# Website Attributes and its Impact on Online Consumer Buying Behaviour: An Empirical Study of Online Consumers in Mumbai Region

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#### **Abstract**

**Objectives:** Slowly online retailing is gaining popularity in India and now Indian consumers prefer online shopping over traditional in-store shopping. During online shopping various factors impact consumer's buying decisions process and what makes it different from traditional in-store shopping is involvement of internet. This research paper aims to identify the various factors impacting online consumer buying behaviour, specifically related to website. **Methods/Statistical Analysis:** Factors impacting online consumer buying behaviour have been identified by detailed literature review and based on that questionnaire has been prepared focusing on website attributes. After that data has been collected from Mumbai city using online survey method. Out of collected 133 responses 123 have been be considered for further data analysis. **Findings:** From this study, it is seen that while selecting a website for online shopping consumers give preference to websites which offers varied and quality products, better price and discounts, less delivery time and after sales services. Analysis based on demographic factors shows that while it comes to loyalty towards a website female are more loyal toward a particular website than male. **Application and Improvement:** Features identified by this research can help digital marketers to design and develop their website in such a way that they can grab attention of more and more customers and gain competitive advantage.

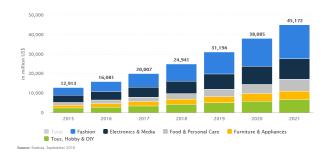
**Keywords:** Attitude, Consumer Buying Behaviour, Online Shopping Website

#### 1. Introduction

Internet has given a dynamic boost to the growth of retail sector across the globe. In developed countries like UK and USA e-commerce is very well established while in developing countries like India and China it is in growth stage. In India developing infrastructure, various government policies, demonetization, cost effective smart phones and low-cost internet services are helping in growth of internet users as well as e-commerce. This growth is not restricted to tier-I cities but it also applies

on tier-II and tier-III cities. According to Internet Live Stats Report (2016) India ranks 2nd globally in the number of internet users, after China and before U.S with 34.8 % penetration (of population). According to one report by Statista (2016) revenue of e-commerce is anticipated to show an annual growth rate (compound annual growth rate 2017-2021) of 22.6 %, which will result US\$45, 172 million volume market by 2021. Figure 1 shows expected revenue as well as growth in various segments. Report also states that in India number of e-commerce users is projected reach to 306.1 m by 2021.

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Source: Statista, September 2016

Figure 1. Indian E-commerce growth in various categories.

#### 1.1 Retailing

Retailing can be defined as selling of goods and services to individual or group of people for consumption while electronic retailing can be defined as selling of goods and services using internet, it includes both B2B and B2C sales. Online retailing is gaining popularity across the globe because of its benefits over traditional retailing suggested that vast information, quick and comparatively inexpensive method of purchasing are some of the factors for rapid growth of online retailing. In the presented article defined E-retailing as "The sale of products and services to the consumer market, over the Internet".2 In the presented article defined e-commerce as an information gaining and purchasing activity using internet.<sup>3</sup> E-retailing is also variously referred to, by other authors, as e-tailing and business to consumer e-commerce. Through the years various literatures suggested that e-commerce, online retailing or e-tailing are synonyms of each other.

# 1.2 Consumer Behaviour and Online Retailing

Consumer behaviour is evident process including three stages known as pre, during and post consumption which includes consumer's both mental and emotional involvement. Buyer behaviour is impacted by various internal and external factors and same applies during online buying process. Various researchers defined consumer behaviour and one such definition given by the-states "Consumer behaviour is the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society".

In any business customers always play a very important role. They are critical element for its existence, success

and viability. Thus, it is very important for marketers to understand which factors impact consumers to take their decisions to make effective marketing strategies. Several studies have been done till now to understand the various factors impacting online consumer buying behaviour and identified price, product, ease of processing of available information, trust, security, privacy, on time delivery, after-sales service, marketing mix and reputation of seller as most important factors.

Broadly factors affecting online consumer behaviour can be classified in three groups-

- Internal Factors: Demographic Factors, Attitude,
- External Factors: Various marketing stimuli, Social Networking Websites, Social Factors
- Technological Factors: Website Design (characteristics), digital literacy, Product information.

# 2. Factors Impacting Online Consumer Buying Behaviour

While doing online shopping consumer can show two types of behaviour, he/she can be just a browser or can be an actual buyer. A browser is an active consumer who searches different websites with intention of buying<sup>6</sup> while buyer actually buys products/services. In the presented article-proposed a model for online consumer buying behaviour which focuses on personal and environmental factors and online controllable marketing mix.<sup>2</sup> Personal and environmental factors known as internal and external factors. Internal factors include personal and psychographic factors while external factors include cultural and social factors. Studies have been done both on

Internal and external factors. Most of the internal and external factors impact in all three stages of buying. Internal factors including demographic factors, lifestyle and attitude have been found to show its impact on online buying behaviour. Under the psychological factors customer's perception of security is a major deciding factor while trust and credibility are other most important internal factors which impact consumer's online decision-making process. Under the psychological factors while trust and credibility are other most important internal factors which impact consumer's online decision-making process. The theory of planned behaviour showed that education and income may have some effect on consumer purchase intention while gender and occupation do not have impact on online buying behaviour. With the various internal factors external factors and web environment plays a very important role. The most distinguishing characteristics of internet are that it helps

in pre-purchase stage.<sup>12</sup> Online consumers select a seller based on offered products, after sales service and information quality several other external factors such as social media, supply chain, brand reputation and service impact consumers while doing online shopping. 13,14 In online shopping during actual purchasing process or also known as second stage of buying process selecting a website, image is an important parameter. 15 Attractive easy to use website, website design, quality information, good customer service can bring customers to a website as well as can convert a browser into a buyer. 16,17 Information on website is an important parameter for selecting a website, but at the same time over loading of information should be avoided.18 Good and informative content and appealing visual design impact repurchasing. 13,19 Informative content includes product information which increases consumer purchasing chances online.<sup>20</sup> Online payment process is another important factor which increases the consumers' willingness to do online shopping.<sup>21</sup> Serval researchers also identified customer service as an important parameter related to website.<sup>22</sup> Broadly website can be designed in three domains. It can be product-dominant, content-dominant or service-dominant. Factors attracting male and female towards a website are different.<sup>23</sup> Various studies suggested that website quality / design can be combination of hygiene factors which includes privacy and security, navigation, technical aspect, impartiality and information content and other factors such trustworthiness, enjoyment, seasoning outcome, look of website, organization of information content and user empowerment.24 One more study suggested that easy and smooth transaction support is also an important factor.<sup>25</sup> Table 1 shows the website with other hygiene and motivation factors.

Table 1. Website attributes impacting online consumer buying behaviour and with their references as reported in the literature

Website Attributes	Author (s)
Available product / service on website	13
Website Image	15
Visual Appeal	24, 25, 27, 16. 17
Interactivity of website	28 ,29
Loading Time/ speed	30; 31,32

Product/ Information/ Content	33, 34, 16 ,17, 18, 20
Customer Service	14, 22
Website privacy and Security	24
Transaction process	25

Some studies also focused on impact of demographic factors and online consumer buying behaviour. Various studies proved that there is significant difference between male and female's behavior toward online shopping. Some earlier studies supported this difference as this study proved men are more task and system oriented and they have higher risk-taking capacity than women. 35,36 Further research suggested men's decision of using computers are influenced by perceived usefulness while women's decision of using computers influenced by ease of use.<sup>37</sup> One more study states that men and women shows different attitude towards internet impacted by emotion, trust, and convenience.<sup>38</sup> Women have more negative attitude towards online shopping than man even the product categories they buy online are different for male and female. One more study states than men are "quick shopper" and woman comes under category of "shopping for fun".39

## 2.1 Objectives of Study

Considering the growing potential of online retailing in India this research is designed to identify the importance of website attributes during online buying process. Therefore, the aims of this study were: To identify the importance of website attributes and its impact on online consumer buying behaviour and second objective was to study the difference between male and female's online buying behaviour specifically when it comes to website attributes.

## 3. Methodology

After detailed literature review various factors impacting consumer behavior during online shopping including various website attributes have been identified. Based on literature review structured questionnaire has been designed and after pilot study data has been collected for further quantitative analysis.

# 4. Data Collection and Analysis

Data was collected with the help of questionnaire from Mumbai city and an online survey was used to collect data. Out of 133 responses 123 usable responses have been considered for further study. From the sample a majority of the respondents were male 71 (57.7%), and belonged to age group between 18-35 years.

Among 123 respondents approximately 62.6 % respondents were working professionals and 34.1% were students (Table 2). Apparels and other fashion accessories were most preferred category (46.3%) of products for online shopping followed by Mobile and computer and related accessories (36.6%).

**Table 2.** Demographic analysis of respondents

Demographics	(n=123)	Frequency %
Gender		
Male	71	57.7%
Female	52	42.3%
Age		
18-35	102	82.9%
36-55	20	16.2%
55+	1	0.8 %
Occupation		
Student	42	34.1%
Working Professional	77	62.6%
Home Maker	4	3.3%
Retired	0	0%
Family Income		
0-300000 lac/ Annum	20	16.3%
300001-600000 lac /Annum	48	39 %
600001-900000 lac / Annum	20	16.3%
900001 and Above	35	28.4%
Preferred Category of Product for online shopping		
Apparels/Accessories/Shoes	57	46.3%
Mobile/Computer/Laptop and related accessories	45	36.6%
Home decor and Furniture	02	1.6%
Grocery	02	1.6%
Baby products	04	3.3 %
Others	13	10.6%

Using multiple response analysis, it is concluded that consumer uses internet mainly for information gathering and social networking (Communication) purpose, while entertainment and online shopping are second most preferred reasons (Table 3).

Table 3. Consumer's preferences for Internet uses

		Resp	Percent	
		N	Percent	of Cases
Q5ª	Research/Information	111	28.5%	90.2%
	Communication	111	28.5%	90.2%
	Entertainment	76	19.5%	61.8%
	Shopping	76	19.5%	61.8%
	others	15	3.9%	12.2%
	Total	389	100.0%	316.3%

a. Dichotomy group tabulated at value 1.

As online shopping was second most preferred reason for using internet respondents were asked questions based on their online shopping experience or intention. While selecting a website for shopping availability of quality products and services, price, delivery and after sale service were most desirable reasons. Website friendliness and website security came on 4<sup>th</sup> and 5<sup>th</sup> place respectively (Table 4).

**Table 4.** Factors Important during selecting a website for shopping

	"While selecting a website for shopping I look for"	Frequency	Percent (%)
Valid	Availability and Quality of Product/s /Service/s	45	36.6
	Delivery and after Sales Service	22	17.9
	Others	1	0.8
	Other promotional Offers	2	1.6
	Price	43	34.96
	Website Friendliness	6	4.9
	Website Security	4	3.3
	Total	123	100

After that respondents were asked to select most preferred website for shopping and based on result Amazon has been identifies as most preferred website for online shopping followed by Flipkart and Myntra (Table 5).

**Table 5.** Most preferred Website

Sr. no.	Name of Website	(n=123) Frequency %	
1	Amazon	53	43 %
2	Flipkart	33	26.8%
3	Myntra	14	11.4 %
4	Snapdeal	6	4.9%
5	Others	17	13.8%

To focus more on website attributes respondents were asked to rate the various factors responsible for creating a positive experience during actual buying process (second stage of buying process) from their preferred website on a five-point Likert scale (1= Least important and 5= Most important). The mean importance ratings are presented in Table 6 and the results indicated that financial and personal security provided by website, website uploading and processing time and product / services offered on a website are most important factors for creating a positive experience during shopping. And for all these three factors mean importance rating is above four.

**Table 6.** Website attributes during actual buying process

**Descriptive Statistics** 

"While purchasing from my preferred website, factors important			
to create a positive			Std.
experience"	M	ean	Deviation
	Statistic	Std. Error	Statistic
Financial and Personal Security provided by website	4.1707	.11116	1.23280
Website Uploading and Transaction Processing Time	4.1626	.10914	1.21043
Products / Service sold	4.1301	.10323	1.14491
Functional Design (Basic Content)	3.7561	.10912	1.21021
Visual and Auditory Content	3.6179	.10676	1.18405
Communication with the Company	3.6016	.11118	1.23301
Communication with other users	2.8699	.10515	1.16619
Links to other websites	2.4878	.10154	1.12619
Valid N (list wise)			

Out of 123 respondents 104 (84.6%) were registered on their preferred website/s but at the same time only 4.1 % respondents showed loyalty towards their preferred websites because as they did not mind shifting to other websites because of various reasons such as non-availability of product or attractive promotional offers on other competitive websites (Table 7 and Table 8).

**Table 7.** Shifting of respondents because of non-availability of product/s or service/s

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Never	5	4.1	4.1	4.1
	sometime	60	48.8	48.8	52.8
	Always	58	47.2	47.2	100.0
	Total	123	100.0	100.0	

**Table 8.** Shifting of respondents because promotional offers on other competitive websites

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Never	5	4.1	4.1	4.1
	sometime	69	56.1	56.1	60.2
	Always	49	39.8	39.8	100.0
	Total	123	100.0	100.0	

While asking them about the overall satisfaction from their previous experience most of the respondents were satisfied from their online shopping experience shows in Table 9.

**Table 9.** Satisfaction level of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dissatisfied	1	.8	.8	.8
	Neutral	8	6.5	6.5	7.3
	Satisfied	84	68.3	68.3	75.6
	Highly Satisfied	30	24.4	24.4	100.0
	Total	123	100.0	100.0	

To satisfy the second objective of paper further analysis has been done to study the difference between male and female's online buying behaviour specifically when it comes to website attributes, for this Whitney Test has been used as data was not normally distributed. Result

**Table 10.** Impact of gender during actual buying process and website attributes

Test Statistics<sup>a</sup>

icst statistics								
								Website
								Uploading
	Functional						Financial	and
	Design	Visual and	Communication		Links	Products	and	Transaction
	( Basic	Auditory	With the	Communication	to other	/ Service	Personal	Processing
	Content)	Content	Company	with other users	websites	sold	Security	Time
Mann-Whitney U	1575.500	1784.000	1730.000	1739.000	1649.000	1733.000	1820.000	1653.000
Wilcoxon W	2953.500	3162.000	3108.000	4295.000	4205.000	3111.000	3198.000	3031.000
Z	-1.455	332	616	565	-1.042	628	150	-1.098
Asymp. Sig.	146	740	F20	F72	207	F20	990	272

.572

Grouping Variable: Male/Female

(2-tailed)

.146

suggested that there is no significant difference between male and female's behaviour while selecting a website and considering various factors impacting the positive experience during actual buying process from preferred websites as in both cases p value is >0.05 (Table 10).

.740

.538

But when it comes to loyalty towards a website it is found that if desired product/s or services are not available on preferred website, male and female shows different behaviour as p value is < 0.05 (Table 11) while in case of promotional offers no significant difference has been observed as p > 0.05 (Table 12). Further statistical analysis showed that in first case female are more loyal to a particular website than male.

With this no significant difference have been found between male and female's satisfaction level as p value is 0.093 which is p>0.05 (Table 13).

**Table 11.** Shifting of respondents because of non-availability of product

Test Statistics <sup>a</sup>				
	If your desired product is not available on your preferred website, do you go to other websites			
Mann-Whitney U	1491.500			
Wilcoxon W	2869.500			
Z	-2.056			
Asymp. Sig. (2-tailed)	.040			
a. Grouping Variable: Male/Female				

**Table 12.** Shifting of respondents because of promotional offers

.530

.880

.272

.297

	Special Discounts / Special
	Sale / Offer coupons on other
	websites attract you to check other
	competitive websites.
Mann-Whitney U	1535.000
Wilcoxon W	2913.000
Z	-1.826
Asymp. Sig. (2-tailed)	.068
Grouping Variable: Male	e/Female

Table 13. Satisfaction level of male and female consumers
Test Statistics<sup>a</sup>

	Satisfied with shopping experience
Mann-Whitney U	1578.500
Wilcoxon W	2956.500
Z	-1.677
Asymp. Sig. (2-tailed)	.093

a. Grouping Variable: Male/Female

## 5. Discussion

Indian consumers started using internet and according to IMRB (Indian Market *Research* Bureau I-) cube report-2015, 71% of urban population uses the internet for communication purpose. Same report suggested that online communication, shopping, social networking,

entertainment, and purchasing tickets online are most preferred reason for using internet. The main aim of this study was to investigate the factors important while selecting a website for online shopping and to study the impact of gender. In India, online shopping is in developing stage so it is necessary to understand the factors important at the time of online shopping so proper strategies can be developed. Literature review was focused on identifying various website attributes such as website design, security, service, download and processing time, payment process, website reputation etc. and based on literature review questionnaire has been prepared and data was collected.

This study supported some earlier research which suggested that internet helps consumers in first stage of buying known as pre-purchase stag as data analysis of this paper also suggested that internet is used mostly for research and information search purpose.<sup>39</sup> Paper supported the research by the reported article stating that consumers select online seller based on criteria of available product, after sale service and available information.<sup>13</sup> During second stage of buying process for creating a positive experience various attributes related to website such as financial and personal security, website uploading and transaction time and available product and services have been identified as most important parameters supporting some previous studies while other aesthetic factors such as design, service (feedback, connecting with other users etc) are identified as secondary factors. 13,30-33,24 According to this study there is not very significant difference between men and female's attitude towards website attributes contradicting some earlier studies which suggested that there is significant difference between male and female's selection criteria for select a particular website for online shopping.40 Thought most of the respondents were registered on their preferred website, research also showed that loyalty towards this website is less. So, based on this research it can be concluded that website should focus on variety of product or services offered, service provided and content followed by technical factors including less uploading and transaction processing timing and should focus on security parameters. 13,25,24

#### 5.1 Academic and Managerial Implications and Conclusion

As online retail industry in growth stage in India and expected to reach to US\$ 1 trillion by 2020 (IBEF, 2017), it is necessarily for marketer to understand consumer buying behaviour and in this regard various academic studies can help marketers. As this study focuses more on website attributes, marketers can utilize the finding to design attractive and impactful websites. With this marketer also need to make impactful strategies to retain their customers as study showed that consumers are not very loyal to their preferred websites.

This study will contribute in existing literature review on online consumer buying behaviour as well as it also has its managerial implications. This study supported various studies done on online Indian consumer buying behaviour and focuses majorly on website related attributes. On one side it supported previous studies on other hand it also contradicts with some existing literature review such as importance website's aesthetic features, importance of service, importance of connecting with seller and other customers as according to this study these factors are not very important for consumers. It also contradicts with existing study on role of gender and website attributes.

More detailed study need to be conducted to reach on more authentic conclusion as this study was restricted to limited geographical area.

Overall this study helps in understanding emerging Indian consumer's online shopping behaviour.

#### 5.2 Limitations of the Study and Future Research

Any research is not complete and there is always a scope of further research. There are a few limitations in this entire study and first one was geographical. Data was collected only from Mumbai region and study has been done in general not specific to any particular category of product or service. In future, more categories specific and with more geographically spread research need to be done in order to examine how website actually impact consumer buying decision process while doing online shopping. Secondly as data was collected by convenient sampling, though enough precaution has been taken to avoid the biasness still there is scope of improvement.

So, there is scope of further research which will give more comprehensive conclusion for website attribute and online consumer buying behaviour.

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