# Impact Of Demographics On The Consumption Of Different Services Online In India

**By**

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*Brief Biographical Description*

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## Abstract

**The role of Internet is becoming inevitable to corporate and society. Across the world, governments and corporate are increasingly working towards the better utilization of the internet. The Internet which was initially perceived as a communication media is now metamorphosing into a powerful business media. The late 20 and early 21$^{st}$ century witnessed the entry and exit of the dot.com companies. The internet motivated many brick & mortar companies to use the Internet to sell products/services online and found negative outcomes as the companies failed to understand the internet buyer behavior and could not figure out the categories of services the Internet users intend to buy. In offline marketing, demographics plays a vital role in understanding buying behavior of consumers belong to different segments which would enable companies to develop products/services according to their specific requirements. Internet is a medium which does not offer this luxury to companies to know the profile of Internet users as it is an indirect medium. The companies would do well if they could find the demographic profile of Internet users which would help them devise strategies accordingly. Hence, the author conducted an extensive primary research in Bangalore, India (Silicon Valley of India) in order to identify the willingness of Internet users to buy different services over Internet. The paper aims at providing a specific focus to identify the impact of demographics in influencing Indian Internet users in consuming different services online. The outcomes would help the corporate world to understand the importance of demographics on online purchase which could be adopted and deployed for better use.**

## 1. Introduction

The UCLA report identified that one of the most advertised products of 1999 and 2000 over Internet were online brokerage services and three-fourths of population that bought and sold services had some form of Internet access. The study revealed that the Individuals with Internet access did more trade per year than individuals who had Internet access (2.3 times) (UCLA, 2000). The above study shows the services are gaining momentum over internet. This could be supported by the yet another study conducted by UCLA in 2001 showed that the Internet users feel at ease to avail services online as it does not need the tangible purchase execution required for product purchase and also revealed that

20% of the respondents avail travel services online (UCLA, 2001). The paper attempts to identify the influence of demographics in consuming different services online. This is supported by the study conducted by Mckinsey revealed that the consumers those who consumed services online were young, well-educated and richer than average and different demographic variables viz. age, employment status, family role, house hold structure played a vital role in consuming Pay-TV services. It also indicated that the income and gender had least impact on consuming the services (The McKinsey Quarterly; 1996, 2001). This is evident that the role of demographics in influencing online consumption of services.

In India, some of the online retailers offer different variant of products (Fabmart.com etc) and some of them stick to certain products (First and second. Com) such as books, adopted the model of Amazon.com. Many entered into service arena by offering different services such as online share trading, banking, travel and hotel booking, holiday packages etc (Sharekhan.com, ICICIDirect.com, Makemytrip.com etc). Yet these online products/service providers could not reach the mass segment. The reasons might be the lack of proper connectivity, payment mode and failure to identify and understand the demographics of the target group. In offline marketing, the services are generated and tailor-made initially considering the demographic segmentation. But, the online retailers in India might have missed the significance of the demographics.
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This prompted the author to conduct an extensive study in Bangalore, India, in order to identify the impact of demographics in influencing the consumption of services online. The author defined the scope of research as he categorized the services into three major categories viz. High involvement, medium involvement and low involvement. Involvement would be defined by four major factors viz. Price, Purchase intervals, Perceived risk and Personal emotional involvement (Ramesh Kumar S & Karan Bajaj, 2002).
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**High Involvement Services:** Normally, a consumer would undergo a lengthy behavior process while he intends to buy high investment service viz. Jewelry, Loan for House, Car, International holiday package, Investment of Funds etc. Hence, higher the investment, more the involvement the consumer exercise to buy a service as he could not switch to substitute brand or service as the investment is high.

**Medium Involvement Services:** Generally, a consumer would not exercise diligent care while he intends to select a domestic holiday package, booking a hotel room as it involved medium investment. Normally, all these purchase come under impulse purchase and the consumer would not use the articles for a long time and he/she may switch to substitute brand or service as the investment is medium.

**Low Involvement Services:** Usually, a consumer would not spend much time in searching information (cognitive) or evaluating (affective) the information collected before make a purchase (behavior) of buying cinema tickets or booking a table at restaurant etc. which incur low investment as he/she could switch to substitute brand if dissatisfy with the service consumed. He/she could do so as the investment for the product/service is comparatively low and would not affect his/her buying decision.

The above definition of the different categories of services are done based on the involvement, investment and time spend by consumers to choose a particular to consume online. Since, the service does not require tangibility in purchase, consumers find at ease to consume online. However, understanding the role of demographics in influencing the consumption of different categories of services online would enable the online service providers to map the profile of online consumers and offer the services tailor made to the target group. Numerous studies have been conducted across the world on the impact of demographics in online consumer buying behavior.

## 2. Literature Review

Profiling online consumers become difficult for the companies and in the initial days of internet, several studies were conducted to profile the internet consumer and found out that innovators who normally belong to high income category

could be initial consumers of Internet (Flynn and Goldsmith, 1993; Goldsmith et al., 1998). The further research revealed the absence of systematic relationships between demographics and the Internet-related consumption behaviors (Aldridge et al., 1997). There were several studies revealed the near exact profile of Internet users tend to be young, male, well educated, and tend to have above-average income (GUV,1998). Further research probed the consumer behavior trends and its connectivity with demographics on online purchase (Eastlick and Lotz, 1999). The studies were conducted on online consumption pattern revealed that the young buyers made heavy purchase of clothing online and also revealed their innovativeness; knowledge over internet prompted them to do so. (Hogg et al.,1998; Silverman, 2000)..

Several studies were conducted to understand the role of gender, education, income and family on online purchase. The study conduced by UCLA revealed the gender ratio on online (57.1% and 45.1% of male and female Internet users bought online) and also revealed that the education, income and experience played a vital in influencing Internet users to make online purchase (UCLA, 2000). The Forrester's study emphasized the significance of studying online consumer behavior which used demographic information along with attitudinal and life style data to create a composite segmentation scheme that divides that markets into ten segments reflecting income level (high Vs. low), three motives for going online (career, family and entertainment) and the two technology attitude groups of optimists and pessimists (Modahl, 2000). The study was conducted to understand the conversion behavior and expressed that the inclusion of demographics in the conversion model was ignored, but stressed the inclusion of demographics would expose the influence of the former on baseline propensity to buy (Moe and Fader, 2002). The extensive study conducted by UCLA revealed the significance of age on online purchase as the Internet users belong to age group 16-18 made first quickest online purchase (14.9 months) and also expressed the Internet users belong to age group 56-65 took average 23.2 months to make first online purchase, closely followed by 19-24 age group who took 22.3 months to make first online purchase (UCLA, 2001).

The studies were conducted to identify the significance of demographics on mapping online buyers and found that the demographics of online buyers become similar to the rest of the population. Moreover, simple demographics may reveal little about the attitudes and motives of innovative consumers (Goldsmith, 2001). The latest study revealed the demographics have no bearing on consumers buying online. It is contradicting the previous studies that stressed the relation with demographics and Internet purchase (Goldsmith, 2002). The extensive study was conducted to unearth the role of demographics which identified four major domains as possible determinants of Internet purchase for the study. They are attitudes (i.e., Internet involvement, attitude toward Internet advertisements), Internet experiences (i.e. web use, product information requests), Demographics as they have proven to be important in explaining buyer behavior in conventional purchasing. It also revealed that the household income, age, gender (males are more likely to buy than females) and education status would have an effect on the likelihood of Internet purchasing. The study emphasized the gender and income are the primary influential demographic factors, where males more likely to buy online than females and also revealed interested to witness that the age and education are found to be weak influencers (Hyokjin et al., 2002).

UCLA conducted an extensive survey over a period of time which revealed the relationship of demographics on online purchase in USA. Though reportorial data, it provided the significant cue required for the online marketers to understand the vitality of demographics. The study identified the relationship between the browsing behavior and age which revealed that below 35 years registered the highest online use (92-97% of the users belong to age group between 18 -24 identified as frequent users of the Internet). It also revealed the considerable amount of increase in number of old age users use the Internet. The study revealed the increasing gender ratio on online (males (77%) and females (74%) are almost equal in terms of using the Internet and revealed the increase of terms of female users use the Internet over years). It is found that the percentage (43%) of adult buyers who bought online has increasing slightly as compared to the previous year (39.7%).The study also probed the online buying behavior and found the continuous increase in online purchase frequency per annum by adult buyers and identified the decreasing trend on online spending ($95 compared to $100 previous year) on online purchase by adult users. The study also revealed the internet attracted the more users who belong to lowest income group (UCLA; 2004, 2005).

The various studies revealed the importance of demographics in online purchase. But, it is elusive to the reach of the

interested companies try to find demographics of online users. There are certain  professional online research agencies viz. doubleclick. Com, Mediametrix, etc. mainly focus on tracking online consumer behavior and also demographics of online consumers in USA. But, In India, the tracking of Internet consumer buying behavior and demographic profile has been evolving as the usage over internet is in nascent stage. Nonetheless, the studies in this area would continue. Hence, the author intended to conduct the study in Bangalore to understand the impact of demographics on online consumption of services.

## 3. Main Issue Of The Paper

To understand the impact of demographics in influencing Indian Internet users to avail different categories of services (High, Medium and Low) over Internet

## 4. Methodology

The study was conducted in Bangalore which is known the Silicon Valley of India, houses the population who possess high technological quotient, computer and Internet knowledge. The study mainly focused on collecting primary data from the selected samples (N=570) from Bangalore. The probability and non-probability sampling techniques viz. quota sampling (Internet Users), Cluster sampling (Bangalore), Stratified Random sampling (selected respondents represent different demographics of the population), Judgment sampling were used to provide fairly accurate outcomes for the study. Structured questionnaire comprised of 3 divisions which were dedicated for different categories of services. The author mainly used 5 point Likert Scale to gauge the willingness of the Internet users to avail services over Internet. The questions in each division had been divided in to three major areas viz. Information, Evaluation and Purchase.  The primary purpose of the research is to identify the impact of demographics in influencing Indian Internet users in availing different services online.  The author used the chi-square analysis to identify the significant impact of demographics on consumption of different services. Four major demographic variables had been selected viz. Gender, Age, Income and Occupation. The author selected these major demographics based on the amount of literature available to support the study (Refer literature review). Yet, the author could not find the pointed literature related the influence of demographics on consuming services online.

## 5. Analysis and Discussions

The two stage analytical approach was used to analyze the data. In the first stage, two- way table was used to identify mean, Standard deviation and the second stage, chi-square analysis was used in order to know the significant relationship between demographics and consuming different categories of services online. The different variables of demographics viz. Age, Gender, Occupation and Income of the respondents had been analyzed vis-à-vis to identify the willingness of the respondents in consuming different categories of services online. In the first component, Age has been selected to find out the significance in consuming different categories of services (High, Medium and Low). It is identified the age has significant impact  on consuming high ($X^2$ value is 16.694 at 1% significance level), medium($X^2$ value is11.647 at 5% significance level) and low ($X^2$ value is13.638 at 1% significance level) involvement services over internet. It clearly shows the role of young buyers in e-commerce (Hogg et al., 1998; Silverman, 2000).

In the second component, Gender has been selected to identify the significant impact and found the negative relationship for consuming all services online. It is contradicting the previous studies (Hyokjin et al., 2002) in which gender in one among of the vital variable influence the internet purchase. It could be interpreted that the female respondents yet to get fully involved in Internet purchase. This scenario may change in future.

Occupation is the third component which has been selected to find out the impact of this on consuming different categories of services online. This shows mixed results as the occupation shown the negative relationship in consuming high involvement services, whereas, it has positive relationship in consuming medium ($X^2$ value is 21.147 at 1% significance level) and low ($X^2$ value is 12.663 at 5% significance level) services over internet. The studies conducted on the role of demographics on online purchase were silent about the role of occupation in influencing online purchase. It could be interpreted the occupation might not play a vital role in the parts of the world from which the previous studies had been conducted. But, the scenario is different in India as the occupation plays a vital role in deciding the buying power and social status. It clearly shows the evolving nature of buyers in consuming different categories of services as they reached the level of consuming medium involvement services online. Non availability of time might

motivate them to use services online as they might not find time to avail services offline. Hence, the internet plays a vital role of the enabler. Income is the final component which has been selected for the study.

It is observed that the Income has negative relationship for consuming high and medium involvement services and shown positive relationship on consuming low ($X^2$ value is 16.694 at 1% significance level) services online. It shows the evolving scenario in India as consumers are slowly adapting to internet usage and availing services.

## 6. Suggestions To The Corporate World

The study was primarily conducted to understanding the impact of demographics in influencing the consumption of services over internet. It is difficult to identify the demographic profile of internet buyer as it lacks personal relationship. But, the demographics play a vital role in figuring out the psyche of buyers in offline marketing. Imbibing the same for online would be helpful to the corporate to profile potential internet buyers. It would help them to devise strategies and customize the offerings according to Age, Gender, Occupation and Income. The differential price technique could be adopted for different age, occupation and Income groups. Products/services could be customized according to gender. For e.g. Air Deccan sells most of its tickets online and it would be helpful to airlines to devise pricing strategies based on demographic profile viz. It could fix different pricing for different occupation groups such as student receives comparatively lower fare than the business man or corporate executive. The same technique could be applied on fixing different tariff on hotel rooms and travel packages. It is learnt that service bags the higher rating among the internet users with reference to online utilization. Hence, it is very useful for the corporate world to identify the impact of demographics. The study revealed the occupation shows more significance to consuming different categories of services. It could be a significant cue to the corporate to tailor made online services suitable to different occupation groups.

Banks could decide on different interest rates as per age, occupation and income. Banks could set up online loan application and eligibility test in which these demographic variables would be collected and assist the potential consumers accordingly. It is already proved that the Indian Railways subsidiary IRCTC has started offering e-tickets over Internet which received overwhelming response. Also, banking, travel and tourism industry are the heavy spenders on online initiatives which received welcome response from the society. Hence, the corporate ought to take cue from the study and to focus on integrating the demographics in the business strategies would definitely make difference in offering services online.

The author made an attempt to identify the significance of demographics in influencing the consumption of different categories of services over internet. The study revealed age and occupation have significant impact on consuming different categories of services online. The study has shown the significance of demographics influence on online consumption of services in the growing Indian market. There are enormous opportunities present for online marketers to tap the potential of rapidly increasingly online market space in India. The understanding and mapping of online consumers through demographics could enable their focus better. The corporate world may take cue from the study for devising better strategies to face their face less consumes online.

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**Annexure**

| Variable | X value | Table value | D.F | Significance |
|---|---|---|---|---|
| **Age** | | | | |
| High Involvement Services | 16.694 | 13.277 | 4 | Significant at 1% level |

| | | | | |
|---|---|---|---|---|
| Medium Involvement Services | 11.647 | 9.488 | 4 | Significant at 5% level |
| Low Involvement Services | 13.632 | 13.277 | 4 | Significant at 1% level |
| **Gender** | | | | |
| High Involvement Services | 2.547 | 5.991 | 2 | Not Significant |
| Medium Involvement Services | 2.757 | 5.991 | 2 | Not Significant |
| Low Involvement Services | 3.079 | 5.991 | 2 | Not Significant |
| **Occupation** | | | | |
| High Involvement Services | 9.456 | 12.592 | 6 | Not Significant |
| Medium Involvement Services | 21.147 | 16.812 | 6 | Significant at 1% level |
| Low Involvement Services | 12.663 | 12.592 | 6 | Significant at 5% level |
| **Income** | | | | |
| High Involvement Services | 9.456 | 12.592 | 6 | Not Significant |
| Medium Involvement Services | 4.210 | 12.592 | 6 | Not Significant |
| Low Involvement Services | 13.645 | 12.592 | 6 | Significant at 5% level |