

E-Commerce on the subcontinent: How Indian consumers will shape demand

Michael Monahan
Frostburg State University

Amit Shah
Frostburg State University

Jyoti Rana
DAVC College

ABSTRACT

As E-Commerce steadily gains traction in the West, the researchers sought to determine its impact in the Far East. India boasts the second largest population of 1.2 billion inhabitants and is expected to surpass China economically by 2050. Their sheer volume of customers will remake the retail landscape. University students are computer literate and more apt to adopt new technologies. Their viewing and buying habits could provide insights to businesses with valuable information for reaching these customers. The respondents to this survey revealed their internet usage, favorite sites visited, items purchased, reasons for shopping online, and frequency of viewing banner advertisements. Based on the results, implications for businesses are offered.

Keywords: E-Commerce, India, internet viewing, online purchasing

Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <http://www.aabri.com/copyright.html>

INTRODUCTION

E-Commerce has made substantial gains in the West, but what about the enormous markets in the Far East? India has the world's third largest GDP at \$4.7 trillion and boasts the world's second largest population with 1.2 billion inhabitants (CIA.gov, 2014) Further, it is expected to surpass China in both population and economics by 2050 (Relph, 2011). This sheer volume of customers has the potential to remake the global retail landscape. India has a history of being a poverty stricken land and while there are still abundant areas of misery, India's economy has been greatly stimulated.

Pradeepkumar & Panchanatham, (2010) assert e-learning can enable rural college students in India to favorably compete with their urban counterparts. Perhaps this is why Dahlman (2007) contends that the large number of Indian graduates who are fluent in English has been one of the main reasons for India's reputation as the source of offshore services that can be delivered over the Internet

Not surprisingly, there is an inverse proportion of the raw number of Internet users as a percent of the population. As of June 2012, there were over 1 billion Internet users in Asia, 519 million in Europe, and 274 million in North America. However the penetration rate, the number of Internet users as a percent of the population, was 27.5% in Asia, 63.2% in Europe and 78.6% in North America (www.Internetworldstats.com/stats.htm, 2014).

Purpose

Since university students are generally in the early 20's age group, are more educated, more comfortable with technology. These students are present and future consumers with potentially growing purchasing power and were the preferred population for this study. By ascertaining the Internet viewing and purchasing habits of university students in India valuable knowledge can be gained to understand and cater to their needs. Further, if statistically significant differences emerge between genders, differentiating strategies could be developed to reach and target this burgeoning population.

The following research questions guided this study:

1. How many hours per week do university students spend on the Internet?
2. Where is the Internet accessed?
3. What sites are most visited by university students?
4. How often do students visit their favorite sites?
5. What items are purchased online?
6. What are the reasons students purchase online?
7. How do students respond to Banner ads?

LITERATURE REVIEW

As a result of a robust gross domestic product, India is now the fourth-largest economy in terms of purchasing power parity. According to a Goldman Sachs report, India could become the second-largest economy in the world by 2050. In addition, India's middle class is rapidly increasing and more and more consumers can afford internet access (Relph, 2011).

A retail revolution is occurring in India as new and expanding merchants are multiplying. Various product lines such as FMCG's, Fast Moving Consumer Goods, which include cosmetics, personal hygiene and cleaning products, light bulbs and paper products are responding to competition by improving their packaging and presentation. Shah (2011) contends that due to the emergence of new retailers, customers have more choices, more buying power, and driven more by impulse than by need. Despite the rapidly growing retail sector the Indian government has restrictions on direct foreign investment and a multitude of regulations and restrictions in this arena (Marshall et al, 2010). These policies create restrictions for customers which are neutralized by online shopping.

With investment in infrastructure, domestic consumption, and a hub for global outsourcing, foreign investment was attracted to India (Ratanpal, 2008). In fact, the emergence of the website, Exclusively.in, provides an array of luxury Indian fashion and home decorations for sale over the web (Swamy, 2011).

Internet Usage

Internet penetration is still in its infancy in India as 112 million Internet households are connected and of those only eleven percent have high speed access as nearly ninety percent of Indians have dial up service (Einhorn & Krishnan, 2011). Parikh (2006) contends consumer demand for the Internet is a key factor that may ultimately drive widespread adoption of the Internet by retailers. However, this lack of connection speed could deter online shopping. Omar, Bathgate, and & Nwankwo, (2011) examined factors which can lead to success or failure in the online venue. These factors would create value for companies engaging in Internet marketing.

Since India's middle class is rapidly increasing more consumers will be able to afford Internet access. This growth is projected to double Internet users in India 230 million by 2015 (Relph, 2011).

In a study of Internet use by college students in developing countries, including India, Fusilier, & Durlabhji (2008) found attitude, training, and university support were positively related to Internet use. In fact, Patel & Chauhan (2010) developed a model based on a weighted score of ten variables to determine the degree of Internet exposure of students at an Indian Agricultural University.

Favorite Sites

Agrawal, Sandhir, and Gupta (2009) who found 96% of their respondents visited their favorite sites daily. Khare, Singh, & Khare, (2010) found Indian Internet users tended to use the Internet for chatting, browsing, and sending e-mails. They contend the users find it difficult to navigate and understand online shopping sites. Thus, while they may go online to find new information about products, they may be unlikely to actually purchase anything. Similarly, Khare & Rakesh (2011) found the majority of students had their own computers and used the Internet to access a wide variety of websites, such as online chatting, banking, job searching, music, games, movies, e-mailing, and shopping. They recommended online shopping websites stress convenience, provide more detailed instructions, convenient payment methods, and more detailed information about the products to increase the likelihood of purchasing online. Further, Men's Health India (2012), asserts that online shopping is one of the most important things for individuals in India to do online, second only to e-mailing.

Gupta, Handa, and Gupta (2008), in a study of 115 college students from Delhi, India, found mostly online surfers and not online shoppers. Their explanation was the students' lack of knowledge and experience with online shopping

Where the Internet is accessed

In a study of students at two engineering colleges in India Kaur and Manhas (2008) found 66% of the respondents utilized the Internet at home or at the college. In addition, more than 70% of the respondents felt the Internet was useful, informative, easy to use, inexpensive and time saving.

Items Purchased

India has become an example of Western-style consumerism as evidenced by increased tobacco and alcohol usage and a transformation from traditional fashion and beauty standards. These changes have increased India's buying power in the global market (Get 1.1 Billion's Attention, 2007). This augmented consumption was verified by Mady (2011) who also found Indian consumers preferred pioneering brands as opposed to follower brands.

In a study of 70 students in India, Agrawal, Sandhir, & Gupta (2009) found 46% of the respondents had not made an online purchase in the last year while 19% had made just one purchase. Just over 15% purchased two to five items online and 20% purchased more than six items online. However four out of five Indians shopped online with men being the biggest spenders (Men's Health India, 2012). Similarly, in a survey of 325 Indian students Khare & Rakesh, (2011) found that male students tend to find online shopping more favorable than female students. They contend online companies seek male shoppers or do not carry female options.

However, Gupta, Handa, and Gupta (2008) found the items students purchased were of low cost due to the lack of trust of shopping online. This finding was supported by Al Kailani & Kumar (2011) who tested the cultural characteristics of uncertainty avoidance and perceived risk on Internet buying in the USA, Jordan, and India. They found cultures with high uncertainty avoidance and perceived risk with Internet, purchased less over the Internet.

Banner Ads

Analyzing the patterns in the types of sites students visit will allow companies to advertise and reach customers at the sites they frequent most. For example, Trivedi and Joshi (2009) surveyed students from Pramukhswami Medical College in India and found they used the Internet to access online journals, download text, chat, participate in online discussions, and engage in e-mail. Their preferred search engines were Google and Yahoo! While Agrawal, Sandhir, and Gupta (2009) found good website designs are positively associated with Indian e-consumer responses. Mahsud et al (2008), found that the more students viewed banner ads, the more likely they were to purchase the product offered.

Reasons for Shopping Online

A study by Patel and Asthana (2012) found that consumer's personalities affected their outlook toward shopping online. Consumers with utilitarian personalities shop online because of

increased productivity, such as convenience, lower prices, and a greater selection of merchandise. Interestingly, Beldona, Racherla, & Mundhra (2011) found that age, education, and amount of time spent online were factors in whether an individual would purchase airline tickets online or offline.

Dash and Saji (2007) found that websites could increase consumer's trust by adding a touch of humanness, friendliness, and belonging as well as increasing social networking. This increased trust lowers consumers perceived risk to shopping online which in turn makes it more likely purchase items online. Ranganath (2012) asserts that consumers are always seeking out convenience in shopping. Especially with more and more families in India becoming dual-income homes, the ability to afford to shop will increase. However, this may also reduce the time the family has to shop, making it essential that online shopping companies focus on efficiency.

Gehrt, Rajan, Shainesh, Czerwinski, and O'Brien (2012) found that there are two major preferences for shopping online in India. One preference is quality at any price. These individuals are not overly concerned with price and typically make travel related purchases or purchase electronics. The second preference is reputation/recreation. These individuals want name brand products and tend to purchase clothing and accessories.

METHODS

Students at several universities in India were invited to complete a voluntary and anonymous survey on their Internet viewing and buying habits. The data was collected and entered into SPSS for analysis.

RESULTS AND DISCUSSION

A total of 516 usable responses were obtained which revealed a gender breakdown of 60% female and 40% male. While the majority of students were online one to ten hours per week, 38% were online in excess of eleven hours per week. Nearly 10% of females were online over 25 hours per week (see Table 1 Appendix). There was a slight, but statistically significant difference in the amount of hours spent online pointing to the females' slightly higher usage.

An overwhelming number of students accessed the Internet at their work while less than 30% had Internet service at their homes (see Table 2). Interestingly, Library access was very low. In addition, no significant differences by gender emerged.

While they these students may not be spending the raw hours on the internet, over 60% visit their favorite sites at least daily (see Table 3). However, no statistically significant differences emerged.

Students of both genders most viewed News sites with Facebook following a close second. However, males went to Gambling sites while females went to Employment sites. Interestingly, Gambling was the females fourth most visited site. Yet, Travel sites revealed the only statistically significant difference as 27% of females visited that site as opposed to 8 % males.

Females were most inclined to purchase Clothing, Cosmetics, and Furniture online while surprisingly; males purchased Cosmetics, Accessories, and Clothing (see Table 5). A number of weak but statistically significant difference were found in Furniture, Housewares, Sports, Travel and Video in which females purchased more in all the aforementioned categories. It is important

to note that two categories which are generally purchased by this population, Music and Games, were purchased at very low rates.

Fascinatingly, the major reason for shopping online was not to find a lower cost. In fact, seeking the lowest costs ranked fourth. Females wanted the Ability to Shop Anytime where they sought items not available locally. Males shopped online due absence of items locally. Interestingly, more of these students would pay the higher prices for the convenience of shopping online than those seeing the lowest cost. A friend's recommendation was the lowest rated factor. Two weak but statistically significant differences were found (see Table 6).

Over half the respondents occasionally viewed Banner ads while nearly a quarter of females often viewed these ads. Interestingly, only a minority always ignored banner ads (see Table 7).

CONCLUSION AND IMPLICATIONS

An integral aspect of commerce is reaching new customers through marketing. Businesses are eager to attract these new shoppers, however efforts must be made to understand their needs, how best to reach them and how to assuage their concerns. Since the students surveyed were remarkably homogenous in their Internet habits, general as opposed to niche' strategies can be devised.

Even though the majority of students were online between one to ten hours per week, 38% were online in excess of eleven hours per week. These students displayed persistence and loyalty to their favorite sites as 60% of the respondents visited their favorite sites daily. While a high percentage, it was smaller than Agrawal, Sandhir, and Gupta (2009) who found 96% of their respondents visited their favorite sites daily. Perhaps this lower viewing percentage is due to the low instance of home internet.

Clothing, Cosmetics and Accessories were the categories where the students purchased the most. Therefore, those vendors could coordinate their marketing to venues reach these customers. For example, since 50% cited Facebook as a favorite site, businesses should focus their advertising there. By concentrating on these social networking sites advertisers can customizes ads to the buying habits of its users (Naone, 2008). By offering promotions and specials, product buzz can develop which can get this group to try your product and tell others about it. Other social networking websites such as Twitter, YouTube, and LinkedIn are offering travel companies a venue to get their product information to customers. It provides a place to post updates of specials, photos, videos, etc. These sites are seen as a place to attract more customers and spark repeating ones (Schall, 2009). In addition, advertizing on News, Employment and Gambling sites could readily reach these students.

Even though online purchasing occurred, the greatest frequency by category was 30% which supports the findings of Al Kailani & Kumar (2011) who found cultures with high uncertainty avoidance and perceived risk with Internet, such as India, purchased less over the Internet. However, this problem could be address by the suggestions of Dash and Saji (2007) who found that websites could increase consumer's trust by adding a touch of humanness, friendliness, and belonging as well as increasing social networking. This increased trust lowers consumers perceived risk to shopping online which in turn makes it more likely purchase items online.

Indian students valued the ability to shop anytime and sought greater selection than what was available locally. Therefore the marketing strategies focusing convenience and depth of

selection for the India should be used. These students are a ready built audience as they are nearly universally online, and they willingly visit their favorite sites daily. Their potential buying habits are predicted by Beldona, Racherla, & Mundhra (2011) who found that age, education, and amount of time spent online were factors in whether an individual would purchase airline tickets online or offline as younger, more educated and online customers were more apt to purchase online.

In addition, with a population nearly four times that of the United States, profound changes in commerce can be expected. Further, since nearly three fourths of this enormous population lives in rural regions, the reach of the Internet can provide goods and services not generally available outside of the urban areas. As these students graduate and begin working they will continue to use the Internet. With additional income they may increase their online purchasing. Businesses need to attract these students now to have them for the future!

FUTURE RESEARCH

Additional research could include analysis by age, major, and personality type. Further the number of purchases and the average amount spent for purchases online could be found. Finally, students from other countries could be surveyed to see if their viewing and buying habits had commonalities or differences with the students from this study.

REFERENCES

- (2014). www.Internetworldstats.com/stats.htm_retrieved May 27, 2014
- (2014). cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html retrieved May 27, 2014
- Gupta, N., Handa, M., & Gupta, B. (2008). Young adults of india-online surfers or online shoppers. *Journal of Internet Commerce*, 7(4), 425-444.
- Agrawal, M., Sandhir, V., & Gupta, G. (2009). Emerging profile of online apparel shoppers in india and comparison with the us online shoppers: A few marketing implications. *Advances in Consumer Research – Asia- Pacific Conference Proceedings*, 8, 6-15.
- Al Kailani, M., & Kumar, R. (2011). Investigating uncertainty avoidance and perceived risk for impacting internet buying: a study in three national cultures. *International Journal of Business & Management*, 6(5), 76-92.
- Beldona, S., Racherla, P. & Mundhra, G. (2011). To buy or not to buy: indian consumers' choice of online versus offline channels for air travel purchase *Journal of Hospitality Marketing & Management*, 20,(8), p831-854.
- Dahlman, C. J. (2007). China and india emerging technological powers. *Issues in Science & Technology*, 23(3), 45-53.
- Dash, S. & Saji,K.(2007). the role of consumer self-efficacy and website social-presence in customers' adoption of b2c online shopping: an empirical study in the indian context. *Journal of International Consumer Marketing*, 20,(2), p33-48.
- Einhorn & Krishnan (2011). India seeks access to the broadband highway. *Bloomberg Businessweek* Issue 4255,.19- 20.
- Fusilier, M., & Durlabhji, S. (2008). Predictors of student internet use: data from three developing countries . *Learning, Media & Technology*, 33(1), 59-69.

- Gehrt, K., Rajan, M., Shainesh, G. Czerwinski, D. & O'Brien, M. (2012) Emergence of online shopping in India: shopping orientation segments. *International Journal of Retail & Distribution Management*, 40,(10), p742-758..
- Get 1.1 Billion's Attention, (2007): *Growing Consumerism in India*. Films on Demand. & Films Media Group.
- Gupta, N., Handa, M., & Gupta, B. (2008). Young adults of india-online surfers or online shoppers. *Journal of Internet Commerce*, 7(4), 425-444.
- Kaur, A., & Manhas, R. (2008). Use of internet services and resources in the engineering colleges of punjab and haryana (india): A study. *International Information & Library Review*, 40(1), 10-20.
- Khare, A., Singh, S. & Khare, A. (2010). Innovativeness/novelty-seeking behavior as determinants of online shopping behavior among indian youth. *Journal of Internet Commerce*, 9, 3/4, p164-185.
- Khare, A. & Rakesh, S. (2011). Antecedents of online shopping behavior in India: An Examination. *Journal of Internet Commerce* 10(4),p 227-244.
- Mady, T. (2011). Does it pay to be first? a cross-national comparison of mature and emerging market consumer attitudes toward pioneer and follower brands. *Journal of International Consumer Marketing*, 23, 3/4, p276-296.
- Marshall, B., Jeongil, C., El-Shinnaway, M., North, M., Svensson, L., Sujue, W., Norris, D. ,& Mukherjee, A. (2010). Fuelling india's retail boom - what should be the right policy? *Advances in International Marketing*, 9, 21, p57-74.
- Mahsud, M., Ahmed, M, & Chaudhry I. (2008). The impact of internet banner advertisements on university students. *European Journal of Scientific Research* 20, 2, p 274-289.
- Naone, E. (2008). Between Friends. *Technology Review*, 111(2), 42-49.
- Omar, M, Bathgate, I & Nwankwo, S. (2011). Internet marketing and customer satisfaction in emerging markets: the case of chinese online shoppers. *Competitiveness Review*, 21(2), 224-237.
- Parikh, D. (2006). Profiling internet shoppers: a study of expected adoption of online shopping in India. *IIMB Management Review*, 2, 31-40.
- Patel, M. C., & Chauhan, N. B. (2010). Model to measure internet exposure. *Agricultural Science Digest*, 30(2), 110-114.
- Patel, V. & Ashthana, A. (2012) A study on students' attitude towards online shopping in india. *Indian Streams Research Journal* 2,(8), Special section p1-11.
- Pradeepkumar-J, E. I., & Panchanatham, N. (2010). A study on impact of rural college students in e-learning (nagapattinam district, tamilnadu-india). *Perspectives of Innovations, Economics & Business*, 4(1), 98-102.
- Ratanpal, A. (2008).Indian economy and Indian private equity. *Thunderbird International Business Review*; 50, (6), p353-358.
- Relph, M. (2011). India's online shopping spree. *Time* 178,(23), pB1-B2.
- Shah, M. (2011). The paradigm shift in the FMCGS' retailing in india. *Review of Management & Economic Engineering*. 10, 1, p 69-80.
- Swamy,(2011). Exclusively.in taking india's best wares to the world one click at a time. *Siliconindia*,14,(3), p14-17.
- Worldwide Wardrobe (2012). *Men's Health India* September p 12

Appendix

Table 1

Hours of Internet Used per Week	Female	Male	Total	r	Sig
0 hours per week	3.6%	4.4%	3.9%	-0.109	0.014
1-5 hours	33.8%	38.0%	35.5%		
6-10 hours	20.0%	26.8%	22.7%		
11-15 hours	19.0%	14.6%	17.3%		
16-20 hours	8.9%	4.9%	7.3%		
21-25 hours	5.2%	8.3%	6.5%		
>25 hours per week	9.5%	2.9%	6.9%		

Table 2

Where the Internet is Accessed	Female	Male	Total
Home	27.9%	26.4%	27.3%
Work	82.8%	86.1%	84.1%
Library	9.1%	7.7%	8.5%

Table 3

Frequency of Visiting Favorite Sites	Female	Male	Total	r
> Once a Day	19.5%	16.0%	18.1%	no sig
Daily	47.8%	45.0%	46.7%	
2-4 times a Week	20.5%	25.5%	22.5%	
Weekly	12.3%	13.0%	12.6%	

Table 4

Favorite Sites	Female	Male	Total	r	Sig
Chat	8.1%	6.3%	7.4%		
Employment	39.9%	35.1%	38.0%		
Entertainment	27.6%	26.9%	27.3%		
Gambling	38.0%	42.3%	39.7%		
Games	2.9%	1.4%	2.3%		
Music	20.8%	17.8%	19.6%		
Facebook	47.7%	50.0%	48.6%		
News	54.5%	58.7%	56.2%		
Shopping	10.4%	13.5%	11.6%		
Sports	26.9%	27.4%	27.1%		
Travel	26.9%	7.7%	19.2%	0.240	0.000
Weather	15.3%	16.8%	15.9%		

Table 5

Items Purchased	Female	Male	Total	r	Sig
On-Line					
Accessories	25.6%	26.9%	26.2%		
Clothing	28.6%	26.0%	27.5%		
Cosmetics	27.9%	31.3%	29.3%		
Electronics	7.1%	8.2%	7.6%		
Furniture	26.6%	13.5%	21.3%	.158	.000
Games	3.9%	1.4%	2.9%		
Housewares	20.5%	13.0%	17.4%	.097	.028
Music	4.2%	5.8%	4.8%		
Shoes	24.4%	22.1%	23.4%		
Sports	22.4%	10.1%	17.4%	.159	.000
Travel	7.1%	1.4%	4.8%	.130	.003
Video	14.6%	6.7%	11.4%	.121	.006

Table 6

Reasons for Buying Online	Female	Male	Total	r	Sig
Lower Cost	11.0%	10.1%	10.7%		
Ability to Shop Anytime	38.6%	28.4%	34.5%	0.106	0.016
Lack of Items Locally	37.3%	48.6%	41.9%	-0.112	0.011
Higher Cost but Convenient	16.6%	16.3%	16.5%		
Recommended by a Friend	8.8%	7.7%	8.3%		

Table 7

Banner Ad Viewing	Female	Male	Total
Always Ignore	21.9%	23.5%	22.5%
Occasionally View	54.3%	58.8%	56.1%
Often View	23.5%	17.6%	21.1%