

## Impact of Demographic Factors on Online Shopping Behavior of Consumers in The Major Cities Of Rajasthan

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Online shopping is the new technology for marketing in India and Rajasthan. Companies are using this electronic technology to get market share and consumers are using it for online shopping purposes. Nowadays the various ways of online shopping are the important parts of their commercial activities. This analyses the demographic factors that influence the online shopping of products and services in Rajasthan. A sample of 455 respondents is selected for the study from Jaipur, Jodhpur, Kota, Udaipur and Ajmer. The questionnaire method is used to collect the primary data and data are also collected by personally contacting consumers in all the five major cities of Rajasthan. The data analysis technique used in this research is ANOVA technique. The results of the study shows that online shopping in India and Rajasthan is significantly affected by the demographic factors like gender, age group, education and income. The findings of the study can be used for further studies in the online shopping area.

**Key words :** Demographic factors, Gender, Age, Education Income, online shopping.

**Introduction :** Internet revolution and economic growth has brought a paradigm change in the field of online shopping. Internet has become a new trend and new interface for the business nowadays. Survival of the firms depends on the efficient use of internet for the commercial transactions. Consumers preferences, education and their income has risen during previous decades. Consumers are interested to buy goods over the internet. Online shopping has emerged as one of the important way of lifestyle for consumers in India. Business houses have been able to reach to the maximum customers at less cost and get more market share. Modern customer wants to spend more on family and lives a new way of life. Online shopping has become important part of his life. There are many advantages of e-marketing over traditional marketing. Reach :Customers can reach to the global markets with help of Internet. Customers can buy from any market. There is no physical or geographical limit for consumers in e-marketing. They can reach to any firm through a click on a link.Scope : Scope of e marketing is wide. Marketers can provide the goods and services to different consumers in different places or markets.Internet is a new communication technology, so scope of e marketing is growing rapidly.Interactive nature: Interactivity is the most important characteristics of e marketing. It allows communication between firms and consumers. Consumers can compare the goods and services and then can send their demands to companies for purchasing. There is interactivity from both sides that is from consumers and from firms. E-marketing is a two way interaction channel. Marketers can provide information,graphics, videos, pictures and other details of products to consumers. Immediacy : Consumers can use Internet 24 hours, 7 days and 365 days continuously.Consumers can order for goods instantly or can buy goods immediately as and when they see the advertisements of their desired goods over internet or other channels. There is no gap between information search and buying process of goods and services. Consumers do not have to wait the opening of the online shops and they can place order from their homes in nights also. Consumers purchasing cycle moves speedily towards completion in e-marketing.If companies working time is over we can continue to search through e marketing for products.We can access the information and

product search even in night hours through the internet. Low cost : E-marketing offers products and services at lower costs to consumers than traditional marketing. There are low transportation costs, low storage costs and there are middleman or agents in e-marketing. Adaptivity : Marketers can change their strategies according to the preferences and wants of consumers in less spending and less efforts. With the help of all these factors the profits of companies can be improved and consumers can be more satisfied through e-marketing.

There are some of e-Marketing: Dependability on technology: Online transactions depends on technology and this new technology changes rapidly. Security and privacy problems: online transactions are not always secure and there is no surety of privacy. Increasing costs: costs of e-marketing activities are increasing day by day. There is increased competition in markets for pricing. Global competition: there is a global competition due to latest technology and globalization of markets. There is no guarantee of goods and services. There is no touch and feel factor involved in the online shopping. The main disadvantage is risk of burglary, fake sellers and fake accounts, and there are increased cheating of credit and debit cards in India and Rajasthan. Every day criminals cheats consumers in the fake identity / fake name of bank officers. There is distrust among some consumers about e-marketing.

### Literature Review

Literature review helps the researcher to get used to the related material on the study and avoid unnecessary and unintentional duplication of other researchers projects. It will help to contribute to knowledge. Literature review helps to summarize the results of previous studies in order for the researcher to use them as data base for their findings.

Demographic factors like gender, age, income and education are considered in the research for internet shoppers behavior (**Fram and Grandy, 1995**). Internet buyer has changed over the time. Professionals, specially males with higher income and higher education has revolutionized the retail channels (**Ernst & Young, 2001; Mahajan, Muller & Bass, 1990**). Gender , age, income, education, residential location and marital status are important determinants of internet purchasing (**Fram and Grandy, 1995; Kunj, 1997; Mehta and shivdas, 1995; Sultan and Henrichs 2000**). **Sultan and Henrichs ( 2000)** found that consumers willingness towards internet and preference to adopt internet is positively related to income, family size and innovativeness. **Pew research center report (2001)** reported that 58% female consumers bought online products and 42% male bought products. Among them 37% women enjoyed shopping but 17% men enjoyed shopping. **Akhter (2002)** reported that younger, educated males and rich people generally liked to purchase goods over the internet. Acceptance of online marketing by consumers is based on the awareness and adoption of internet and not on knowledge of traditional channels. The main factors that are important for adoption of online marketing are same as for adoption of internet. **Kim and Kwon (1999)** stated that progressive, assertive and modern lifestyle of consumers leads them to the more use of internet. **Sohn and Ahn (1999)** suggested that consumers knowledge is the important factor that influences their adoption of e-commerce. **Liang and Huang (1998)** found that consumers experience is the key factor in online shopping. **Khalifa (2003)** added that consumers innovativeness is important factor which affects internet shopping. Websites quality also affects consumer purchasing over internet.

**Venkatesh and Balachandran (2004)** in their study found that good internet marketing offers low advertisement costs, attracts more consumers to web sites, increases brand exposure , branding

of goods and services increases sales. There are some steps that can assist in retaining consumers. These are like e-mails, free greeting cards, e-letters, free electronic gifts, chat forums and regular updates of products.

According to **Guda (2005)** there are some important benefits that can be achieved by e-marketers from e-commerce activities. These are improved services, increased consumers, reduced operating costs, improve service quality, better competitiveness, increase efficiency and minimizes administrative errors. Consumers like tangibility in online shopping because consumers want security and assurance of purchasing right goods in good condition from e-tailers. Consumers generally want to feel and touch sense in the shopping (**Rajamma, Paswan and Ganesh, 2007**).

There is no significant difference found between male and female students regarding online shopping attitude in the graduation level. Online shopping has gained popularity during the last decade among consumers. The research results shows that respondents have liked online shopping positively. Online shopping has a bright future in India. (**Dr. Sonal Kala and Rajesh Kumar Sharma, 2015**)

Consumers have understood the difficulties of online purchasing processes and get accustomed how to deal with it. There is a shift towards cash on delivery method of payment and convenient delivery timings according to the consumers choices. Results revealed that demographic factors influences online shopping in India. Demographic factor gender plays important role in online shopping of women as gender influences female frequency of shopping over internet. (**Dr. Gagandeep Nagra et al, 2013**)

Factors affecting online shopping are time saving, money saving, easy transactions, easy comparison of products and services and in time delivery of goods. Her findings says that there is correlation between age and online shopping, that is, young generation is inclined towards online shopping and older age consumers are not keen to shop online shopping. Results shows that the higher educated consumers are more interested for online shopping. Male consumers rate for online shopping preference is 60%. 38% consumers feel that online buying is easy. Majority of respondent consumers, 92%, feel that online shopping is time saving and 85% consumers says that it is money saving. Mostly consumers feel that online shopping is less risky and there is timely delivery of goods services. (**Dr. Seema Agarwal**)

**Richa Devgun and Dr. Parul Agarwal** in their study found that e-shopping is more convenient and time saving. 65% consumers agree that online shopping is easily accessible. Young consumers of age 18-30 years are more attracted towards discounts and special offers in online shopping. It is revealed that 47% consumers are concerned about disclosing personal information and mostly consumers shop from shops and 32% shop from online. There is a positive relation between income, young age and online shopping. Both the genders, male and female, use internet frequently in Rajasthan.

**Dr. Sanjay hooda and Sandeep aggarwal (2012)** in their study analysed the online shopping behavior of jaipur consumers. They suggested that most of the respondents irrespective of gender difference, age group of 18-30 years find e-shopping more convenient, time saving and prefer credit card as the convenient mode of the payment followed by debit cards and cash payments. Consumers prefer the E-ticketing as the most popular service followed by e-booking and e-billing. They observed that @68% consumers find shopping from shop more easier and convenient and

@32 % like to purchase goods from online shopping. There is a strong relation between income, occupation and purchase decision of respondents. People of higher income prefer to shop online because they do not have time to go to market and spend 2-3 hours on shopping. It is observed that young generation is highly attracted towards discounts and offers given by companies.

Innovation technology plays important in the popularity of online shopping format of business. Online shopping is increasing these days hugely due to the increasing penetration of internet. Innovation refers to the adoption of latest technology and changes in the system for the current requirements of consumers. A number of factors makes products attractive to customers. These are external environment, geographical factors, personal characteristics, product qualities, brands, consumer satisfaction, and payment options. With the rapid development of technology and innovation in the field of online shopping, there is a great change in the shopping pattern (Monika Pathak and Gagandeep kaur, 2014).

Consumers mostly (approximately 80%) purchased tickets and 8% purchased clothes, 10% likes books, 25% likes video games, 18% likes electronic goods and 20 % music. According to study on mode of payment consumers generally pay through cash on delivery (80 %), 55 respondents out of 60 respondents, than followed by credit cards and debit cards. It is suggested that for more usage of online shopping consumers should be educated, government role is important, e-marketers should think about consumer interests and banks should promote credit card and debit card facilities in online shopping (Dr. Payal Upadhyay and Jasvinder Kaur)

**American Express and Nielsen** conducted survey on "Understanding online consumers in India" (2016) in six cities Delhi, Mumbai, Bangalore, JAIPUR, Ahmedabad and Hyderabad among internet users. Survey findings are interesting. 98% of internet users shop online and 96% use internet for social media. 95% for banking, e-tickets and sending e-mails. Mostly 74% females use credit or debit cards for shopping purposes/transactions. Indian women uses Application 98% and men App. Usage is 81%. Consumers want to shop online with cards. Survey says that 70% Indian consumers uses cards for payment in above cities. Card users are in the age group 26 to 30 years and earning members. Delhi and bangaluru residents paying utility bills are 81%. Tier 2 cities like JAIPUR and Ahmedbad are paying utility bills is 75% and 72% respectively.

### **Research objectives**

To study the impact of demographic factors like gender, age, education and income on online shopping behavior of consumers of Rajasthan and India. To study the consumer awareness towards e-marketing among the people of Jaipur, Jodhpur, Kota, Udaipur and Ajmer cities.

### **Research Hypothesis**

- H1. There is no significant statistical difference in consumer behavior towards online shopping due to gender.
- H2. There is no significant statistical difference in consumer behavior towards online shopping due to age.
- H3. There is no significant statistical difference in consumer behavior towards online shopping due to education.
- H4. There is no significant statistical difference in consumer behavior towards online shopping due

to income.

### Research method and data analysis

Research on the study of impact of demographic factors of consumers on online shopping behavior in major cities of Rajasthan is a descriptive research. Population and scope of study here represents the residents of JAIPUR, JODHPUR, KOTA, UDAIPUR and AJMER cities of Rajasthan. Data is collected from primary and secondary sources. Primary sources are interviews and questionnaires. Secondary data are collected from news papers, journals, various publications and books and libraries. Sample size for the questionnaire was 455 from the above five major cities of Rajasthan. The study undertaken is stratified sampling, that is, population is divided into strata according to the gender, age, education and income. Pilot survey is conducted in Jaipur city. The sample was collected five cities assuming that there is a high internet usage is expected.

Table 1. Sample size for questionnaire

City	No. of Respondents
Jaipur	100
Jodhpur	85
Kota	90
Ajmer	95
Udaipur	85
<b>Total</b>	<b>455</b>

To meet the research objectives and to test proposed hypotheses the data analysis technique used in the study is AVOVA. The following data analysis examines the impact of demographic factors on consumer behavior towards online shopping over the internet. Demographic factors like gender, age, education and income are analysed in this study. The One Way analysis of Variance is used to for analysis in this study. Various aspects of consumer buying behavior through online shopping is studied in the survey.

### Gender

Table 2. Gender analysis

	Variable	Count/number	Percentage
Gender	Male	299	66%
	Female	156	34%

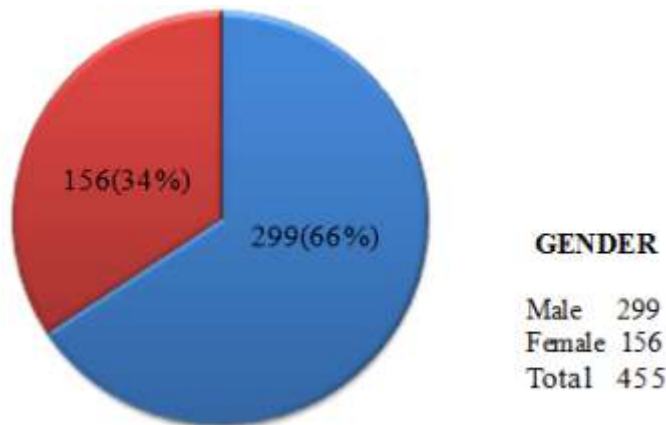


Table 3: Means, standard deviations and, t-values for respondent attitude scores of gender.

Gender	Percentage	Mean	Standard deviation	t-value	Significance
Male	66	3.693	0.329	1.44	0.15
Female	34	3.598	0.456		

The analysis of first hypothesis (H 1) that there is no strong statistical difference in consumer behavior towards online shopping due to gender is shown in the table 3. The various statistical values like mean, standard deviation and t-values are calculated to test the above hypothesis. Standard deviation for gender for males is 0.329 and for females is 0.456, and t-value for gender is 1.44 and significance level is 0.15. The analysis as per the table illustrates that there is no strong statistical difference in consumer behavior towards the online shopping due to gender ( $\alpha=0.15$ ). This shows that the null hypothesis (H 1) is accepted. There is no statistical difference in the male and female online shopping behavior. It means that there is similarity in the online shopping behavior of male and female consumers.

### Age group

Table 4. Age group analysis

Variable	Count/number	Percentage
Age		
18 - 35 years	292	64.20%
35 - 50years	121	26.60%
More than 50 yrs	42	9.20%

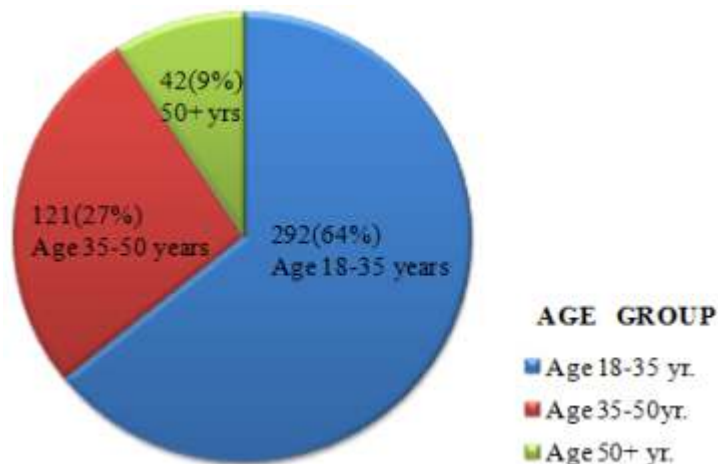


Table 5: Means, standard deviation and, F-ratios for respondent attitude scores of age group.

Age group	Percentage	Mean	Standard deviation	F-ratio	F-probability ( $\alpha$ )
18 -35 years	64.2	3.63	0.37	0.975	0.379
35 -50 years	26.6	3.73	0.31		
More than 50 years	9.2	3.67	0.33		

The analysis of first hypothesis (H 2) that there is no strong statistical difference in consumer behavior towards online shopping due to age is shown in the table 5. The various statistical values like mean, standard deviation and F-values are calculated to test the above hypothesis. Standard deviation for age 18-35 years is 0.37, for 35-50 years is 0.31 and more than 50 years is 0.33 and F-ratio is 0.975. F-probability is 0.379.

The analysis as per the table illustrates that there is no strong statistical difference in consumer behavior towards the online shopping due to age ( $\alpha \leq 0.05$ ). This shows that the null hypothesis (H 2) is accepted. It means that there is almost similarity in the online shopping behavior of consumers due to age.

## Education

Table 6. Education level analysis

Variable		Count/number	Percentage
Education	Secondary	128	28.10%
	Graduation	285	62.70%
	Post-graduation/ professional	42	9.20%

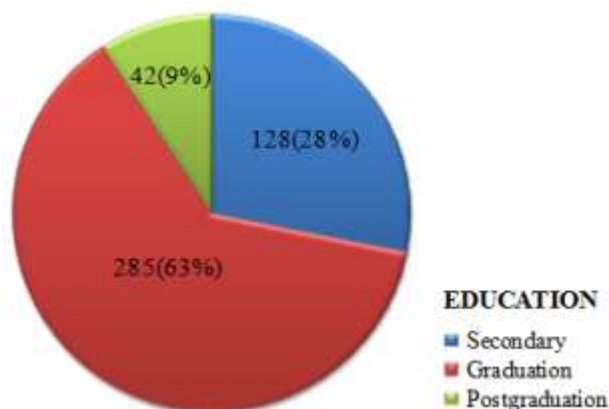


Table 7: Means, standard deviations and, t-values for respondent attitude scores of education

Education level	Percentage	Mean	Standard deviation	F-ratio	F-probability ( $\alpha$ )
Secondary	28.1	3.53	0.32	0.572	0.291
Graduation	62.7	3.83	0.27		
Post-graduation/ Professional	9.20	3.69	0.38		

The analysis of first hypothesis (H 3) that there is no strong statistical difference in consumer behavior towards online shopping due to education is shown in the table 7. The various statistical values like mean, standard deviation and F-values are calculated to test the above hypothesis. Mean for secondary education is 3.53, for graduation 3.83 and for post graduation 3.69. Standard



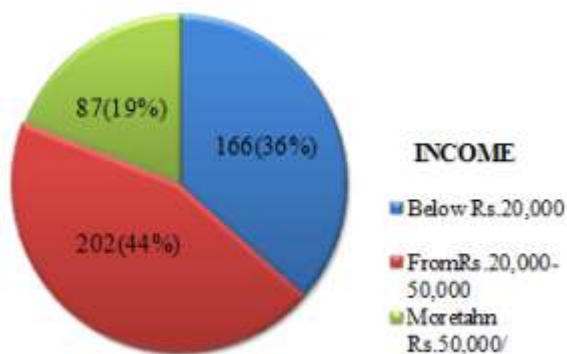
deviation is 0.32, 0.27 and 0.38 respectively for secondary, graduation and post graduation/ professional level of education. F-value is 0.572 and F-probability ( $\alpha$ ) is 0.291 which is almost similar to the results of hypothesis I and II analysis. The results illustrates that the impact of education is not likely on the consumers attitudes towards online purchasing. The null hypothesis is be accepted. The education classifications shows that there is similarity in the consumers attitudes towards online shopping.

### Income

Table 8. Income analysis

Variable		Count/number	Percentage
Income	Below Rs.20000/	166	36.50%
	20000-50000/-	202	44.40%
	More than 50000/	87	19.10%

Table 9: Means, standard deviations and, F-ratios for respondent attitude scores of income.



Income	Percentage	Mean	Standard deviation	F-ratio	F-probability( $\alpha$ )
Below Rs.20,000/	36.50	3.57	0.39	3.0014	0.047
Rs.20,000/ to 50,000/-	44.40	3.71	0.35		
More than Rs.50,000/	19.10	3.73	0.36		

The analysis of first hypothesis (H 4) that there is no strong statistical difference in consumer behavior towards online shopping due to income is shown in the table 9. The various statistical values like mean, standard deviation and F-values are calculated to test the above hypothesis. Analysis illustrates that there is strong statistical difference according to the income in consumers attitudes towards online shopping. F-ratio is 0.047 and standard deviation for income of Rs.20,000 is 0.39, for Rs.20,000 to Rs.50,000 is 0.35 and for income more than Rs.50,000 is 0.36. This result shows that we cannot accept null hypothesis. There is statistical difference in the consumer behavior towards online purchasing. It means it shows that income of consumers have clear impact on their online shopping attitudes. Results of the study illustrates that higher income groups are more likely to shop online products and services than the lower income groups. It is probably due to their risk, security and privacy concerns about online shopping.

### Conclusion

The results of this study shows that consumers of Rajasthan have enough knowledge and skills in using the computer, they are internet savvy and are using internet services for online shopping. The overall results prove that the respondents have perceived online shopping in a positive manner. This clearly justifies the growth of online shopping in Rajasthan and India. However, the frequency of online shopping is relatively less in Rajasthan.

The current study examined the possible differences among consumer subgroups in terms of gender, age, education, and income. The analysis shows that there were no significant differences in consumer attitudes due to these demographic variables, with the exception of income. The study concludes that the higher the income bracket of consumers, the more favorable the attitude towards online shopping. Result shows that income of consumers have clear impact on their online shopping attitudes. The issue of security and privacy of online transactions seems to be a major concern to consumers. It is evident that this particular issue appears to be a major factor that restricts the willingness to make a better use of online shopping in Rajasthan. This may sufficiently explain why many consumers of Rajasthan are not encouraged enough to shop online.

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