

# Modelling The Effect Of E Service Quality On Consumer Satisfaction Towards E Grocery

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## **Abstract**

The TAM Technology acceptance model (Davis 1989) has guided the study of behavioral factors towards new technology. The model highlighted the importance of many behavioral intentions notably Perceived ease of use and perceived usefulness. Taking the base of TAM, the present study will aim to model the effect of latest E Service quality variables on consumer satisfaction towards E Grocery that will continuously guide the marketers to study the behaviour of consumers and their purchase intentions for grocery products using online mechanism. The study further aims to find the impact of demographic factors on consumer satisfaction for online grocery market. The survival of any market depends on its customers as we all believe that customers are the king, they are the key source for any business. The study of Consumer loyalty will help the marketer to understand what their customers think and how they perceive the online platform for grocery products. As the online grocery market is still on its growing stage, the study of consumer play a vital role in its future growth and survival. It will be the base for marketers to analyse future threats and opportunities.

**Key Words** – E Service Quality, E Grocery, E Grocery Model, Consumer Satisfaction, Consumer perception, consumer loyalty

## **Purpose**

Online market has developed its space in the virtual world but, Is this market worth for all kinds of products especially the perishable grocery products? The marketers need to analyze and understand what their consumers actually want and what they perceive about online services and thus, efforts are required to study the effect of E Service quality on consumer satisfaction with reference to E Grocery Market

**The study aims:** -

- To Determine the effect on consumer satisfaction towards E – Grocery based on Educational Qualification
- To Study the effect of - Service Quality measures (Perceived usefulness and Ease of use) on consumer satisfaction towards E Grocery

### **Methodology**

The research design used for this study will be **descriptive research methodology**. **Quantitative Techniques** will be employed for the proper analysis of the hypothesis. The Present study will be carried out in the Tri-City (Chandigarh, Mohali District and Panchkula District areas of Northern India. Sample will be collected from 50 respondents from the specified region.

### **Hypothesis**

Education of consumers plays an important role in affecting the level of satisfaction towards E – Grocery

Perceived Usefulness affects the consumer satisfaction towards E - Grocery.

Ease of Use affects the consumer satisfaction towards E - Grocery.

### **Literature Review**

**Kuang, Peiying & Ali, Mahmood (2014)** performed the research to study the E Grocery in Digital age. The aim of study was to identify attributes that attract consumers to buy groceries online and guide the grocers to enhance their virtual grocery dealings to retain consumers and attract new one. The data was collected from 204 respondents using observation and Interview method of data collection. The research concluded that goods and service quality, convenience, time saving, customers' trust, web page and advertising are the vital attributes that consumers consider while choosing online groceries. The author suggested that future studies can be extended in this field to include shared box service and also consider the cost for the consumers in e-grocery sector.

**Raman, Prashant (2014)** conducted the study on factors influencing women consumers' buying behavior towards online shopping in India. Online grocery shopping in India is at very initial stage but is gradually moving ahead. The aim of the study was to analyze the factors that instigate the female shoppers' attitude towards online grocery shopping. The data for the study was collected from the Females across India using the questionnaire technique. The result revealed that convenience was the most important factor for female shoppers to shop online while risk of doing transactions was the factor which stopped women from buying grocery online. With the incredible growth of e-commerce in India, there is a vital need to understand the factors that influence Indian female consumers to shop online. There are very few studies done on Indian context and the results of this study can thus help the online retailers and vendors to design their marketing strategies in a much better way.

**AK Subhramani (2015)** conducted a research to study perception of consumers towards online grocery market. He believed that consumers play a vital role in shopping. The increased dependence of younger generation on internet gave an opportunity to retailers to expand their market online. Thus it made it important to know what consumers perceive about online market. The main purpose of research was to determine what consumers think about online grocery shops. The data was collected using both secondary and primary data. The sample size taken in the study was 200 consumers from Chennai using Google forms. The paper concluded that majority of consumers buy online in order to get special articles at best possible price. Availability of product at one place and easy comparison of price attract consumers to shift to online market where as demographic factors like age, gender don't have greater influence on consumer behavior.

**Anna Blomqvist and Louise Nyman (2015)** conducted a study with aim to investigate whether positive attitude help to influence consumers buy grocery online or not. The study thus focused to find relationship between attitude and intentions of consumers towards online grocery. The data was collected through online survey in place of Sweden and was analyzed through SPSS software using correlation mix, factor analysis, multiple regression and descriptive variable technique. The study revealed that there was positive relationship between attitudes and intention to buy grocery online. The research on other side successfully tested the planned behaviour theory and provided the base for future researches.

**Chitra Sharma (2015)** conducted a research to study the impact of online grocery shopping on consumer perception. She believed that the dawn of internet era has brought new possibilities for the retailers and marketers. It has caused the perfect amalgamation of marketing and technology. Online grocery market works on the system of internet and a business model where they just accept the order for various items from the phone and deliver the same to their place. Some consumer showed a better response to online market as they provide various grocery items at affordable prices and discounts helping them to save money and time. On the other hand many opposed the system due to lack of trust towards quality and fear of spoilage of perishable goods due to late delivery.

### **Growth Drivers for E Grocery Market in India**

#### 1) Growing younger Population

India's population is expected to be more youth dominated in coming future (E-commerce-success). Most of Internet users are of young age (Teo and Lims study 1999). As per his study 22.5% users are less than 21 years old and 56.5 % users are of age group between 21-30 years (Margaret Tan 2000). The comfort demanded by our today's youth is a driving factor for growth of E Grocery.

#### 2) Growth of Internet Usage and Online Shopping trend

Internet penetration has seen rapid growth in last decade especially in developing countries like India (Kathleen A; Krentler 2009). There are 564 million active internet users in India in 2020 as compared to 525 million in 2019 (statista.com). Availability of high speed internet is one the main factor of increased no. of internet users (Venkata venu et el 2014). This is a blessing for E Commerce business and is a growth driver for E Grocery in India.

3) Rising Disposable Income

Rising disposable income of nation is resulting in increased spending and rises in demand for different goods and services (Sonu Joseph 2013). In 2019 disposable income of India was 206752290 which was the highest disposable income since 1950 ([tradingeconomics.com](http://tradingeconomics.com)) Rising disposable income will lead to growth of economy and increased returns from E Commerce (Eric D. Beinhocker 2007)

4) Increasing Affluence Levels

Rising level of affluence is another factor which is leading India towards digitalization and increased consumption. Consumption expenditure is expected to increase to \$4 trillion in 2025 (BCG report). By 2025 affluent households will rise from 8 to 16 % as compared to 2016 and total percentage of strugglers will drop from 31 to 18% (BCG report).

5) Quality products online

Quality is the life line for any product. In order to retain customers, building brand and improving ROI Return on Investment, Quality products play a main role (Business.com). Quality reviews available online are key drivers for shifting consumers towards online products. Almost 92% of consumers look for online quality reviews of different products (Icons8.com). Checking the star ratings of different goods and services is major criteria for choosing products these days.

6) Being customer driven less Investment driven

Online Era has brought an opportunity for the development of a market which is more consumer driven ([Diane M. Martin](#) 2013). There are many small businesses which have emerged in past few years with little or no investment. Low investment has resulted in more focus of marketers towards customer satisfaction than on making profits. Availability of huge discounts, comforts and ease of use have changed consumers perception towards online stores which will lead to more demand of online grocery in near future. Better communication, Target marketing and other situational factors have triggered consumers to shift for online grocery shopping (Chris hand et. al, 2009).

**Hypothesis Testing**

Hypothesis 1

H1 Education of consumers don't play an important role in affecting the level of satisfaction towards E – Grocery

H2 Education of consumers plays an important role in affecting the level of satisfaction towards E – Grocery

**Percentage Analysis**

Table 1			Fig 1	
Particulars	Frequency	Percentage	Education	

Up to Higher Secondary	3	6	
Senior secondary	8	16	
Graduate	12	24	
Post Graduate and above	27	54	
<b>Total</b>	<b>50</b>	<b>100%</b>	

Interpretation – As evident in Table 1 and Fig 1, 54% of respondents who buy grocery online have education equivalent to Post Graduation or more. And only 6% of respondents who had minimal education up to Higher Secondary purchased grocery using E Sources. Thus it is interpreted that the educated respondents are more aware about E Grocery advancement and prefer to buy grocery online.

**Table 2 Chi square Test Statistics**

	Education	Consumer Satisfaction
Chi-Square	25.680 <sup>a</sup>	41.400 <sup>b</sup>
df	3	4
Asymp. Sig.	.000	.000

As seen in Table 2, as sig value of Chi Square being less than 0.05 i.e. 0.00 the null hypothesis H1 that the education of consumers don't play an important role in affecting the level of satisfaction towards E – Grocery is rejected and the alternative hypothesis H2 that education of consumers play an important role in affecting the level of satisfaction towards E – Grocery is accepted. Educated respondents are more aware about E Grocery advancement and are more likely to buy grocery online and generate greater satisfaction as compared to less educated respondents.

Hypothesis 2

H3 Perceived Usefulness does not affect the consumer satisfaction towards E - Grocery.

H4 Perceived Usefulness affects the consumer satisfaction towards E - Grocery.

**Table 3 Determination of Perceived Usefulness For E Grocery**

FACTORS	Strongly disagree	Disagree	Neither Agree nor disagree	Agree	Strongly agree
Online Grocery helps me in shopping my grocery products more quickly	1	5	4	33	7
I find online grocery useful for shopping my grocery products	0	3	10	31	6
Online Grocery eliminates geographic limitation and increases flexibility	3	2	8	25	12
Usefulness of buying groceries online increase my level of satisfaction for E Grocery shopping	1	8	12	21	8
<b>Total</b>	5	18	34	110	33

Fig 2

### Perceived Usefulness For E Grocery

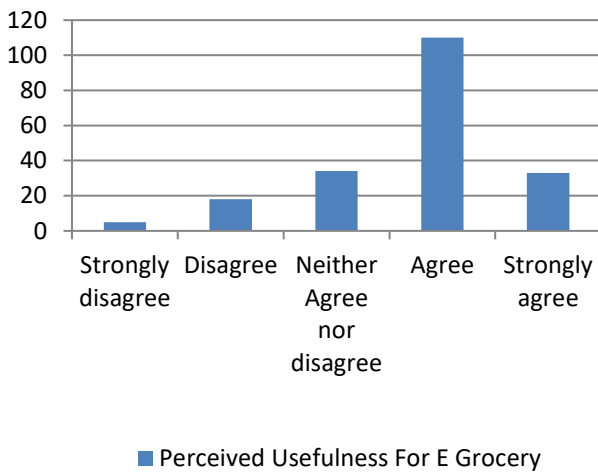
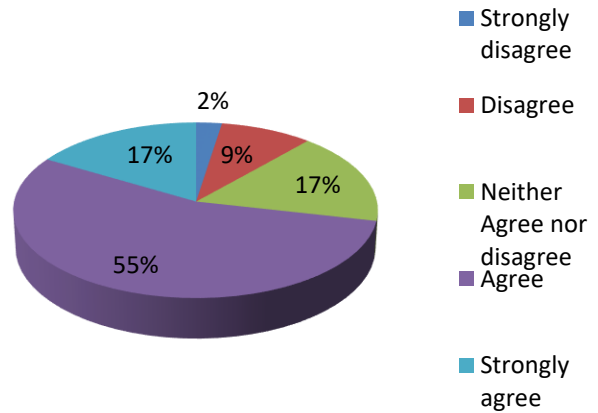


Fig 3

### Perceived Usefulness For E Grocery



**Interpretation:** - As evident in table 2 and Fig 2 & 3, Most of the respondent's i.e.55% of respondents agree that perceived usefulness affects the level of satisfaction towards E Grocery and 17% respondent's strongly agree with effect of perceived usefulness on E Grocery, Whereas 2% respondents were such who strongly opposed the same.

Further the hypothesis is being tested using the Anova analysis

<b>Table 4 ANOVA ( Perceived usefulness * Consumer Satisfaction)</b>						
		Sum of Squares	df	Mean Square	F	Sig.
Perceived Usefulness For E Grocery [Online Grocery helps me in shopping my grocery products more quickly]	Between Groups	20.923	4	5.231	13.783	.000
	Within Groups	17.078	45	.380		
	Total	38.000	49			
Perceived Usefulness For E Grocery [I find online grocery useful for shopping my grocery products]	Between Groups	13.540	4	3.385	12.225	.000
	Within Groups	12.460	45	.277		
	Total	26.000	49			
Perceived Usefulness For E Grocery [Online Grocery eliminates geographic limitation and increases flexibility]	Between Groups	21.340	4	5.335	7.493	.000
	Within Groups	32.040	45	.712		
	Total	53.380	49			
Perceived Usefulness For E Grocery [Usefulness of buying groceries online increase my level of satisfaction for E Grocery shopping]	Between Groups	15.680	4	3.920	7.494	.000
	Within Groups	23.540	45	.523		
	Total	39.220	49			

As seen in Table 4, as sig value of Anova being less than 0.05 i.e. 0.00 the null hypothesis H3 that the Perceived Usefulness does not affect the consumer satisfaction towards E – Grocery is rejected and the alternative hypothesis H4 that Perceived Usefulness affects the consumer satisfaction towards E – Grocery is accepted. Thus Perceived Usefulness plays a vital role in enhancing the satisfaction of consumers towards E Grocery and lead to greater usage of E Grocery sites.

### Hypothesis 3

H3 Ease of Use does not affect the consumer satisfaction towards E - Grocery.

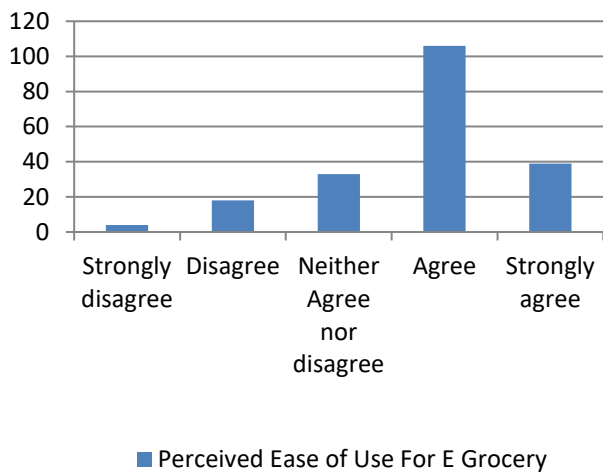
H4 Ease of Use does not affect the consumer satisfaction towards E - Grocery.

**Table 5 Perceived Ease of Use**

FACTORS	Strongly disagree	Disagree	Neither Agree nor disagree	Agree	Strongly agree
It is easy to buy groceries online	0	6	7	30	7
Online Grocery is available 24*7 therefore enables me to carry out shopping as per my convenience	2	0	4	30	14
Remembering online steps to buy groceries is easy to remember	2	6	9	22	11
Ease of buying groceries online increase my level of satisfaction for E Grocery shopping	0	6	13	24	7
<b>Total</b>	4	18	33	106	39

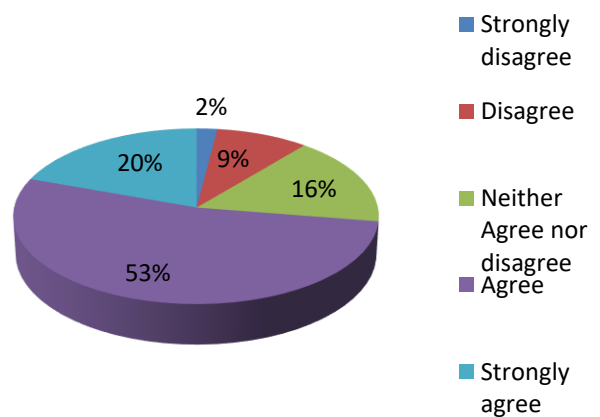
**Fig 4**

**Perceived Ease of Use For E Grocery**



**Fig 5**

**Perceived Ease of Use For E Grocery**



**Interpretation:** - As evident in table 5 and Fig 4 & 5, Most of the respondent's i.e.53% of respondents agree that perceived ease of use affects the level of satisfaction towards E Grocery and 20% respondent's strongly



agree with effect of perceived ease of use on E Grocery, Whereas 2% respondents were such who strongly opposed the same.

Further the hypothesis is being tested using the Anova analysis

<b>Table 6 ANOVA Testing</b>						
		Sum of Squares	df	Mean Square	F	Sig.
Perceived Ease of Use [It is easy to buy groceries online]	Between Groups	6.093	4	1.523	2.361	.003
	Within Groups	29.028	45	.645		
	Total	35.120	49			
Perceived Ease of Use [Online Grocery is available 24*7 therefore enables me to carry out shopping as per my convenience]	Between Groups	15.483	4	3.871	8.624	.000
	Within Groups	20.197	45	.449		
	Total	35.680	49			
Perceived Ease of Use [Remembering online steps to buy groceries is easy to remember]	Between Groups	9.853	4	2.463	2.357	.002
	Within Groups	47.028	45	1.045		
	Total	56.880	49			
Perceived Ease of Use [Ease of buying groceries online increase my level of satisfaction for E Grocery shopping]	Between Groups	12.492	4	3.123	5.615	.001
	Within Groups	25.027	45	.556		
	Total	37.520	49			

As seen in Table 6, as sig value of ANOVA being less than 0.05, the null hypothesis H5 that the Ease of use does not affect the consumer satisfaction towards E – Grocery is rejected and the alternative hypothesis H6 that Perceived Ease of use affects the consumer satisfaction towards E – Grocery is accepted. Thus Perceived ease of use plays a vital role in enhancing the satisfaction of consumers towards E Grocery and lead to greater usage of E Grocery sites.

## Findings

Majority of respondents who buy grocery online have education equivalent to Post Graduation or more. Thus it is interpreted that the educated respondents are more aware about E Grocery advancement and prefer to buy grocery online.

Perceived Usefulness plays a vital role in enhancing the satisfaction of consumers towards E Grocery and lead to greater usage of E Grocery sites.

Perceived Ease of Use plays a vital role in enhancing the satisfaction of consumers towards E Grocery and lead to greater usage of E Grocery sites.

## **Conclusion**

The research helped in developing a new model by studying the effect of E Service quality factors on consumer satisfaction towards E Grocery. The Research will help in exploring the impact of various service quality factors on consumers by using the online grocery mechanism. It will play a precious role in the E Grocery Industry by providing them knowledge about the consumer's response towards the online market of grocery products and further will help them in establishing the market on a wide scale.

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