

A Study on Consumers' Buying Preferences: Website-Based vs. App-Based Products and Services

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Abstract: The aim of this study is to understand the consumer buying behavior via website versus mobile application. There are millions of people online at any point of time and all of them are potential customer for some or other retailer. With the advent of technology, many portals have been developed online, for the ease of customers as per their convenience like – websites, mobile applications. Since there are many portals and so many providers of services, it is vital to understand what customers are buying, from where they are buying, how they are buying and the reason behind buying from that particular place/portal.

Customer behaviors are influenced by the advantages and disadvantages of these portals (websites and mobile applications) and also the demographics due to which they show varying behaviours.

To understand the consumer behaviour, a questionnaire was designed and distributed online to 156 respondents and the sample consisted of people from Bengaluru.

The result of this study would contribute to enhancement of knowledge and help analyze why one portal is working more than the other for the same retailer. It will help identify the major product/service categories that are availed via website and sectors availed via mobile application so that providers of different services/products can develop marketing strategies to generate more traffic and sales.

Keywords: Online shopping, website, mobile application, consumer buying behavior

I. INTRODUCTION

On August 15, 1995, Videsh Sanchar Nigam Limited (VSNL) launched public Internet access in India. Since then, Internet has immensely changed the scenario of India. The exposure to this technology has made the lives of the people easy, as they can now communicate, learn, entertain and buy products or avail services online at ease. It has become the center of the lives of the people. One cannot imagine life without the Internet.

As compared to 137 million Internet users, the figures have risen to 462 million Internet users in 2016 in India (IAMAI, 2016). This increase in technology provides good opportunities to the seller to reach wider range of customers in much faster, easier and economic way and it has

also lead to increase in products/services variety available to the consumers.

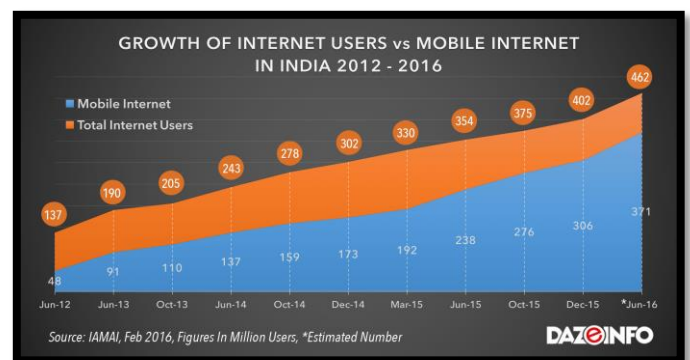


Figure 1 Internet Growth of Internet Users vs. Mobile Internet in India 2012-2016 (IAMAI)

The use of technology has led to online shopping by consumers, to avail different products and services. Internet holds the attention of retail market and not just in the sector of clothing but it ranges from food, entertainment to renting a car, booking a hotel service as well. It provides them with a chance to search information about products/services, place a comment or give orders. As the online shopping is on a rise, markets have come with different portals that can be accessed by the consumers like – website, mobile application. These portals have been developed as per the convenience of the devices available with the customers. The market for mobile apps has increased heavily lately, and at the same time, Internet has made it possible for consumers to share their experience of products and services to a wider public all over the world.

Since the advent of smartphones, users have started downloading mobile applications since it is portable and can avail services/products with one click. Now organizations are considering to providing different payment methods, different shipping alternatives and even different web interfaces.

It is vital to any organization to study consumer buying behavior to understand what, why, how and from where consumers are buying so as to develop marketing strategies to generate more sales and henceforth more profits.

These days, organizations have developed different medium from where customers can buy products online. But it is important to understand which portal is generating more traffic for a particular service/product.

With the introduction of technology, consumers are introduced to the world of hacks, bugs or technical glitches which come complementary with the kind of portal they are using, be it a website or a mobile application. So, the fundamental understanding of different portals that are being availed by consumers for different categories is important and this preferential buying behavior is based on different advantages and disadvantages of these portals. Analyzing the process of shopping activities, how consumers decide and make purchases over the Internet and what they buy, need to be identified by online providers in order to satisfy and succeed in the competitive business environment.

II. REVIEW OF LITERATURE

According to Shergill (2012) Internet is changing the way consumers shop and buy goods and services and has rapidly evolved into a global phenomenon. This rapid growth has also provided the E-marketers to develop their prospects. Factors like website design, website reliability/fulfillment, websites' customer service and website security/privacy influence the buying decisions of the consumers.

According to Nuseir and Morad, (2010) the consumer decision-making is affected by the interaction between consumers and the factors applicable in an online environment. The factors are security, infrastructure for Internet, product/service characteristics, response time, visual appeal, user interface, E-price and E-Promotion. Until and unless high quality E-Promotion would not achieve shoppers, they won't be inspired enough to buy online and will create obstacles in the consumer purchase decision through Internet.

According to Raghunath and Sahay (2015) online shopping is becoming a trend among Indians as they experience it is more comfortable, time saving and convenient. When consumers make a purchase online, they are affected by various factors, including price, trust, convenience and information quality. A survey was conducted to know the impact of the various factors on consumers. The result indicated that reduced price and convenience are the influential factors for customers to buy online. The current trend in India is "browse offline and buy online". Customers browse various products in physical stores to have a touch and feel of the product and later they buy them online to get it in reduced price.

According to Agrawal and Gupta (2010) in this era, where Information Technology has penetrated deep into the lives of the common people, e-shopping forms an important means of trade. Online shopping is most common these days in the developed world especially in the USA. Though rapidly

rising, online shopping in the developing countries particularly in India is yet to become strong and diversified. There has been a rapid increase in the number of Internet users in India, which proves to be a boom for e shopping. The most pervasive challenge is the transaction security and hand feel for Indian consumers and there is low penetration of e-shopping in the Indian market. The bearing of e-shopping especially the retail businesses on the Internet have created opportunities to the consumers to transact online with comfort and convenience. The study uncovers a tremendous potential for changing over Indian in-store buyers into online purchasers.

According to Goswami and Khan (2015) the four factors namely Anxiety, Ease of Use, Usefulness and Price as the determinants of shopper buying behaviour online. The factor 'Anxiety' comes out as the single most important factor in online shopping though the shoppers are young, technology savvy and prefer buying online. The next important factor is 'Ease of use' followed by 'Usefulness' and 'Price'. Price, though an important factor doesn't influence shoppers as the other three variables. So this concluded that online shoppers are shopping more, for convenience and utility than for price difference or discounts.

A research firm Nielsen Informat Mobile Insights, through research established that the number of smartphone owners using mobile apps of e-commerce companies has gone up from 1,680 (21%) in May 2014 to 4,320 (54%) in May 2015, based on real-time mobile usage data across 8,000 handsets in the country. Flipkart gets 75% of its traffic from mobile apps. Features like image search, smart search, (through barcodes and voice search), notifications are increasing the number of consumers who shop online. Users in non-metros are slightly more engaged with shopping apps than those in the metros. The most popular e-commerce products viewed and bought are electronics items, which is a segment driven by young men. Amazon's mobile shopping app is one of the lightest in the industry to address poor network conditions. Flipkart is leading in mobile shopping apps both in terms of penetration (35%) and engagement (60 minutes per month), followed by Snapdeal (penetration of 20% and user engagement of 35 minutes a month) and Amazon (a reach of 17% and user time of 37 minutes per month).

III. RESEARCH METHODOLOGY

A. Statement of the Problem

The growing use of technology across the globe has provided the consumers with numerable options for buying different products and availing services. The usage of technology in India has grown immensely. Almost every person in India has an easy access to smartphone, which has exposed him or her to a world of technology.

With innovations in technology, come a variety of options that consumers can choose from. While availing different services online, consumers can either shop via website or from mobile application. A ton of organizations have both portable applications and sites, yet buyers typically get frequent of purchasing by means of one alternative according to their benefit as they may confront a few issues from the other.

There are certain products/ services that consumers prefer buying from one platform and identification of those will help companies innovate those platforms to generate more traffic. Their choice is affected by numerous reasons that might affect their convenience and likeability towards that particular option. Hence it is vital for any organization to identify the products/service a consumer prefers to buy via a mobile application versus websites as it may enhance their traffic generation on at least one particular portal and also work upon the drawbacks of the other one.

B. Objectives

1. To study consumers' buying preferences towards website or application based purchasing in various product/service categories
2. To identify the key products and services availed by customers online
3. To study the reasons for consumers' website based/application based buying behavior with respect A. to specific product segments

C. Research Design

The research designs are both exploratory and descriptive.

D. Data Collection

1) *Primary data*: has been collected via survey.

2) *Sample unit*: is a consumer who makes online purchases through a mobile-based application and websites for various products and services.

3) *Sampling Technique*: is judgmental sampling where the criterion for selection is people who make online purchases through a mobile or website based portal so as to meet the objectives of the research. Google Forms were used to design and send the questionnaires to respondents.

4) *Components of the questionnaire*: The questionnaire consisted of 21 questions divided into three sections. First section had demographic questions like name, age, gender, occupation and educational level, monthly income of the respondent.

Second section included questions mentioning various products/services from different categories that are availed by customers online via website/ mobile application.

Third section constituted questions mentioning the parameters on the basis of which respondents' preferential buying behavior between website based versus mobile application can be assessed.

Four open-ended questions have been included in the questionnaire.

5) *Secondary data*: Secondary data have been extracted from the published summaries, articles, journals, books etc.

E. Data Analysis

Basic statistical tools like frequencies and averages have been used along with weighted averages.

F. Scope of Research

Scope of research only extends to consumers using online technology for buying in Bengaluru. The research is limited to 156 consumers who are accustomed to using mobile applications and website.

G. Limitations

The limitations of the research are sample size, categories limited to few products and the location of research restricted to Bengaluru city

IV. DATA ANALYSIS

Demographics

Age: 68% of the respondents were in the age group 16-23, whereas around 21% of the respondents were from the age group 32-40

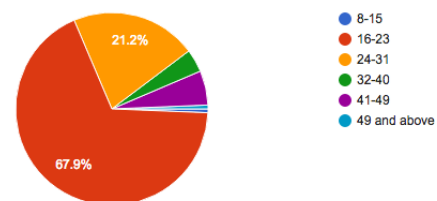


Figure 2 Distribution of Respondents with respect to Age
Gender: 58% of the respondents were women and rest 42% were men.

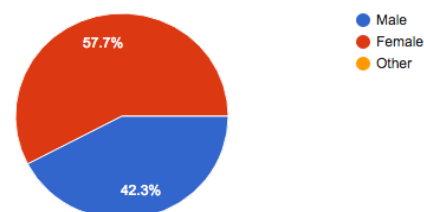


Figure 3 Distribution of Respondents with respect to Gender

Marital status: only 16% of the respondents were married whereas the rest 84% were unmarried.

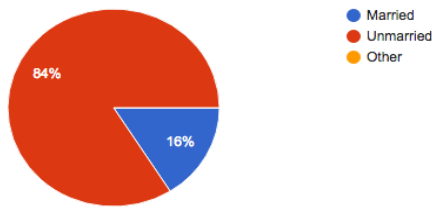


Figure 4 Distribution of Respondents with respect to Marital Status

Occupation: around 53% were students, 22% salaried, 10% professionals, 10% self-employed and around 6% were housewives.

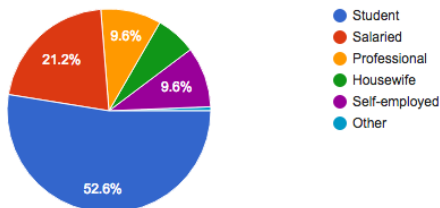


Figure 5 Distribution of Respondents with respect to Occupation

Education: 54% of the respondents were graduates, 23% post-graduates, 20% were 12th pass, and only around 3% people had completed a professional course.

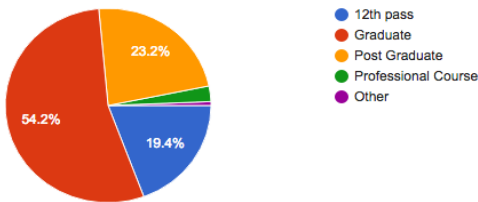


Figure 6 Distribution of Respondents with respect to Education

Monthly personal income

50% of the respondents were dependent and around 19% earned less than Rs. 30,000, 19% earned between Rs. 40,000 – Rs. 80,000, and around 10% people earned between Rs. 90,000 – Rs. 2,00,000.

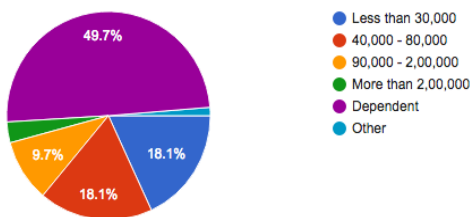


Figure 7 Distribution of Respondents with respect to Monthly Personal Income

Owning of a smartphone: all the respondents owned a smartphone

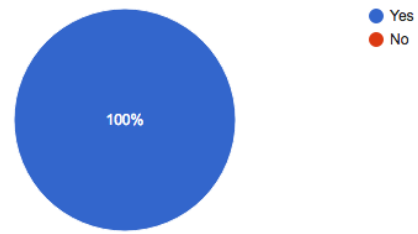


Figure 8 Distribution of Respondents with respect to owning of a Smartphone

Owning of a personal laptop/computer

90% of the respondents also owned either a Laptop or a Personal Computer, whereas only 10% did not own both a laptop and a computer.

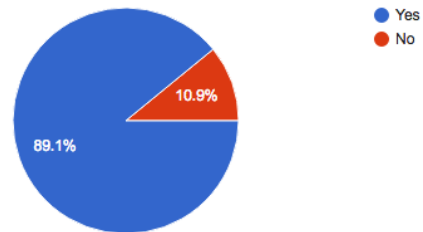


Figure 9 Distribution of the Respondents with Respect to Owning of a Laptop or a PC

Preference of mode for availing a product or service

55% preferred using a mobile application for availing a product or a service, whereas around 30% preferred using a desktop website, and 15% preferred using a mobile website.

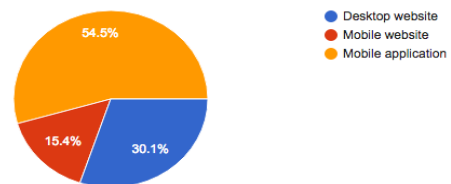


Figure 10

B. Frequency of purchase

51% of people shop only once a month via mobile application which is followed by approximately 16% of people shopping once in 6 months and only 10% of them shopping once in a week via mobile application.

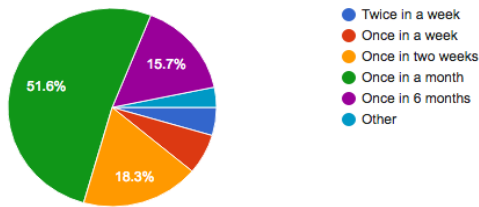


Figure 11 Distribution Of Respondents With Respect To Frequency Of Purchase Via A Mobile App

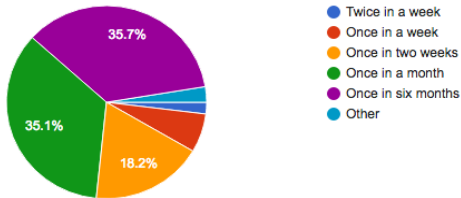


Figure 12 Distribution Of Respondents With Respect To Frequency Of Purchase Via A Website

If the previous statistics are applied to shopping via website then most of the people that is approximately 36% and 34% shop once in 6 months and once in 1 month respectively while only a small percentage (6%) shops once in a week.

Preference for products to be purchased via mobile application vs. a website

If the consumer preferential buying behavior in purchasing different products via website versus mobile application is compared, it can be said that for products like,

- Clothing and accessories
- Food and beverages
- Body care
- Books and stationery
- Entertainment (buying DVD's, movies, songs)

Respondents' prefer using a mobile application rather than website. Food and beverages and clothing and accessories are two major segments where the preference level is particularly high.

Consumers prefer buying products like, electronic gadgets, household items and sports equipment via website

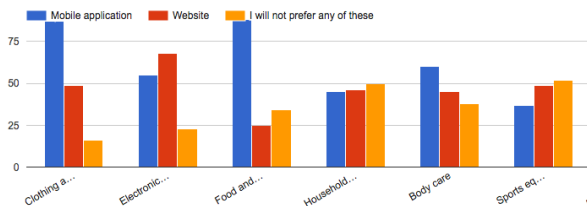


Figure 13 Distribution Of Respondents With Respect To Preference Of Products To Be Purchased Via Mobile App vs. Via A Website

Other products purchased via a mobile application

Certain other products that customers prefer to buy via mobile application are

- Groceries
- Gym Accessories
- Cosmetics
- Dog Food
- Medicines
- Gifting items

Other products purchased via a website

Some other products that customers prefer buying via website are

- Stationery
- Furniture
- Baby Product

Preference of services to be availed via mobile application vs. website

While availing different services via website and via mobile application consumers prefer availing services like entertainment (watching TV, movies) and entertainment (listening to songs) via mobile application over a website. While for renting services, consulting services (marriage, life, education), packaging services, educational courses and tutorials customers like to avail via a website than via a mobile application.

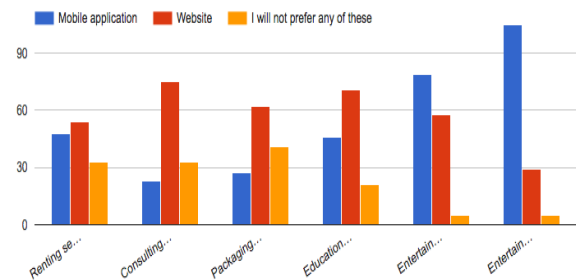


Figure 14 Preference of Services to be availed Via Mobile Application vs. Via a Website

Other services availed via a mobile application

Certain other services that customers avail via mobile application are:

- Hotel bookings
- Courier services
- Fashion forecasting
- News
- Cabs
- Phone book – True caller
- Games
- Bill payments
- Bus rental

- Wedding services

Other services availed via a website

Services that customers avail via website are health insurance, hotels, different journal provider sites, flights, spa treatment booking, laundry, bank transactions, on-line presentations.

Reasons for purchasing from a website

Various parameters were given in the questionnaire to record the satisfaction of the consumer according to the parameter, with options from Very Satisfied to Not Satisfied.

The satisfaction levels were coded from 1 to 5 (1 – not satisfied and 5 – very satisfied), and weighted average was calculated for each parameter, to determine the parameter was highest rated.

The results are as follows:

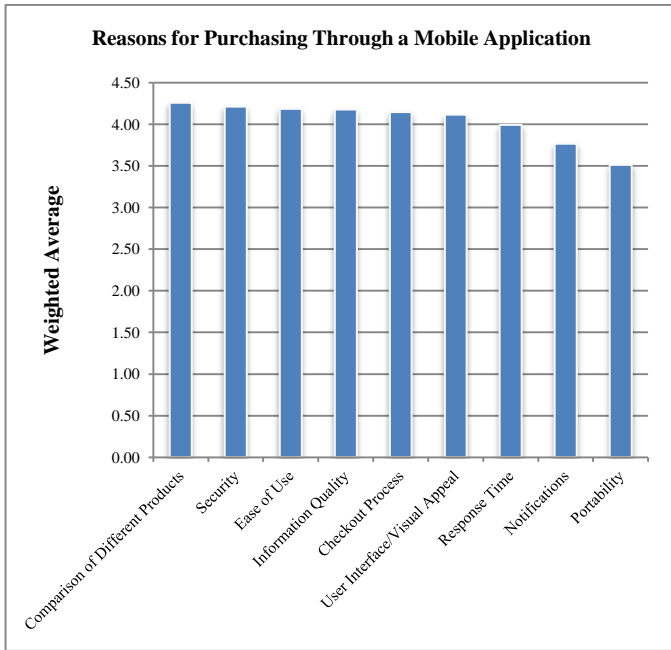


Figure 15 Reasons for Purchasing Through a Website

In terms of parameters, Comparison of Different Products > Security > Ease of Use > Information Quality > Checkout Process > User Interface/Visual Appeal > Response Time > Notifications > Portability. The highest rated was Comparison of Different Products and the lowest rated was Portability.

Reasons for purchasing through a mobile application

Various parameters were given in the questionnaire to record the satisfaction of the consumer according to the parameter, with options from Very Satisfied to Not Satisfied. Weighted Average was taken for each parameter and plotted.

The results are as follows:

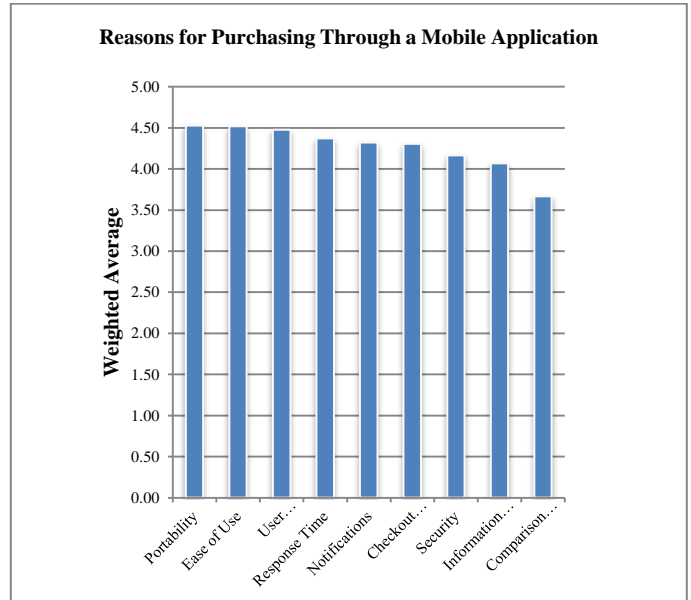


Figure 16 Reasons for Purchasing Through a Mobile Application

In terms of parameters, Portability > Ease of Use > User Interface/Visual Appeal > Response Time > Notifications > Checkout Process > Security > Information Quality > Comparison of Different Products. The highest rated was Portability and the lowest rated was Comparison of Different Products, totally the opposite of that in the previous case.

Various parameters with respect to the use of both mobile application and a website were listed. According to the results, in terms of

- Ease of Use – People prefer using a mobile application
- User Interface/Visual Appeal – People prefer using a mobile application
- Checkout Process – People prefer using a mobile application
- Security – People prefer using a website
- Information Quality – People prefer using a website
- Response Time – People prefer using a mobile application
- Comparison of different products – People prefer using a website
- Notifications – People prefer using a mobile application
- Portability – People prefer using a mobile application

V. CONCLUSION

The finding and the analysis show that the consumers who are between the age group of 16-23 are more comfortable in using mobile applications. A mobile app can work without Internet also, but a website requires a constant network to operate.

The key categories identified for the products availed by the consumers are clothing, food, electronics, entertainment, books and stationery, body care, sports equipment. Most of the consumers prefer availing these products via the mobile application due to portability, better user interface or appeal of the product, notifications, response time and ease of usage to avail these tangible products. Portability of mobile applications as in smartphones contributes majorly to increasing usage of mobile apps by consumers to buy products.

The key categories identified for the services that are availed online by the consumers are renting services, consulting services, educational services, entertainment services, hospitality, cab/bus/train bookings and packaging services. Most of these services are availed by consumers via website as they provide consumers with better information quality, better pictures and more information. For example, if a consumer wants to pursue any educational course or any consulting service, he would want to know everything from cost, services provided, time duration, which he would be easily able to access on websites while it might become cumbersome on mobile application.

Hence, technology is penetrating into the Indian market at very fast rate and it is important for an organization to study this preferential buying behavior of consumers to analyze which portal to concentrate upon to develop effective marketing strategies to generate more traffic and sales.

REFERENCES

- [1]. Joseph, P.T. (2015). *E-Commerce, Fifth Edition: An Indian Perspective*. pp 127, PHI Learning Pvt. Ltd.
- [2]. Nuseir, T. M., Arora N., Morad, M. A and Gharaibeh, M. (2010). *Evidence of online shopping: A consumer perspective*. International Review of Business Research Papers, Volume 6, Number 5, November 2010. <http://www.bizresearchpapers.com/8.%20Nitin%20Arora-FINAL.pdf> (Accessed on 14/12/16)
- [3]. Agrawal, Sandhir, M., Gupta V., Gaurav, (2010). *Emerging Profile of Online Apparel Shoppers in India*. Labovitz School of Business & Economics, University of Minnesota Duluth, 11 E. Superior Street, Suite 210, Duluth, MN 55802. Retrieved from http://www.acrwebsite.org/volumes/ap08/ap_2009_vol8_86.pdf (Accessed on 14/12/16)
- [4]. Chen Y. L. (2011). *The quality of Mobile Shopping system and its impact on purchase intention and performance*. International Journal of Managing Information Technology (IJMIT) Vol.5, No.2, May 2013. Retrieved from <http://airccse.org/journal/ijmit/papers/5213ijmit03.pdf> (Accessed on 14/12/16)
- [5]. Shergill, G.S., (2012). *Web based shopping – Consumers attitudes towards online shopping in New Zealand*. Journal of Electronic Commerce Research, VOL. 6, NO.2, 2005. Retrieved from http://mail.ongisnade.co.id/sites/default/files/paper1_0.pdf (Accessed on 14/12/16)
- [6]. Kundu, Dr. S.G., Trivedi, J.P. (2014). *A study of mobile application preferences of youth and future scope*. Researchjournal's Journal of Marketing, Vol.2, No.3, April, 2014 ISSN 2348-0947. Retrieved from <https://www.researchgate.net/publication/262188801> (Accessed on 14/12/16)
- [7]. Raman, P. (2014). *Factors Influencing Women Consumers' Buying Behavior Towards Online Shopping In India*. Journal Of Contemporary Management Research, 8(2), 23-56. Retrieved from <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?sid=7429b34d-f4c2-4ef0-a3ee-47074ff96ae0%40sessionmgr4010&vid=1&hid=4111> (Accessed on 14/12/16)
- [8]. Gupta, A., Kumar, N., & Kanchan, U. (2015). *A Study Of Online Purchase Behaviour Of Customers In India*, ICTACT Journal On Management Studies, August 2015, Volume: 01, Issue: 03. Retrieved from http://ictactjournals.in/paper/IJMS_paper_4_pp_136_142.pdf (Accessed on 14/12/16)
- [9]. Goswami, S., & Khan, S. (2015). *Impact of Consumer Decision-making Styles on Online Apparel Consumption in India*. Vision (09722629), 19(4), 303-311. doi: 10.1177/0972262915610853. Retrieved from <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?sid=1a114ee4-fc38-4d62-8373-477c554328a9%40sessionmgr4007&vid=2&hid=4111> (Accessed on 14/12/16)
- [10]. Choudhary, V. (2015, July 28). *Nielsen report shows surge in use of mobile apps for shopping*. Livemint. Retrieved from <http://www.livemint.com/Consumer/t5ecA2Tf0iNzqaPQhtDC2H/Survey-shows-surge-in-use-of-mobile-apps-for-shopping.html> (Accessed on 14/12/16)
- [11]. *India's Online Retailers Launch 'Lite' Versions Of Websites To Snare Mobile shoppers*. (2015). FRPT- Telecom Snapshot, 23. Retrieved from <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?sid=25489512-ba19-43a1-ad83-248c80d42a78%40sessionmgr4009&vid=1&hid=4111> (Accessed on 14/12/16)