

## A STUDY ON SEGMENTATION OF ONLINE SHOPPERS OF ANAND AND NADIAD: A BEHAVIOURAL SEGMENTATION APPROACH

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### **Abstract:**

Segmentation plays a very important role for marketers for targeting their prospective customers and positioning their products. Demographic segmentation has been used extensively in past. But due to severe limitations of demographic segmentation, marketers are using behavioural and lifestyle segmentation coupled with demographic segmentation. In the present study, 400 online shoppers from the cities of Anand and Nadiad were administered a questionnaire and 3 meaningful clusters were identified. The three clusters are as follow: price conscious shoppers, product involvers, and convenience oriented shoppers. All three clusters exhibited different behaviours and hence can be grouped in to different segments.

**Keywords:** Segmentation, Demographic segmentation, Lifestyle segmentation, behaviour segmentation, Clusters, Positioning.

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**Introduction:**

Online shopping had become a vital activity in everybody's life now a days. According to the report of Google, "Increasing Internet penetration and growing preference for shopping online will drive the ecommerce market in India to USD 15 billion by 2016 with a whopping 100 million people going online to shop". Growth of ecommerce was low in the starting years due to inhibitions, but it is growing now with an extra ordinary pace as the confidence of Indian buyers is increasing slowly. In last two years many ecommerce website has mushroomed and it is still likely to increase. As per the study conducted by alexa, Flipkart, eBay, snapdeal, Jabong, Home shop 18, Myntra, Naaptol, Tradusin, and Fashionandyou are the top ten e-commerce websites in India. With the advent of technology and smartphones with good internet speed, people in India now shop at their convenience by means of computer and mobile phones. Many of the e-commerce company had large volumes of sales from mobile friendly applications. More and more companies are planning to sell through mobile application only.

Every consumer is different from each other. Though they may be similar demographically, but if we look at the lifestyle and behaviour which guides their purchase decisions, each consumer should be differently treated. Though demographic segmentation is used from the beginning of marketing era, now the marketers are segmenting their consumers on the basis of their behaviour and lifestyle.

**Rational of the study**

The major objective of study is to find the relevant segments of online shoppers which can then be targeted by marketers. This will help marketer to cater to the needs of individual segment in a timely manner. It will also serve as the basis for many other researchers and will fill the gap in the existing literature.

**Literature review:**

**James, L., Lamont, K., & Karnes, K. (2001)**The online survey questionnaire is self-administered to a random sample of over 33,000 adults per month using Harris web-based interviewing technologies. Interviews averaged fifteen minutes in length. The completed interviews were weighted to reflect the characteristics of the online population, as determined through Harris' parallel telephone research. Segmentation analysis based upon the number of

sites visited and the amount spent online yielded six shopper segments including Browsers, Peripheral Shoppers, Educated Shoppers, Less Involved Browsers, Less Involved Shoppers, and Educated Shoppers.

**Kau, A., Tang, Y., & Ghose, S. (2003)** A survey of 3712 online shoppers was conducted in Asia and six clusters were identified namely, on-off shoppers, comparative shoppers, traditional shoppers, dual shoppers, e-laggards, and information surfer.

**Rohm, A., & Swaminathan, V. (2004)** Four types of clusters are identified and are labeled as convenience shoppers, variety seekers, balanced buyers, and store-oriented shoppers in USA. The convenience shopper is more motivated by convenience. The variety seeker is substantially more motivated by variety seeking across retail alternatives and product types and brands than any other shopping type. Balanced buyers are moderately motivated by convenience and variety seeking. The store-oriented shoppers are more motivated by physical store orientation (e.g., the desire for immediate possession of goods and social interaction).

**Pandey, S., Chawla, D., & Venkatesh, U. (2015)** A survey of 432 online shoppers revealed three key shopper segments, namely, mature traditionalists, offer enthusiasts, and technology mavericks. They were influenced by five key factors, namely, Internet enjoyment and convenience, Internet distrust, Internet offers, Internet logistical concerns, and Internet self-inefficacy. Mature traditionalists are the relatively older, married customers who prefer offers given by the brick-and-mortar stores but are attracted to the convenience and enjoyment of buying online. Internet-based offers, in terms of selection and quality, are the key attraction for the offer enthusiasts. Technology mavericks are the younger generation, avid users of the Internet having no logistical or self-inefficacy issues. However, they do not trust the security and privacy offered by Internet vendors.

### **Research Methodology:**

1. To segment online shoppers on the basis of their behaviour.
2. To identify the medium through which online shoppers purchases products.

(Table 1: Research Design)

|                           |   |
|---------------------------|---|
| Sample Size               | 400   |
| Type of Sampling          | Convenient Sampling   |
| Sampling Units            | Online Buyers   |
| Area of Research          | Anand & Nadiad  |
| Type of Research          | Descriptive research design   |
| Method of data collection | Questionnaires (Questionnaire was taken from research conducted by Dr. Nirmal Sharma in his research paper “A comparative study on online purchasing behaviour of the customers of Anand and Nadiad”) |
| Type of data used         | Quantitative  |

Table 2: Demographic Profile

|           |               | Gender |        | Total | Percentage (%) |
|-----------|---------------|--------|--------|-------|----------------|
|           |               | Male   | Female |       |                |
| Age       | 17 to 21 year | 52     | 66     | 118   | 29.5%          |
|           | 22 to 30 year | 81     | 81     | 162   | 40.5%          |
|           | 31 to 60 year | 94     | 26     | 120   | 30.0%          |
| Total     |               | 227    | 173    | 400   | 100.0%         |
| Education | H.S.C.        | 0      | 39     | 39    | 9.8%           |
|           | Graduate      | 121    | 67     | 188   | 47.0%          |
|           | Post-Graduate | 106    | 67     | 173   | 43.3%          |

|                   |                        |     |     |     |        |
|-------------------|------------------------|-----|-----|-----|--------|
| Total             |                        | 227 | 173 | 400 | 100.0% |
| <b>Occupation</b> |                        |     |     |     |        |
|                   | Agriculture            | 27  | 0   | 27  | 6.8%   |
|                   | Housewife              | 0   | 54  | 54  | 13.5%  |
|                   | Salaried<br>(Services) | 68  | 53  | 121 | 30.3%  |
|                   | Student                | 52  | 66  | 118 | 29.5%  |
|                   | Professional           | 40  | 0   | 40  | 10.0%  |
|                   | Businessmen            | 40  | 0   | 40  | 10.0%  |
| Total             |                        | 227 | 173 | 400 | 100.0% |
| <b>Location</b>   |                        |     |     |     |        |
|                   | Anand                  | 114 | 86  | 200 | 50.0%  |
|                   | Nadiad                 | 113 | 87  | 200 | 50.0%  |
| Total             |                        | 227 | 173 | 400 | 100.0% |

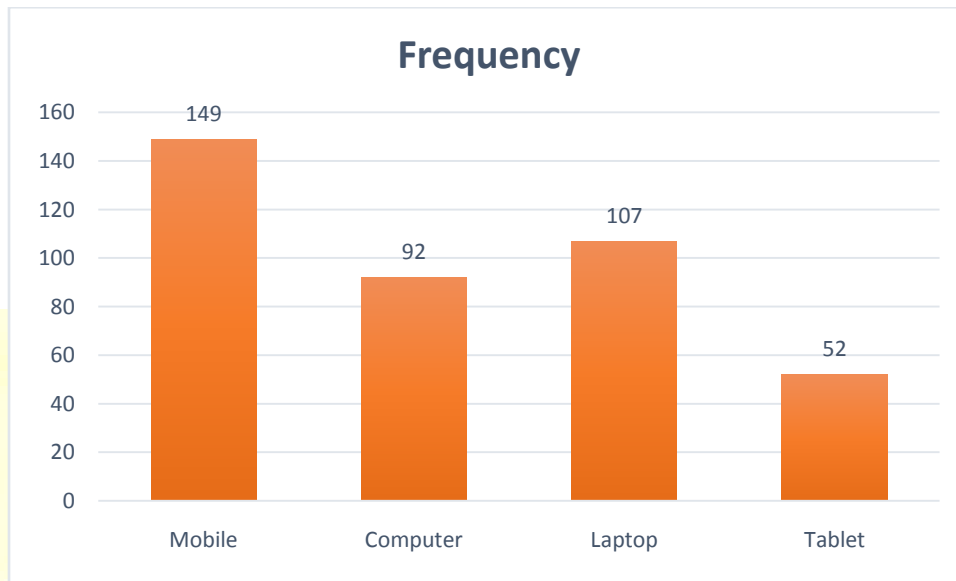
(Source: Primary Data)

Respondents were asked by which medium they purchase online?

Table No: 3 – Medium of purchase

| Particulars | Frequency |
|-------------|-----------|
| Mobile      | 149       |
| Computer    | 92        |
| Laptop      | 107       |
| Tablet      | 52        |

Chart No: 1 - Medium of purchase



(Source: Primary Data)

**Interpretation:**

From the above data, it is said that majority of the respondents (37%) uses mobile, (23%) uses computer, (27%) uses laptop, and (13%) uses tablet for online purchase.

**Cluster Analysis:**

It is a class of techniques which classifies the cases in to groups which are relatively homogeneous and between the groups there exists heterogeneity.

| Cluster Analysis   |         |   |   |
|--|---------|---|---|
| Initial Cluster Centers  |         |   |   |
| (Table no: 4)  | Cluster |   |   |
|  | 1       | 2 | 3 |
| I shop online because of the cheaper price than solid shops            | 2       | 2 | 5 |
| Online shopping provide me a wide variety of products than solid shops | 4       | 1 | 2 |

|   |   |   |   |
|---|---|---|---|
| I tend to shop online to buy goods not available from the nearby solid shops or the solid shops of the city | 2 | 3 | 5 |
| I tend to shop online to buy goods that are not supplied in solid shops                                     | 1 | 5 | 2 |
| I shop online for limited edition products  | 2 | 2 | 5 |
| I shop online because I do not have time to shop at solid shops after work or study                         | 1 | 5 | 2 |
| The lower price of the same product at solid shops is an advantage when I shop online                       | 2 | 2 | 5 |
| Free delivery charge is a price advantage when I shop online  | 2 | 3 | 5 |
| More discounts for purchasing more is an advantage when I shop online                                       | 2 | 2 | 5 |
| Free gift is a price advantage when I shop online   | 2 | 3 | 5 |
| Product price is important to me when I shop online   | 2 | 2 | 5 |
| I am willing to pay for a higher price for product(s) that is/are not available in solid shops              | 4 | 1 | 2 |
| I will consider all comprehensive factors to choose the best products when I shop online                    | 2 | 3 | 5 |
| Higher credibility of the online sellers indicates better quality of products                               | 1 | 5 | 2 |
| When I shop online, more positive feedback indicates better quality of products                             | 2 | 2 | 5 |
| Higher price indicates better products quality when I shop online   | 4 | 1 | 2 |
| Product quality is important to me when I shop online   | 2 | 3 | 5 |
| I do not mind the real products have difference between the photos of the products when I shop online       | 1 | 5 | 2 |
| The seller's attitude affect my purchasing decision when I shop online                                      | 4 | 1 | 2 |

|  |   |   |   |
|--|---|---|---|
| The availability of the stock affect my purchasing decision when I shop online         | 1 | 5 | 2 |
| The delivery methods affect my purchasing decision when I shop online                  | 2 | 3 | 5 |
| The delivery period affect my purchasing decision when I shop                          | 2 | 2 | 5 |
| The availability of after sales service affect my purchasing decision                  | 4 | 1 | 2 |
| Good after sales service affect my willingness of repeat purchasing behaviour          | 2 | 3 | 5 |
| I tend to repeat purchasing from an online seller that I traded before                 | 1 | 5 | 2 |
| The regular promotion activities of the online seller will increase my repeat purchase | 2 | 2 | 5 |
| The quality of the products affects my repeat purchasing behaviour                     | 2 | 3 | 5 |
| The price of the products affects my repeat purchasing behaviour                       | 4 | 1 | 2 |
| Online Shopping is Trustworthy & Reliable  | 2 | 3 | 5 |
| Safety of payment instrument   | 2 | 2 | 5 |

(SPSS Output)

(Table no: 5) Number of Cases in each Cluster

|         |   |     |
|---------|---|-----|
| Cluster | 1 | 223 |
|         | 2 | 52  |
|         | 3 | 125 |
| Total   |   | 400 |

**Final Cluster Centers**(Table no: 6)

|  |                |          |          |
|--|----------------|----------|----------|
|  | <b>Cluster</b> |          |          |
|  | <b>1</b>       | <b>2</b> | <b>3</b> |



|   |      |      |      |
|---|------|------|------|
| I shop online because of the cheaper price than solid shops   | 2.06 | 2.5  | 4.01 |
| Online shopping provide me a wide variety of products than solid shops                                      | 2.48 | 2.12 | 2.32 |
| I tend to shop online to buy goods not available from the nearby solid shops or the solid shops of the city | 2.03 | 2.27 | 3.09 |
| I tend to shop online to buy goods that are not supplied in solid shops                                     | 2.68 | 3.67 | 2.46 |
| I shop online for limited edition products  | 2.09 | 2.5  | 4.1  |
| I shop online because I do not have time to shop at solid shops after work or study                         | 2.65 | 3.67 | 2.41 |
| The lower price of the same product at solid shops is an advantage when I shop online                       | 2.06 | 2.5  | 4.01 |
| Free delivery charge is a price advantage when I shop online  | 2.09 | 2.62 | 2.74 |
| More discounts for purchasing more is an advantage when I shop online                                       | 2.06 | 2.5  | 3.66 |
| Free gift is a price advantage when I shop online   | 2.44 | 2.27 | 2.79 |
| Product price is important to me when I shop online   | 2.09 | 2.5  | 4.1  |
| I am willing to pay for a higher price for product(s) that is/are not available in solid shops              | 2.8  | 1.77 | 2.31 |
| I will consider all comprehensive factors to choose the best products when I shop online                    | 2.03 | 2.27 | 3.43 |
| Higher credibility of the online sellers indicates better quality of products                               | 2.33 | 4.02 | 2.42 |
| When I shop online, more positive feedback indicates better quality of products                             | 2.06 | 2.5  | 3.66 |
| Higher price indicates better products quality when I shop online   | 2.83 | 1.77 | 2.37 |

|   |      |      |      |
|---|------|------|------|
| Product quality is important to me when I shop online   | 2.06 | 2.27 | 3.53 |
| I do not mind the real products have difference between the photos of the products when I shop online | 2.65 | 3.67 | 2.41 |
| The seller's attitude affect my purchasing decision when I shop online                                | 2.42 | 1.77 | 3.01 |
| The availability of the stock affect my purchasing decision when I shop online                        | 2.33 | 4.02 | 2.42 |
| The delivery methods affect my purchasing decision when I shop online                                 | 2.03 | 2.27 | 3.09 |
| The delivery period affect my purchasing decision when I shop   | 2.48 | 2.5  | 3.37 |
| The availability of after sales service affect my purchasing decision                                 | 2.45 | 1.77 | 3.1  |
| Good after sales service affect my willingness of repeat purchasing behaviour                         | 2.41 | 2.27 | 2.74 |
| I tend to repeat purchasing from an online seller that I traded before                                | 2.27 | 3.67 | 3.1  |
| The regular promotion activities of the online seller will increase my repeat purchase                | 2.12 | 2.85 | 3.32 |
| The quality of the products affects my repeat purchasing behaviour                                    | 2.03 | 2.27 | 3.09 |
| The price of the products affects my repeat purchasing behaviour                                      | 2.83 | 1.77 | 2.37 |
| Online Shopping is Trustworthy & Reliable   | 2.06 | 2.27 | 3.53 |
| Safety of payment instrument  | 2.44 | 2.5  | 3.31 |

(SPSS Output)

### Interpretation

From the above tables no 4 and 6, it can be seen that there exist three different groups which exhibits different behaviours while purchasing online. The name of these groups are given as follow: price conscious shoppers, product involvers, and convenience oriented shoppers. There characteristics are as follow:

#### Cluster 1 – Price Conscious Shoppers

- ✓ They shop online because of the cheaper price than retail shops.
- ✓ The lower price of the same product at retail shops is an advantage when they shop online.
- ✓ Product price is important to them when they shop online.
- ✓ They are willing to pay higher price for product(s) that is/are not available in retail shops.
- ✓ The price of the products affects their repeat purchasing behavior.

#### Cluster 2 – Product Involvers

- ✓ Online shopping provide them a wide variety of products than retail shops.
- ✓ They shop online for limited edition products.
- ✓ They will consider all comprehensive factors to choose the best products when they shop online.
- ✓ When they shop online, more positive feedback indicates better quality of products.
- ✓ Product quality is important to them.
- ✓ The quality of the products affects their repeat purchasing behavior.

#### Cluster 3 – Convenience oriented shoppers

- ✓ They tend to shop online to buy goods not available from the nearby retail shops.
- ✓ They shop online because they do not have time to shop at retail shops after work or study.
- ✓ Free delivery charge is a price advantage when they shop online.
- ✓ More discounts for purchasing more is an advantage when they shop online.

## Findings

- Mobile is the most used medium through which customers purchase online, followed by laptop, computers and tablets.
- All the three clusters have different reasons to buy online: price conscious shoppers buy online because they think prices of product in retail shop is more compared to buying online, product involvers buy online because they think that quality is good, and convenience seekers buy because products are not available in retail shops.
- All the shoppers do compare products on different websites before placing an order online.

## Conclusion

It can be concluded from the study that people do have some inhibitions towards online shopping. People choose cash on delivery as mode of payment. Books and apparels are mostly purchased by online shoppers. Price, quality and novelty products are the factors which governs the behaviour of online buyers. Online buyers tends to purchase those items from website which has got more positive online review by other buyers.

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