in an electronic way and either having them ordered at ones house or collecting them at a store or at a pick up point (Anna, 2016). As a result, internet shopping has been widely accepted as a way of purchasing grocery products. It has become a more popular means in the Internet world (Bourlakis M, 2008).

When we see global scenario one quarter of respondents use online grocery products and 55% are willing to use it in the future. In India delivery of household needs/staples or ready cooked meals to home are very old practices. Even the delivery of milk at door step is a traditional method. Milkman is back, but this time he is gone digital. Consumer are not ordering through phone but browsing web pages and using mobile apps.(Nielsen, 2015).Convenience is one of the factor while buying grocery product as consumer have multiple choice, he selects the most convenient method of buying. Does consumer prefer the traditional method (Brick and Mortar way) or buy online anytime with comfort at home. Second factor which decides the mode of buying through traditional way or through online portal, is the situation at that moment, availability of time, arrival of guests, emergency requirement. Advantage of offers, schemes, lucky draws etc or impulsive buying for liking of product. The aim of the research paper is to study impact of Convenience factors and situational factors on online buying behavior of IT employees in Pune region.

Objectives of the study:

1. To study the impact of convenience factor on online grocery shopping of IT Employees.
2. To study the impact of situational factor on online grocery shopping of IT Employees.
3. To compare traditional and modern (Online) buying reasons grocery shopping.
4. To study preference of female's to use online options in various situations.

Hypothesis:

- HA1 – Convenience factors has significant impact on online grocery shopping of consumers.
HA2 – Situational factors has influence on customers for online shopping of grocery products

Scope of the study:

Study is conducted by collecting of data by way of responses to a structured questionnaire from IT sector employees in Pune. Purpose to select Information Technology employees is considering the working hours, stress level at work, life style and techsavvy skills. Study reveals significance to online players/sellers, new entrepreneurs for:

- i) Development and sale of online grocery products in targeted segment.
- ii) Understand preference of online buyers
- iii) To know behaviour of customers in various situations.

II. Literature Review

The study reveals online grocery shopping is popular among service professionals, business class and retired people. Model is also popular among the working women. Saving of time and effort is major reason for purchasing groceries online. Online sellers provide customer's option of replacement. Expectation of customer from physical market is different compared to online model. Problem lies with unavailability of products and delay in scheduled delivery time. (Himanshu Budhiraja, 2016)

Respondents agree that online shopping can be done anytime because there is no time limit to browse internet but some respondents disagree the fact that less time is required to order grocery products online as viewing of pages and looking for desired product takes much time. Confirmation of order takes time. (Ali M. Noor, 2011)

Business professionals don't get time to shop in retail stores because of busy schedule. In online grocery shopping , grocery products are delivered at door step but still some respondents are afraid of unknown person coming for delivery at home and prefer availability at home during time of delivery. High priority is given to quick delivery, easy returns policy, visibility of manufacturing and expiry date in buying online groceries. (Sabari Shankar R, 2018)

Delivery charges or extra cost is not acceptable by Malaysian consumer. People disagree for repeat purchase for buying grocery products online. Constraint of availability of time and time to navigate online pages is lengthy process and not time saving. Traditional super markets are constantly improving value provided to consumers. High service level and late night opened hours, increase

efficiency and improving marketing mix for getting customer loyalty is stated in the article. (Zetty Madina Md. Zaini, 2011).

Authored has progressed conceptual model that addresses consumer value perception for using internet shopping versus traditional shopping. Objective of paper is to study factors that motivate customers to decide whether to do online shopping or go for the offline shopping. Study finds in last two years online shopping has increased immensely as people are more aware of technology. People above 35 years of age are less aware or updated about technology and will prefer to shop online if price of products are less than the market rate.(Gupta, 2015)

The paper insights different dimensions of online consumer purchase pattern and consumption behavior with increased access to internet, way to more systematic and sophisticated approach. Paper gives overview of online portals like bigbasket.com, Amazon groceries, zopnow, reliance fresh, aaramshop.com, bazaar cart etc. (Jayasree, 2017)

Study focuses on customer relationship management by online grocery stores and part of online grocery shoppers in attracting customers towards online shopping. Features of online portals to attract and satisfy customer desires and make them stick to the same portal in near future.24.3% respondents expect surprise gifts and 18.4% customers expect bonus points on referrals, other initiatives like invitations to events or movie tickets and provision of relationship manager. Price, Quality, Home delivery, variety of payment modes, return options, website navigation, easy accessibility are core services factors expected by customers.(Kaur, 2018)

Study confirms, online grocery shopping is affected by perceived trust, security and quality service support, personalized attention, price, promotion etc. E-Grocery retailers may offer discount, cash back, rebates and offers to online grocery customers. Personalized and customized attention plays critical role in customer's online grocery buying behavior. Inadequate security, risk of online grocery shopping coupled with doubt regarding truthfulness of online grocery retailers may prevent internet purchaser's to shop. A demographic characteristic have significant influence on grocery buying and helps to better understand, satisfy specific needs and wants of online grocery consumers.(Ch. Jayasankara Prasad, 2018)

III. Research Methodology

The research methodology is based on primary and secondary data. The primary data is collected through questionnaire to capture the opinions of the respondents. The questionnaire was designed to take feedback of Information Technology employees who know about online grocery shopping. The data was collected from IT and ITES companies of Pune region. Out of 400 respondents selected through random sampling 206 respondents are female. Data analysis is done with help of SPSS.

IV. Data Analysis

Inferential statistical techniques like t-test, Correlation were used for testing the formulated hypotheses.

Testing of 1st Hypothesis

Ho1 – Convenience factors has no significant impact on online grocery shopping of consumers.

Ha1 – Convenience factors has significant impact on online grocery shopping of consumers.

For testing this hypothesis the average agreement level on the issue was calculated with reference to the agreement percentages of the responses to the questions of the questionnaire as under –

1.1	76%
1.2	78%
1.3	77%
1.4	64%
1.5	73%
1.6	73%
1.7	66%
1.8	66%

Testing of statistical significance – (@ 95% level of confidence)

H1 (average of the sample)=	72%
SD (SD of the sample) =	0.91136
Ho (hypothesized mean of the population) =	50%
H1(sample mean) =	0.72
N (sample size) =	400
t-Test statistic ((H1-Ho)/((SD)/Sqrt(n)) =	4.73
p-value (tdist(t),(n-1),1)	0.000002
Is p-value < 0.05	Yes
Accept/Reject Ho	Reject Ho

Since the Null Hypothesis got rejected it can be said that Customer shift is seen towards online grocery stores due to convenience.

Testing of 2nd Hypothesis –

Ho2 - Situational factors has no influence on customers for online shopping of grocery products

Ha2 – Situational factors has influence on customers for online shopping of grocery products

For testing this hypothesis the average agreement level on the issue was calculated with reference to the agreement percentages of the responses to the questions

2.1	68%
2.2	79%
2.3	68%
2.4	67%
2.5	66%
2.6	69%
2.7	67%

Testing of statistical significance – (@ 95% level of confidence)

H1 (average of the sample)=	69%
SD (SD of the sample) =	0.92146
Ho (hypothesized mean of the population) =	50%
H1=	0.69
N (sample size) =	400
t-Test statistic ((H1-Ho)/((SD)/Sqrt(n)) =	4.19
p-value (tdist(t),(n-1),1)	0.000017
Is p-value < 0.05	Yes
Accept/Reject Ho	Reject Ho

Since the Null Hypothesis got rejected it can be said that Situational factors influence customers for online shopping of grocery products.

HA1: Convenience factor has impact on online grocery shopping

Correlations										
Control Variables			At Home Convenience	Online_Purchasing	Anytime_Purchasing	Availability_of_Money	Purchasing_on_Holiday	Quality_Assurance	Payment_Facility	Getting_List
Category	AtHomeConvenience	Correlation	1.00	.822	.617	.555	.648	.387	.668	.670
		n	0	397	397	397	397	397	397	397
		df	0	397	397	397	397	397	397	397

Online_Purchasing _Convenience	Correlation	.822	1.000	.704	.606	.646	.438	.745	.672
	df	397	0	397	397	397	397	397	397
Anytime Purchasing	Correlation	.617	.704	1.000	.556	.464	.398	.720	.479
	df	397	397	0	397	397	397	397	397
Availability_of_Mo ney	Correlation	.555	.606	.556	1.000	.521	.357	.523	.546
	Df	397	397	397	0	397	397	397	397
Purchasing_on_Ho liday	Correlation	.648	.646	.464	.521	1.000	.378	.521	.613
	df	397	397	397	397	0	397	397	397
Quality Assurance	Correlation	.387	.438	.398	.357	.378	1.000	.384	.415
	df	397	397	397	397	397	0	397	397
Payment_Facility	Correlation	.668	.745	.720	.523	.521	.384	1.000	.522
	df	397	397	397	397	397	397	0	397
Getting_rid_of_Lis t	Correlation	.670	.672	.479	.546	.613	.415	.522	1.000
	df	397	397	397	397	397	397	397	0

HA2: – Situational factors has influence on customers for online shopping of grocery products

Correlations									
Control Variables		Availa bility_ of_Tim e	Availabili ty_of_Inc entive	Emerge ncy_Req uiremen t	Impulsive _Require ment	Urgent_ Require ment	Interne t_Speed	Websit e_Desig n	
Ca teg ory	Availability_of_Time	Correlation	1.000	.823	.922	.930	.932	.926	.945
		df	0	397	397	397	397	397	397
	Availability_of_Incen tive	Correlation	.823	1.000	.781	.719	.798	.808	.783
		df	397	0	397	397	397	397	397
	Emergency_Require ment_as_shown_in_ Ad	Correlation	.922	.781	1.000	.894	.911	.885	.944
		df	397	397	0	397	397	397	397
	Impulsive Buying	Correlation	.930	.719	.894	1.000	.901	.832	.913
		df	397	397	397	0	397	397	397
	Urgent Requirement	Correlation	.932	.798	.911	.901	1.000	.881	.935

	df	397	397	397	397	0	397	397
Internet Speed	Correlation	.926	.808	.885	.832	.881	1.000	.890
	df	397	397	397	397	397	0	397
Website Design	Correlation	.945	.783	.944	.913	.935	.890	1.000
	df	397	397	397	397	397	397	0

Female's use more online options compare to male's in various situation.

Descriptive Statistics							
		Statistic	Std. Error	Bootstrap ^a			
				Bias	Std. Error	95% Confidence Interval	
						Lower	Upper
Gender	N	400		0	0	400	400
	Minimum	1					
	Maximum	2					
	Mean	1.51		.00	.00	1.51	1.52
	Std. Deviation	.500		.000	.000	.500	.500
	Skewness	-.060	.122	.000	.000	-.060	-.060
Valid N (listwise)	N	400		0	0	400	400

a. Unless otherwise noted, bootstrap results are based on 400 stratified bootstrap samples

Correlations ^b						
				Category	Gender	
Spearman's rho	Category	Correlation Coefficient		1.000	.103*	
		Sig. (2-tailed)		.	.039	
		Bootstrap ^{on}	Bias		.000	.001
			Std. Error		.000	.052
			95% Confidence Interval	Lower	1.000	.003
				Upper	1.000	.203
	Gender	Correlation Coefficient		.103*	1.000	
		Sig. (2-tailed)		.039	.	
		Bootstrap ^{on}	Bias		.001	.000
			Std. Error		.052	.000
95% Confidence Interval		Lower	.003	1.000		
		Upper	.203	1.000		

*. Correlation is significant at the 0.05 level (2-tailed).

b. \$bootstrap_split=0 :Listwise N = 400

on. Unless otherwise noted, bootstrap results are based on 400 stratified bootstrap samples

V. Findings

1. 76% respondents agree that online grocery shopping is convenient compared to traditional (brick and mortar) purchase
2. 78% of respondents feel seating at home and doing grocery purchase is contributing factor for convenience.
3. 73% respondents accepts that online purchase offers quality assurance even for non branded products.
4. 68% respondents feel availability of time is situational factor influencing online grocery purchase.
5. 79% respondents accepts that incentive schemes like offers, discounts, free gifts, influence or attracts online grocery purchase.
6. 68% respondents think emergency requirement like arrival of guest, illness, climate conditions influence online grocery purchase.

VI. Conclusion

Comfort of ordering from internet portal and delivery at door step is highest convenience factor followed by any time ordering through internet, is preferred by people in the study.

Time is important constraint but it is not leading factor in situational factor, preference is to incentive schemes like offers, discounts, free gifts, free vouchers, referral schemes attract people to purchase grocery product through online portals.

Limitations

Study was conducted in limited time span. Study was conducted only for IT & ITES employees in Pune region other buyers of online grocery shopping are not studied. Convenience and situational factors are only covered in the survey other factors like Demographic factors, service provided by E-grocers , Impact of offers and discounts, Impact of advertisement on online buying are not considered in this study.

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