



A STUDY OF ONLINE SHOPPING AND CART ABANDONMENT

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Introduction:

In 1995, Amazon.com commenced with online selling of books. In the same year eBay was founded as an online market place for the sale of goods and services. By the year 2001 online shopping was here to stay in the U.S.(1).In India it all started in 1995 with Indiatimes, Yahoo, Sify and Rediff websites , ebay acquiring Baze.com in 2005 and appearance of Flipkart in 2007(ET,2006). An online retail sale is anticipated to account for 10% of the total retail sales in 2018, up from 6.5% in 2013, and 3.5% in 2008, (Deloitte, 2014).In the year 2013, the e-commerce sector in India had reached USD 11 Billion. This is predicted to expand to USB 60 Billion by 2017.

The factors responsible for this rapid growth in online sales in India is because of cheaper PCs and mobiles, increasing penetration of internet and the variety of payment options available to consumers Next to China and US, India has the third largest number of internet users in the world(Deloitte, 2014). India is expected to overtake US in the next couple of years. What is interesting is that while it took 10 years for the internet users in India to move from 10 million to 100 million, it took a mere three years for the users to leap from 100 million to 200 million(Deloitte, 2014).

With more and more Indians accessing the internet through mobile phones, the mobile internet users was estimated at 110 million users in October 2013.Mobile internet is expected to unlock a significant market in India, beyond the urban cities(Deloitte, 2014).

With such a buoyant prediction of the online retail industry, the investors had invested nearly USD 2 billion in various online companies in 2014(Deloitte, 2014).

The online shopping rage has compelled many traditional retailers to go online (Capoor, 2015). Product categories like consumer durables, apparel and footwear are showing a high online adoption rate. These categories account for two-thirds of the USD 4.5 billion online retail market in India. This is expected to increase to four-fifths of the total online market by 2020.

Companies like Croma, Shoppers' Stop, Puma, HP, Madura Fashions have launched their own e- commerce sites (Capoor, 2015).

Online sales account for 21% of retail sales in India. This amounts to about Rs 60,000 crores of a total market of Rs 2.8 trillion (Capoor, 2015).

With the number of online players in the retail market increasing by the year, the behavior of online shoppers is of critical interest to internet companies. Online shopping cart abandonment rate has also increased over the years.

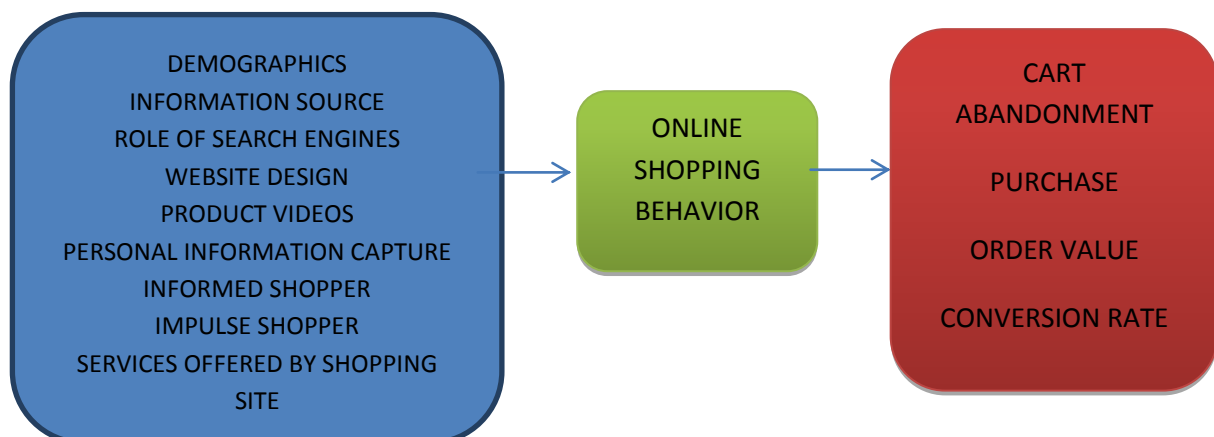
Patricia, Victor & Stanley (2005) in their study on attitude and age differences in online shopping show that while older online shoppers search for significantly fewer products than their younger counterparts, they actually purchase as much as younger consumers.

Hasan (2010) in a study on online shopping behavior found that females value the utility of online shopping less than their male counterparts do.

A study on income, age and gender and whether it moderates online shopping behavior shows that these variables neither influence previous use of internet, nor the perceptions of e-commerce; in other words they do not condition the behavior of the experienced e-shopper (Blanca, Julio, Martín, 2011).

The most common product categories purchase online according to Walker Sands' 2014 Future of Retail Study, are Consumer Electronics, Books, Clothing and Apparel, Household goods, Office Supplies, Consumer Packaged Goods, Sporting Goods, Pet Supplies, Food and groceries, tools and home and luxury goods (Nanji, 2013). A study indicates that eighty one percent of shoppers carry out an online research before they make a purchase (Morrison, 2014). The study also shows that 61% will read product reviews before making any purchase. Sixty percent begin with a search engine before they shop online. Despite people being busy, it looks like people are willing to get details and take advantage of information available, before they make a shopping decision (Gcimazine, 2013). Search engines are now taking search traffic on themselves, with people preferring to start their search on the search engine rather than a specific comparison site (Moran & Hunt, 2014). According to Baymard Institute, a web research company in the UJ, 67.45% of online shopping carts are abandoned (Macdonald, 2013). Cart abandonment therefore is a big problem for online retailers. As shoppers shift from brick and mortar to the web, impulse shopping which is common in traditional buying formats, seems to go down (Gustafson, 2014). Encouraging shoppers to snatch those extra products becomes more challenging online. A study on online shoppers' privacy concerns shows that consumer concern and willingness to provide marketers with personal data varies dramatically with the type of information sought (Joseph, Glen, & Elizabeth, 2000). Research on experienced repeat online shoppers shows that consumer trust is very important to online commerce and this trust is built through the belief that the vendor will not misuse personal information and that safety mechanisms are built into the website (Gefen, Karahanna & Straub, 2003). Two factors of website quality (usability and information quality, visual appeal and image, were found to influence online apparel shopping (Jones, & Kim, 2010). Considering that these variables seem to influence online shopping behavior, they have been included in the theoretical framework. Order value and conversion rate were included as they provided quantitative parameters to assess the effectiveness of parameters influencing online shopping.

Theoretical Framework for Online Shopping Behavior:



The study was initiated to study the online shopping behavior of shoppers in India. The study sought to answer the following retail questions:

- ✓ What is the profile of the Online Shopper?
- ✓ How do they source information?
- ✓ What is the role of search engines?
- ✓ How does the website design ,product videos and services offered affect online purchase
- ✓ What is the role of networking sites in online shopping?
- ✓ Why do online shoppers abandon shopping carts?
- ✓ What do people buy online?
- ✓ What is the distribution of informed consumers?

Research Methodology:

The study being sponsored by an online shopping site, the survey questionnaire was mailed to 2857 shoppers randomly (using random tables) from all over India. The response rate was 20% and a total of 571 complete digitally filled in questionnaires were received.

The findings of the study are outlined below:

Table 1: Age Distribution of Online Shoppers

Age	Frequency	Percentage
18-24	103	18.1
25-34	123	21.5
35-44	126	22.1
45-54	120	21
55-64	53	9.3
65 and above	46	8
Total	571	100

The study indicates that 25 to 54 year olds are the most active online shoppers. A more recent study in the US seems to support these findings. In this study, it was found that 23% of online shoppers fall in the 35 to 44 age group and 24% fall in the 45 to 54 age group. (Smith, 2015)

Table 2: Gender Distributions of Online Shoppers

Gender	Frequency	Percentage
Male	337	59.1
Female	234	40.9
Total	571	100

The study shows slightly more males as compared to females indulging in online shopping. Other studies support this finding. Li et al (1999) conclude that men are interested to use more than one channel to shop. Awad and Ragowsky (2008) say that men do not get emotional about shopping.

Doolin et al (2005) mention the value women place on traditional shopping and the socialising associated with it. Hasan (2010) believes that men are more interested in online shopping because they tend to consider shopping very rationally as a concept of buying what one needs in the best possible way. Dennis and McCall (2005) argue that men are more involved in online shopping because of the technological element.

Table 3: Income Distributions of Online Shoppers

Income(in Rs)	Frequency	Percentage
Less than 30,000	75	13.1
31,000 - 49,999	87	15.2

50,000- 74,999	162	28.4
1,00,000 or more	247	43.3
Total	571	100

The data indicates that higher income groups are more drawn to online shopping. Punj (2011) conclude that higher income groups are more attracted to the time saving features of online shopping.

Table 4: Education Distribution of Online shoppers

Education	Frequency	Percentage
Less than plus 2	20	3.5
Completed High School (plus 2)	106	18.6
UG	183	32
PG	262	45.9
Total	571	100

The data indicates a predisposition of more educated people to indulge in online shopping. Other studies do not support this finding. Richa (2012) emphasizes that education has no influence on online shopping behavior.

Table 5: Purchase of Online Product Categories

Product Category	Frequency	Percentage
Digital Content & Subscriptions	101	19.2
Consumer Electronics	122	21.3
Flowers, Greetings & Gifts	138	24.2
Computer Hardware	104	18.3
Apparel & Accessories	97	17.0
Total	571	100

Popular categories of products seem to be consumer electronic and gifts. Other popular categories purchased are digital content, hardware and apparel. Nanji(2013) show the popular categories to be consumer electronics, followed by books, apparel, household goods and office supplies. This study seems to broadly support the findings of the current study.

Table 6: Information Sources for Online Shopping

Search Avenues	Frequency	Percentage
Social Networking Sites	29	05
Shopping Comparison Sites	63	11
Online Product/Retailer Review	69	12
Retailer Emails	80	14
Coupon sites	97	17
Search Engine	234	41
Total	571	100

Search engines and coupon sites seem to be the major source of online shopping sites. 94% of consumers were found to do some kind of research, before they made a purchase online and 61% of online shoppers were found to use search engines to discover information (Li, 2013).

Table 7: Distributions of Informed Consumers

Level of Consumer	Frequency	Percentage
Far above Average	171	30
Above Average	166	29
Average	137	24
Below Average	69	12

Far Below Average	2	05
Total	571	100

The study indicates a good level of informed online shoppers. A study on online shoppers (Gladson, 2011) shows that 75% of US internet users research grocery and personal care products. Google has shown a 288% increase in search for coupons over 2010 and 2011. With broadband penetration now over 63% in the US, shoppers are well in control of the information they receive (Gladson, 2011). Social networking sites are also expanding their influence. Peer driven reviews of brands are posted in sites like facebook and twitter and influence brand choice.

Table 8: Performance of Search Engines in Driving traffic to Online Shopping

Search Engines	Frequency	Percentage
Google	500	87.5
Bing	29	5.1
Yahoo	29	5.0
Facebook	6	1.0
Twitter	5	1.2
Others(Guruji, Isohunt, pipl, etc)	2	0.4
	571	100

Google is found to be the most popular search engine, driving traffic to online shopping sites. A study (Ipsosmedia CT, 2014) on search engines and their role in driving traffic to online shopping sites and stores shows how search engines, the most popular being Google, play an integral role in driving online shopping.

Table 9: Search Engine Results: Pattern of Viewing Pages

Pages Viewed	Frequency	Percentage
First Page only	104	18.3
First and Second Page	458	80.2
Third and above Pages	9	1.5
	571	100

The study shows that most shoppers view the first and the second page of the search engine results. However a study by Condliffe (2014) contradicts this finding and reveals that the second page is a wasteland and it is rare that people go to the second or third page for searches.

Table 10: Conversion Rate and Average Order Value-Frequency of Buying a Product after Using a Particular Source of Information

Information Source	Conversion Rate (%)	Average Order Value (in Rs)
Google	2.5	250.15
Bing	2.8	256.62
Yahoo	2.9	261.24
Facebook	1.5	252.59
Twitter	0.2	271.12
Others (Guruji, Isohunt, pipl, etc)	0.1	-

Surprising, the study shows a higher conversion rate for Yahoo and Bing as compared to google. The average order value is highest for twitter, followed by yahoo. The differences are however too small to be relevant. There don't seem to be any studies that have done such a comparison of search engines.

Table 11: Reasons for Abandoning Shopping Carts

Reasons	Frequency	Percentage
High Shipping Costs	251	44
Not Ready to Purchase	234	41
High Product Price	143	25
Wanted to Save products for later consideration	137	24
Did not clearly mention shipping costs	125	22
No Guest check out option	80	14
Need too much information	69	12
Complex checkout process	63	11
Website too slow	63	11
Pay extra for Taxes	46	8
Do not have enough payment option	40	7
Slow Shipping	34	6
	571	100

High shipping costs, followed by ‘not ready to purchase’ are the main reasons for abandoning shopping carts. Other important reasons seem to be high product price, ‘saving for later consideration’ and ‘did not clearly mention shipping cost’.

Table 12: Impulse Shopper Distribution

Impulse shopper status	Frequency	%Distribution
Far Below Average	126	22
Below Average	103	18
Average	137	24
Above Average	97	17
Far Above Average	114	20
	571	100

Impulse shopping has been found to be average to far below average in online shopping. This corroborates another study(Ryan,2013) that found 40 percent of survey respondents spending more money than planned in retail stores, while only 25 percent reporting doing so when shopping online.

Table 13: Shoppers’ Opinion About Retailer use of Shopping Data

Opinion	Frequency	Percentage
Don’t want retailers to track my purchase history	176	30.8
Don’t want retailers to know anything about me	155	27.1
Make recommendations based on what I bought before	92	16.1
Know what I purchased on any channel	86	15.0
Know what I put in my online shopping cart	62	10.9
	571	100

The study shows that shoppers value their privacy and many don’t like retailers tracking their purchase history and many also not wanting retailers to know anything about them. But while shoppers are concerned about their safety and privacy online this does not seem to be stopping them from online shopping as 71% of U.S. adults were found to buy products online(Enright,2012)

Table 14: Online Shopping Behavior

Statement	Agree Frequency- each out of 571	Agree Percentage each out of 100
Website Layout can make a difference in whether I shop here	451	79

I usually only shop at my favorite website because I know what kind of service I will receive	371	65
I usually only shop at my favorite website because I know that they have the brands I like	411	72
For relatively expensive items, I'll shop at different stores to make certain I get the best price	337	59
I shop around a lot to take advantage of specials or bargains	394	69
I always look out for special offers	377	66

The data shows that layout of an online shopping site is important as also the brands they stock.

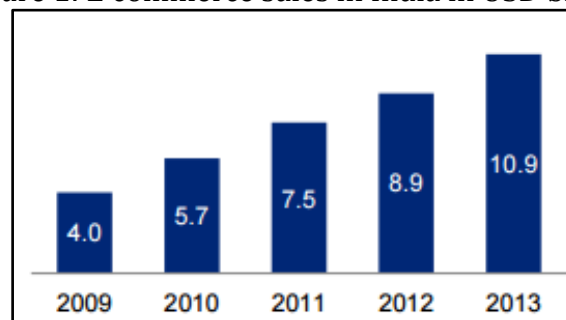
Table 15: Product Videos as Online Shopping Aids

Statement	Agree	Percentage - Each out of 100
I am more confident when I watch a product video in advance of making a purchase online and therefore less likely to return that product	337	59
I have more confidence in the purchases I make after I watch related onsite videos	365	64
I am willing to stay on a website longer because the retailer or brand manufacturer makes product videos available	371	65
I am more engaged with a retailer or brand manufacturer as a result of videos they make available about products they sell	308	54
I am more likely to return to a retailer who integrated video into their website experience	257	45
I purchase more products on websites that allow me to learn about them via video	223	39
I spend more time on websites where video is present	308	54
I purchase products on websites as a result of being influenced by videos on these sites	217	38

Product videos seem to play a big role in online shopping and on site videos make shoppers more confident and increase their time of stay on a site

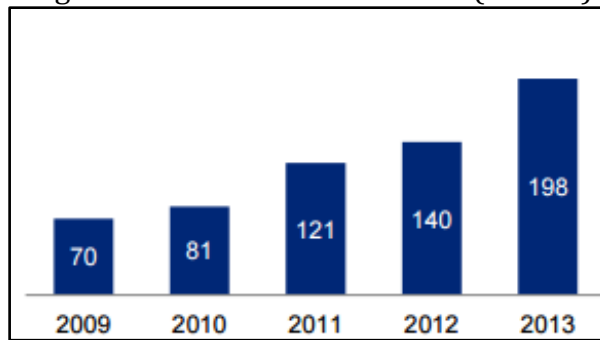
Secondary Data:

Figure 1: E commerce sales in India in USD billion



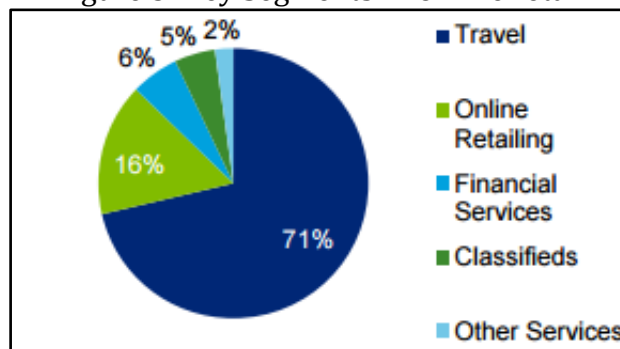
Source: Deloitte, 2014

Figure 2: Internet Users in India (million)



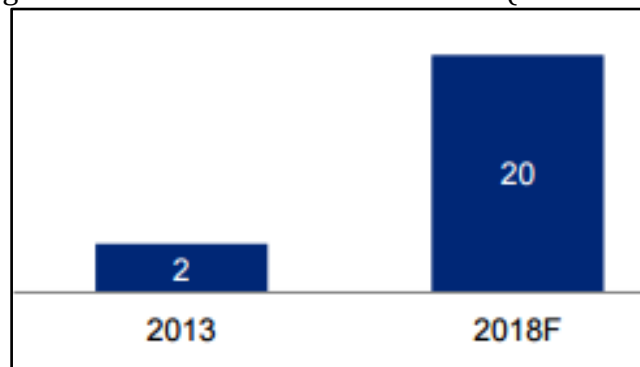
Source: Deloitte, 2014

Figure 3: Key Segments in Online retail



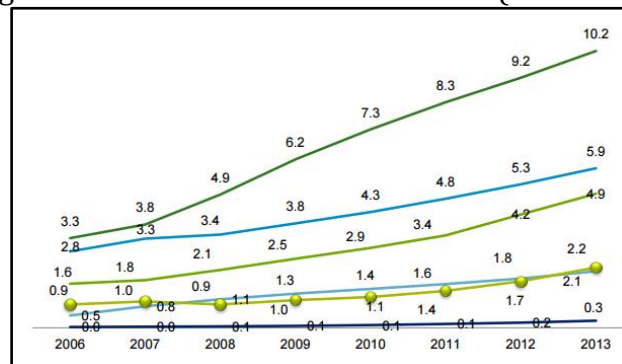
Source: Deloitte, 2014

Figure 4: Online Retail Market in India (USD billion)



Source: Deloitte, 2014

Figure 5: Online share in overall retail (Percentage)



Source: Deloitte, 2014

Conclusion and Implications:

With the online share of retail expanding phenomenally in the last decade, it is right to see how these online shoppers expect from online shopping sites. The study

shows active online shoppers are found in the young to middle aged age groups as 25 up to 50 year olds are found to indulge in online purchases. The study shows more males buying online as compared to females. Males being less emotional and more utilitarian are more suited to online shopping than females. Higher income groups and the more educated are more drawn to online shopping probably because of the time saving aspect of online shopping. Electronics, digital content, apparel, books, gifts are found to be the popular product categories. Shoppers were found to do some research before shopping online, through search engines or other sites. This makes shopper more confident of their purchase. Most online shoppers make informed purchases. Social networking sites and the availability of internet has driven the information availability. Online shoppers are found to use Google more than any other search engine. Cart abandonment being a major challenge in online shopping, was one of the objectives of this study. The study shows shipment costs and 'not ready to purchase' as the major reasons for cart abandonment. Impulse shopping is also found to be below average. Shoppers are concerned about privacy issues but this does not stop them from shopping online. The quality of the website as well as product videos has a strong influence on purchase and retailer loyalty.

The study thus, while corroborating findings of earlier studies, provides more insights than other studies on aspects such as comparison of search engines, cart abandonment and website quality driving online shopping.

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