Determinants of online shopping behaviour in India

Hemanti Richa, Shaili Vadera

Abstract: With low-cost smartphones and affordable data packages Internet penetration is rapidly growing in India. The research identifies the salient features of online customer behaviour in Indian context. An Exploratory factor analysis was conducted and identified determinants that govern consumer buying behaviour. Six factors emerge which were named utilitarian attributes, post purchase intentions, Hedonic motives, freedom, intrusion and convenience. These factors are consistent with the global studies, but freedom emerges as a new factor in Indian context. Given the fabric of Indian society making independent choice & freedom of choice is a significant issue, which online shopping portals can use in their marketing strategy.

Keywords: Online purchase intention, consumer behaviour, utilitarian attributes, post purchase behaviour

I. INTRODUCTION

Multinationals are investing more in emerging economies like India to target the untapped population of Tier II and Tier III cities. However, this trend poses both opportunities and challenges for the cluttered online shopping space. Consumers are demanding richer shopping experiences with focus on variety, quality, conveniences and customer satisfaction forcing online retailers to rethink their global strategy.

A report by Bain & Consultancy in 2018 reflected that India’s online retail market has witnessed a massive increase of 53% in CAGR (compounded annual growth rate) between 2013 – 17. But despite this, the online retail penetration is relatively very low at 5%, compared to China (20%), USA (12%) etc. With low-cost smart phones and affordable data packages, now 400 million customers are online consuming an average of 8 GB mobile data per month. Indian retailers need to capitalise upon the power of this online audience and increase the low transaction sizes.

According to Deloitte & RAI joint study (Unravelling the Indian consumer, 2019) the e-commerce market in India is expected to grow up to USD$4 billion by 2021 from USD 24 billion in 2017. The major factor that will fuel this growth is internet penetration in the rural and semi-urban landscapes, resulting in increased smartphone & data usage. With its large population base, India is on its way of being the third largest retail market with valuation of USD 1.2 trillion by 2012 approximately. More than 50% online orders generated and 50-70% of the traffic on giant e-tailers is through mobile apps. As per PwC-Assocham study (Video on Demand: Entertainment reimagined, 2019) Indian smartphone users will touch 859 million mark by 2022, growing at 12.9% CAGR. After the launch of Reliance Jio in 2016, India has the cheapest mobile data globally with INR18.5 for 1GB against INR 600 world average.

The e-commerce sector needs to use the government’s focus on digitalization and the changes in the business environment and, redefine the traditional business levers to accelerate the growth.

The new age Indian consumer living in metros & tier I cities is very aware, and demanding in terms of convenience, comfort, variety, being hassle free and optimizing time. Online shopping hits the bull’s eye in such cases with quick deliveries at home. In case of tier II & tier III cities, the aspirational consumers are the norm. online shopping portals provide them the choice of various brands and products otherwise not easily available in their city. Also, the online shopping portals offer better deals and discounts round the year, which is normally not the case with brick and mortar stores.

Unlike USA and China, where certain taxes are not applicable on online products, India has the same tax structure for online and offline products. This makes it difficult for online retailers to provide discounts in the long run, without burning their own pockets. Most of the online retailers are currently giving discounts to gain market share, but not even a single online shopping portal has been profitable till date in India. Thus, understanding the online consumer behaviour is very essential in Indian scenario, as it will be the make or break factor for online retailers.

Researches have been done and are still going on to understand the online consumer behaviour in a better way globally. Studies have suggested that consumer behaviour has been influenced by demographics, risk factors, security, privacy, information content, website design, website reliability, website customer service, convenience, time saving, need for recreation (Ranganathan & Ganapathy, 2002; Shergill & Chen, 2005; Doolin et al., 2005; Qinghe et al., 2014; Keaveney & Parthasarthy, 2001; Bagga & Bhatt, 2013). There are relatively fewer academic studies done to understand Online Indian buyer’s behaviour. Most of the consumer behaviour studies done in India were in-house marketing studies commissioned by online retailers; thus, we don’t have a significant pool of knowledge available on online consumer behaviour in India. Drawing from the existing researches, the present study attempts to examine the determining factors in Indian consumer behaviour and their influence on the online shopping intention.

II. LITERATURE REVIEW

The buyer’s online behaviour has caught the attention of researchers and firms equally. The researchers have explored the various factors attributing to the online behaviour of customers. Initial studies were based on demographic factors only, as they are the easiest to quantify. Later on, researchers have included psychographic factors as well to understand the consumer behaviour. Bhatnagar & Ghose (2004) applied modelling approach to reveal the latent consumer segments based on their online buying patterns, and then created consumer profile based on

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Hemanti Richa, Research Scholar at Amity Business School, Amity University, Lucknow.
Dr. Shaili Vadera, Assistant Professor at Amity Business School, Amity University, Lucknow.
the demographic and benefit variables, respectively.

Rohm & Swaminathan (2004) evolved a typology based on motivations for online shopping and segregated the online shoppers into four, namely convenience shoppers, variety seekers, balanced buyers, and store-oriented shoppers. A study by Girard et al. (2003) was aimed at examining consumer preferences for online shopping for different products getting influenced by demographics and shopping orientations.

Gupta & Kim (2010) probed online customer purchase decision making from the value perspective based on mental accounting theory and perceived price, convenience, risk, pleasure from previous transactions and uncertainty (perceived risk) as determinants of customer’s value perceptions. The results of this study also reveal that purchase intention is not significantly impacted by perceived risk. This was a refutation to some of the previous studies (e.g., Hoffman et al. 1999; Jarvenpaa & Todd, 1996) which proposed that consumers consider perceived risk as a hindrance to Internet transactions.

According to the Robinson et al (2007) the most important motivational factor for online buying is convenience with respect to round the clock availability and home delivery. Morganosky & Cude (2000) conducted study among online grocery customers and concluded that time saving and convenience are primary antecedents for online buying. Liu et. al. (2017) claim the higher website quality as primary influence to shop online. Their study is consistent with Liang & Lai (2000), Zhang et al. (2000), Zhang & Dran (2000), Hassan & Abdullah (2010) and Li & Zhang (2002). Some apprehensions regarding online shopping are privacy & security (Belanger & Benbasat, 2004), inability to see actual product (Bhatnagar, A. et. al., 2004), financial & non-delivery risks (Thakur & Srivastava, 2013; Zendehdel et. al., 2012; Almousa 2014). Chen (2009) extrapolated the extended theory of planned behaviour (TPB) on online consumer behaviour and perceived ease of use (PEOU) and trust, came out as the essential antecedents in deciding the behaviour of online consumer through behavioural attitude and perceived behavioural control.

Perea y Monsuwé et. al. (2004) used external variables like consumer traits, situational factors, product characteristics, previous online shopping experiences, trust, perception and intention for technology use, to propose a structure for understanding the intention of consumers’ regarding online shopping. Study in Malaysia by Salehi et. al. (2012) revealed security, appearance, quick loading, security, sitemap and validity as factors that influence consumers towards online shopping. Buyer’s attitude toward online shopping, realm oriented innovativeness and personalised norms positively affected internet based shopping behaviour of consumers, whereas financial risks and non-delivery risks had a negative influence. (Javadi, et al, 2012).

The Indian online consumer’s belief that shopping via online portals is easy and hassle free is assessed by their “perceived usefulness” and “ease of use” attributes of web portals. The buying behaviour is also affected by their normative beliefs and gender; wherein men find it easier to use internet and customers prefer a web portal which has a positive review from their social system & peer group. (A Khare et al, 2012). The study done by Dash & Saji (2007) regarding influences on customer’s intention to buy online in Indian context showed that the consumer’s individual effectiveness and website’s social-presence have a significant impact on trust, perceived usefulness and perceived risk in the online customers, and have positive effect. Khare et al (2010) found information, convenience and flexibility of website as factors positively influencing online shopping behaviour among Indian youth. Some studies have been done on consumer behaviour in Indian context as well but they are few and far between as compared to the global research scenario (Deka, 2017; Islam et. al., 2017; Arora & Rahul, 2017; Khare & Rakesh, 2011; Nagra & Gopal, 2013; Sharma et. al. 2014; Bagg & Bhatt, 2013). Uddin & Khan (2016) did an exploratory study by examining shopping attitudes of management students based on gender; and accessed that gender gap in internet shopping is declining.

III. RESEARCH METHODOLOGY

To investigate the online consumer behaviour we used a structured, non-disguised questionnaire as research instrument to collect data. The items on questionnaire were based on adaptation from literature review and personal interviews with 26 adult male and female online shoppers. The questionnaire was written in English and pilot test was done on 30 respondents from the universe from which the respondents of main study were to be drawn. The final questionnaire had 25 items related to online consumer behaviour on 5-point Likert scale, 5 items related to background information about shopping habits and 7 items in biographical inventory. The final questionnaire was converted into an online survey using Google Forms and an offline paper questionnaire. A message on top of questionnaire described the purpose and nature of the study, the time required for completing the survey, the researcher’s affiliations and anonymity assurances. For data collection simple random sampling was used. After validating the questionnaires for redundancies an effective sample of 288 online forms and 290 offline, was selected for analysis. The 25 items on research instrument had been developed based on adapting items from literature review and personal interviews with online shoppers. Four variables were used to measure online purchase intention (Vazquez & Xu 2009) (α=.891), five variables were used to measure convenience (Hawes & Lumpkin,1984; Gehrt & Shim, 1999; Sahney et. al. 2008) (α=.668), another four variables for information seeking (Khare & Rakesh, 2011) (α=.798), three variables for identifying hedonic values (Raju & Venkatesam, 1980) (α=.776), three variables for freedom(α=.741), three variables for post purchase issues (Mohanty et. al. 2007) (α=.851) and another three for intrusion(α=.602). These variables underwent principal component analysis using Varimax rotation method with Kaiser normalisation , so as to reduce the multiplicity of variables into selected factors. 0.670 is the score of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which being greater than 0.5 implies that the data is adequate for factor analysis. The factors were extracted on the criterion that Eigen value should not be less than one and the factors must have acceptable reliability (alpha coefficient >.60). Ultimately 21 items yielded six factors respectively. The 6 factors accounted for 68.764 per cent of total variability. The factor structures along with high loading items (>40, based on Stevens, 1992), Mean, S.D, reliability and variance explained by the factors have been shown in Table 1.

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Table 1: Factor Structure of online shopping antecedents

<table>
<thead>
<tr>
<th>Factor 1: Utilitarian attributes</th>
<th>Items</th>
<th>Loadings</th>
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<tbody>
<tr>
<td>Eigen Value 4.549, Variance 21.66%, rii .904, Mean (SD) 4.149 (.764)</td>
<td>The testimonials and online reviews of product/service increase my information base during product/service search</td>
<td>.89 0</td>
</tr>
<tr>
<td></td>
<td>Product tracking mechanism makes online shopping more reliable</td>
<td>.87 0</td>
</tr>
<tr>
<td></td>
<td>It makes comparison easy.</td>
<td>.80 6</td>
</tr>
<tr>
<td></td>
<td>I like the extensive product information available online.</td>
<td>.79 1</td>
</tr>
<tr>
<td></td>
<td>It saves time.</td>
<td>.75 5</td>
</tr>
<tr>
<td></td>
<td>I like the 24*7 availability.</td>
<td>.71 3</td>
</tr>
<tr>
<td></td>
<td>I like that portals keep showing me content similar to what I am looking for</td>
<td>.63 5</td>
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<tr>
<th>Factor 2: Post Purchase Issues</th>
<th>Items</th>
<th>Loadings</th>
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<tbody>
<tr>
<td>Eigen Value 2.515, Variance 11.99%, rii .851, Mean (SD) 3.396 (1.104)</td>
<td>It is difficult to get repairs done.</td>
<td>.90 4</td>
</tr>
<tr>
<td></td>
<td>The refunds take long time.</td>
<td>.85 4</td>
</tr>
<tr>
<td></td>
<td>I cannot judge the product quality.</td>
<td>.84 2</td>
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<tr>
<th>Factor 3: Hedonic motives</th>
<th>Items</th>
<th>Loadings</th>
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<tbody>
<tr>
<td>Eigen value 2.098, Variance 9.99%, rii .776, Mean (SD) 3.609 (1.050)</td>
<td>It gives me more choice.</td>
<td>.898 0</td>
</tr>
<tr>
<td></td>
<td>It gives me better deals</td>
<td>.831 0</td>
</tr>
<tr>
<td></td>
<td>I get easy access to foreign goods.</td>
<td>.758 0</td>
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<tr>
<th>Factor 4: Freedom</th>
<th>Items</th>
<th>Loadings</th>
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<tbody>
<tr>
<td>Eigen value 1.929, Variance 9.19%, rii .741, Mean (SD) 3.256 (1.018)</td>
<td>I am able to do shopping without anyone escorting me</td>
<td>.81 3</td>
</tr>
<tr>
<td></td>
<td>I get more freedom in making shopping decisions</td>
<td>.74 3</td>
</tr>
<tr>
<td></td>
<td>I can buy personal items without inhibition</td>
<td>.45 7</td>
</tr>
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<tr>
<th>Factor 5: Intrusion</th>
<th>Items</th>
<th>Loadings</th>
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<tbody>
<tr>
<td>Eigen value 1.75, Variance 8.33%, rii .602, Mean (SD) 3.173 (.843)</td>
<td>I can buy personal items without inhibition</td>
<td>.81 3</td>
</tr>
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</table>

The portals use my personal information without my authorization. 60
1. I don’t like receiving the mail/call regarding the feedback on product/service purchased. 79
Constant pop-ups based on my shopping history are irritants. 79

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<tr>
<th>Factor 6: Convenience</th>
<th>Items</th>
<th>Loadings</th>
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<tbody>
<tr>
<td>Eigen value 1.601, Variance 7.62%, rii .687, Mean (SD) 4.611 (.604)</td>
<td>I can avoid traffic/parking troubles.</td>
<td>.85 9</td>
</tr>
<tr>
<td></td>
<td>I like home delivery.</td>
<td>.85 2</td>
</tr>
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IV. CONCLUSION AND DISCUSSION

Internet is integral part of our life nowadays. The average Indian consumer has made space for online retailers alongside the traditional offline stores that he/she visited. As per Ministry of Statistics and Programme Implementation (GOI) in 2011 census the youth (15-24 years) constituted one fifth of the population (19.1 per cent), and it is expected to have 34.33 per cent share in the total population by 2020. This makes India a young country and the millennial Indian buyer is well informed and assertive. The present study was aimed at examining the determinants of online consumer behaviour and understand their influence on online purchase intention. The results identified Utilitarian attributes, convenience, hedonic, freedom, intrusion and post purchase issues as the determining factors of the behaviour on Indian online shopper. The results of the study reveal a lot about online Indian customer and the important factors which influence their shopping. Utilitarian attributes are technological interventions to improve the overall shopping experience, which is the most significant factor for Indian online shopper. Most of the global studies have also mentioned it as an important factor, which means the results of this study are congruous with the existing literature pool. Post purchase issues and intrusion are glaring negatives of the online shopping. The online shopping portals need to address them to make online shopping more appealing for the Indian customer. The traditional offline stores have these same issues as their USP. They are able to refund or replace immediately, and repairs are also catered to quickly at the local service centres or they send the product to respective service centre on their own initiative. Some of the e-tailers have started giving immediate refunds, but in their own online wallet, where the customer can use it for any future purchase. But the Indian customer would like to have the money back in a place where it is under their absolute control and can be used for anything they desire. E-tailers need to work upon their refund systems and reduce the turnaround time. A majority of the high value products, especially electronics, have international/national warranties; but e-tailers need to nurture their relationship with these service centres so that their customers get an immediate & delightful service. Some shopping portals have started using augmented reality applications and are opening offline stores to...
remove this barrier of ‘no touch, no feel’, but still it’s a long way to go and they need to work upon it. The e-tailers have to maintain a precarious balance between communication with buyers and the feeling of intrusion in the buyer’s life. The buyer should be informed about latest offerings, sale, special offers etc and their feedback should be valued; but at the same time buyer should not feel bombarded with communication from the e-tailer.

Hedonic motives, freedom and convenience are other important factors for the online buyer. The millennials are well informed and look for same services that are offered across the globe. Pleasure, fun, variety & convenience have been observed as determinants of online consumer behaviour by Bhatnagar & Ghose (2004), Dash & Saji (2008), Khare & Rakesh (2011), Bagga & Bhatt (2013), Javadi et. al. (2014); the outcomes of this research also concur the same. Freedom was a new factor that was introduced in the survey; based on personal interviews prior to designing the survey. The social fabric of our country is such that women don’t get many avenues to exercise their independent decision making. Shopping also came out to be one prominent area where women generally did not have the freedom of shopping independently, during the personal interviews. The results revealed that men also found freedom as an important determinant for online shopping. This can be understood in the light that Indian society lays a lot of emphasis on family irrespective of gender, and family is included in majority of the decisions from big to small (Kaur & Singh, 2007; Sinha et. al, 2002).

Online shopping portals should focus on improving website attributes and reduce post purchase issues & intrusion fee to accelerate the online purchase intention. This will increase the faith of buyers in online shopping and make it far more popular.

V. LIMITATIONS AND FUTURE SCOPE

Since every study has to have a scope, with it some limitations become part of this research. These limitations form a foundation for any future research work. Online shopping is a relatively new phenomenon, as online portals have started gaining popularity after 2013. The sample used for the study is taken during 2018-19, so the shoppers can be categorised as early adopters. This means that sample characteristics may change with more penetration of online shopping. Another limitation is that the study was confined to cities and catered to only urban population. As internet connectivity is expanding, Online shopping will have presence in rural areas as well. Online giants like Amazon & Flipkart are planning to open warehouses catering to tier III cities of India. Future research can be focussed on extending these findings to rural landscape.

REFERENCES


AUTHORS PROFILE

Hemanti Richa is Research Scholar at Amity Business School, Amity University, Lucknow. She has specialization in Marketing & International Management with Research interest in Online marketing, Retail and consumer behaviour. She has 4 years of industry experience.