

EXAMINING PERCEPTION OF CONSUMERS' SHOPPING ONLINE WITH REFERENCE TO AHMEDABAD CITY

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Abstract

The rapid expansion of the e-commerce sector, combined with the emergence of modern technologies, has significantly altered consumer purchasing behaviors, shifting them from traditional in-store shopping to online shopping. Over the past decade, this trend has been driven by increased internet access through mobile phones, tablets, and laptops, making online shopping more convenient and faster. Consumers now enjoy a wide range of products and services delivered directly to their doorsteps. This research aims to explore the perceptions of online shoppers in Ahmedabad City. Primary data was gathered from 1001 respondents in Ahmedabad using a structured questionnaire. The study examines consumer preferences for online shopping, identifies key factors influencing their choices across different product categories, and investigates the process consumers use to finalize purchases. It also assesses the annual expenditure on online shopping and evaluates how consumers' demographic profiles impact their online shopping preferences.

Keywords: Online Shopping, Perception, Ahmedabad City, Factor Analysis, Cluster Analysis, Artificial Neural Network.

INTRODUCTION

In the past, human necessities were primarily limited to essentials such as food, clothing, and shelter. However, with the advent of the digital era, internet connectivity has emerged as an indispensable component of modern life. The rapid expansion of internet access has significantly influenced various sectors, including commerce, education, and communication. According to Statista, internet penetration in India has risen remarkably, from under 14% in 2014 to nearly 52% in 2024, demonstrating a substantial increase in digital adoption. Today, approximately 1.4 billion people, or nearly half of India's population, have internet access, fostering an environment conducive to the growth of e-commerce.

The Indian e-commerce market has witnessed exponential growth, driven by increasing internet penetration, favorable government policies, and evolving consumer preferences. In 2024, the market was valued at 123 billion US dollars and is projected to reach 300 billion US dollars by 2030. The number of online shoppers in India is expected to rise to 427 million by 2027, highlighting the growing reliance on digital platforms for purchasing goods and services. This shift in consumer behavior underscores the transformative impact of technology on retail and commerce.

Gujarat, one of India's most industrially advanced states, mirrors this trend in digital adoption. Internet accessibility in Gujarat has surpassed the national average, with 72 out of every 100 individuals using the internet, compared to the national average of 62 per 100 people. As per the Telecom Regulatory Authority of India (TRAI), Gujarat has 5.18 crore internet users, with 1.67 crore in rural areas and 3.51 crore in urban regions. Additionally, the state boasts 6.7 crore mobile subscribers and 5.4 crore internet subscribers, positioning it as a significant player in India's digital economy. Ahmedabad, Gujarat's largest city, exemplifies this digital transformation, with internet penetration steadily increasing over the years, further fueling the adoption of online shopping.

Online shopping has become an integral part of consumer behavior, offering numerous advantages, including 24/7 accessibility, reduced transportation costs, lower operational expenses for retailers, and a diverse range of products and services. The convenience and efficiency of e-commerce platforms have led to their widespread acceptance among consumers, particularly in urban areas where smartphone and smart device usage is prevalent.

This study aims to explore consumer perceptions of online shopping in Ahmedabad City. By analyzing consumer attitudes and behaviors, the research seeks to identify the key factors driving online shopping adoption and the challenges faced by consumers in the digital marketplace. The findings of this study will provide valuable insights into consumer preferences and emerging trends, aiding retailers and policymakers in developing strategies to enhance the e-commerce experience in Ahmedabad. Understanding these dynamics is crucial for adapting to the evolving digital landscape and meeting the needs of modern consumers.

LITERATURE REVIEW

Upon reviewing various research papers, articles, and journals, it was discovered that numerous studies have focused on examining the behavior of online shoppers. However, only a limited number of studies have critically evaluated the perceptions of online shoppers living in Ahmedabad City.

Kumar (2000) identified that attitude, subjective norms, perceptions of behavioral controls, and past purchases are key predictors of the intention to shop online. The study indicated that the intention to shop online is highest for Specialty Products, followed by Personal Products, Information-Intensive Products, and Household Products. Additionally, **Lackana (2004)** emphasized that Perceived Usefulness is a crucial determinant of behavioral intention, showing a positive and direct impact on consumers' online purchase intentions. **Kim (2004)** noted that factors such as gender, ethnicity, internet usage ability, and consumers' attitudes toward online shopping significantly influence their purchase behavior. **Gohrary et al. (2014)** identified significant differences in personality traits between males and females, particularly in areas such as conscientiousness, neuroticism, openness, compulsive buying, and the value placed on hedonic shopping. **Kim and Lim (2001)** found that reliability, information quality, entertainment, convenience, and speed are critical factors in selecting shopping sites and distinguishing buyers from non-buyers, as well as in determining customer satisfaction. **Halstead and Becherer (2004)** also supported the importance of speed and convenience in online buying. **Changchit et al. (2005)** highlighted that cost savings, free shipping, tax savings, and discounts are the primary factors motivating respondents to shop online, rather than easy return policies and the ability to view product images. Conversely, **Kapur and Kapur (2016)** revealed that not only return policies, social media advertisements, and discounts attract consumers to online shopping, but pricing is also a major motivating factor, even more so than convenience. **Parikh (2006)** found that long-term internet users had a strong preference for online shopping, with demographic characteristics having no significant association with shopping segments. **Virdi, Puri, Modi, and Sehgal (2007)** discovered that the demographics of online users significantly influence their purchasing behavior. They found that security concerns, particularly regarding credit card misuse, make consumers wary of online shopping. They also observed that spending power varied across different cities and recommended enhancing website appeal and authenticity to improve consumer responses. **Maray De Swardt and C. Wagner (2008)** conducted in-depth interviews with eight participants and found that security concerns, the inability to physically touch products, unfamiliarity with merchants, and fears of unsafe transactions discourage South Africans from shopping online. However, those who do shop online value the convenience, time savings, ability to compare prices, and product accessibility. **Pooja Mordani (2008)** demonstrated that a positive website experience builds consumer trust, making the website appear easier to use, more enjoyable, and less risky, which in turn increases the intention to make transactions. **Siohong Tih, Sean Ennis, and June M. L. Poon (2008)**, in their study of 413 participants, found that students' attitudes towards online retailing are similar to those of non-students. Lastly, **Dimitrios Maditinos, Lazaros Sarigiannidis, and Elisavet Kesidou (2009)** surveyed 204 Greek internet users and found that Personal Innovativeness of Information Technology (PIIT) and product involvement positively influence consumer attitudes towards purchasing books online.

RESEARCH METHODOLOGY

➤ Objective of the study

1. To assess the proportion of online shoppers.
2. To analyze the frequency of shoppers shopping online.
3. To identify the key factors that encourage consumers to engage in online shopping.
4. To assess the preferred product categories for online shopping.
5. To investigate the process adopted by consumers in order to finalize their purchase decisions
6. To determine the annual expenditure made by respondents on online shopping.
7. To examine the effect of demographic profile of consumers on their preference for online shopping.

➤ Research Design

- This study primarily utilizes Descriptive and Causal Research Designs.

➤ Sampling Design

- This study is based on primary data gathered from 1001 respondents in Ahmedabad City, with 758 respondents shopping online and 243 preferring not to shop online.
- The respondents are selected through Purposive Sampling from among internet users residing in Ahmedabad City.
- The data is collected via a structured Google Form questionnaire.
- To evaluate the reliability of the questionnaire, a Cronbach Alpha Test is conducted with 26 respondents from Ahmedabad City. According to Bryman and Bell (2007), a construct or variable is considered reliable if the Cronbach Alpha exceeds 0.6. The Cronbach's Alpha value obtained was 0.930, which is significantly higher than 0.6, indicating that the research instrument is reliable.

Table 1 Reliability Statistics

| | |
|------------------|-------------|
| Cronbach's Alpha | No of items |
| 0.930 | 13 |

➤ Tools and Techniques

- The data collected was thoroughly analyzed using IBM's Statistical Package for the Social Sciences (SPSS) version 25.0. Various statistical tools and techniques were employed to derive the results, including Descriptive Statistics, Factor Analysis, Cluster Analysis, and Artificial Neural Networks.

DATA ANALYSIS

- In order to assess the proportion of shopper's shop online, out of total respondents, almost 76% of respondents' shop online whereas remaining 24% respondents do not shop online as depicted in Chart 1. Of which 75% of males' shop online while 25% of males don't shop online and 77% of female shop online compared to 23% of females who don't. Thus, when compared to male responders, females shop more as shown in Chart 2.

Table 3 Respondents Shopping Online

| Type | Frequency | Percentage |
|-------|-----------|------------|
| Yes | 758 | 75.7% |
| No | 243 | 24.3% |
| Total | 1001 | 100.0% |

Chart 1 Percentage Distribution of Respondents Shopping Online

ONLINE SHOPPERS AND NON SHOPPERS

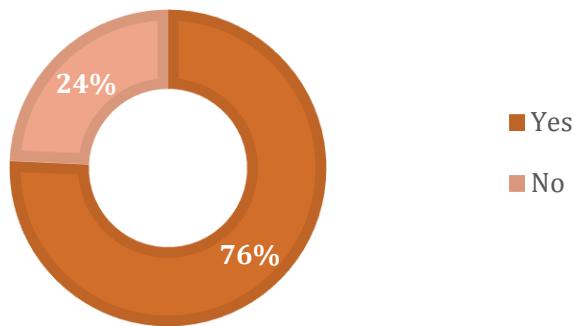
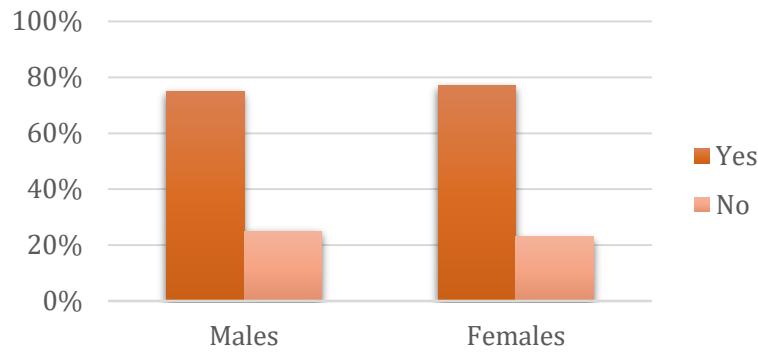


Table 4 Gender Wise Classification of Online Shoppers

| Type | Online Shopping | | | | Total | |
|-------|-----------------|------------|-----------------|------------|-------|------|
| | Male Shoppers | | Female Shoppers | | | |
| | Frequency | Percentage | Frequency | Percentage | | |
| Yes | 417 | 75% | 341 | 77% | 758 | 76% |
| No | 142 | 25% | 101 | 23% | 243 | 24% |
| Total | 559 | 100% | 442 | 100% | 1001 | 100% |

Chart 2 Gender Wise Percentage Distribution of Online Shoppers

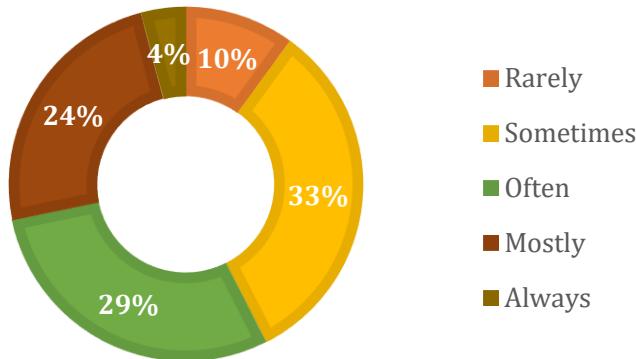
Gender Wise Distribution of Online Shoppers



2. In order to analyze the frequency of shoppers shopping online, only 4% of respondents "always" shop online, while 33% of respondents "sometimes" prefer shopping online. Meanwhile, 10% of respondents "rarely" buy online as depicted in Chart 3.

Chart 3 Frequency of Online Shoppers

FREQUENCY OF SHOPPERS TO SHOP ONLINE



3. In order to identify the key factors that drive consumers to shop online, factor analysis was performed on a set of 13 statements rated on a five-point Likert scale. The analysis identified four major factors that represent the key motivations behind consumers' decisions to shop online.

In order to test the data appropriateness for factor analysis "KMO and Bartlett's Test" has been carried out. The range of KMO is between 0 to 1 and the value between 0.5 and 1.0, (Field, 2009. p. 647) suggests that the data is adequate for factor analysis. In this case the value was 0.938 which is closer to 1.0 and hence the data is fit for the factor analysis. Bartlett's Test of sphericity indicates the significance value is 0.000 which is less than 0.05. Thus, null hypothesis is rejected. Further the value of Chi Square is approx. 5176.500 which is very high, indicating a significant relationship between the variables within the population.

Table 5 outlines the extraction of four primary factors that illustrate the reasons why consumers choose to shop online, along with their respective cumulative percentage variances. These four factors collectively account for 72.334% of the total variance, highlighting the key motivations for consumers to engage in online shopping, as displayed in the table below:

Table 5 Total Variance Explained

| Component | Initial Eigen Values | | | Extraction Sums of Squared Loadings | | |
|-----------|----------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 6.528 | 50.217 | 50.217 | 6.528 | 50.217 | 50.217 |
| 2 | 1.365 | 10.498 | 60.715 | 1.365 | 10.498 | 60.715 |
| 3 | .922 | 7.095 | 67.810 | .922 | 7.095 | 67.810 |
| 4 | .588 | 4.524 | 72.334 | .588 | 4.524 | 72.334 |
| 5 | .538 | 4.142 | 76.476 | | | |

| | | | | | | |
|----|------|-------|---------|--|--|--|
| 6 | .507 | 3.897 | 80.373 | | | |
| 7 | .450 | 3.462 | 83.834 | | | |
| 8 | .413 | 3.174 | 87.008 | | | |
| 9 | .410 | 3.156 | 90.164 | | | |
| 10 | .363 | 2.792 | 92.956 | | | |
| 11 | .339 | 2.605 | 95.560 | | | |
| 12 | .308 | 2.372 | 97.932 | | | |
| 13 | .269 | 2.068 | 100.000 | | | |

Extraction Method: Principal Component Matrix

The rotated component matrix in Table 6 extracted four factors which are given below:

Table 6 Rotated Component Matrix^a

| | Component | | | |
|--------------------------------------|-----------|---|------|------|
| | 1 | 2 | 3 | 4 |
| Saves Time | .801 | | | |
| Fair Discounts | .638 | | | |
| Wide Variety | .707 | | | |
| Detailed Product Description | | | | .789 |
| Safe Shopping | | | | .628 |
| 24/7 Shopping | .757 | | | |
| Recall Notices | | | .707 | |
| Influencer or Celebrity Endorsements | | | .876 | |
| Delivery at Door Step | .830 | | | |
| Saving Transit Cost | .700 | | | |
| Cash On Delivery (COD) option | .515 | | | .663 |
| Return / Replace of Products | .681 | | | |
| Shopping in Regional Language | | | | .870 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization^a.

a. Rotation converged in 6 iterations.

Names of extracted factors

The four factors extracted has been named as below mentioned

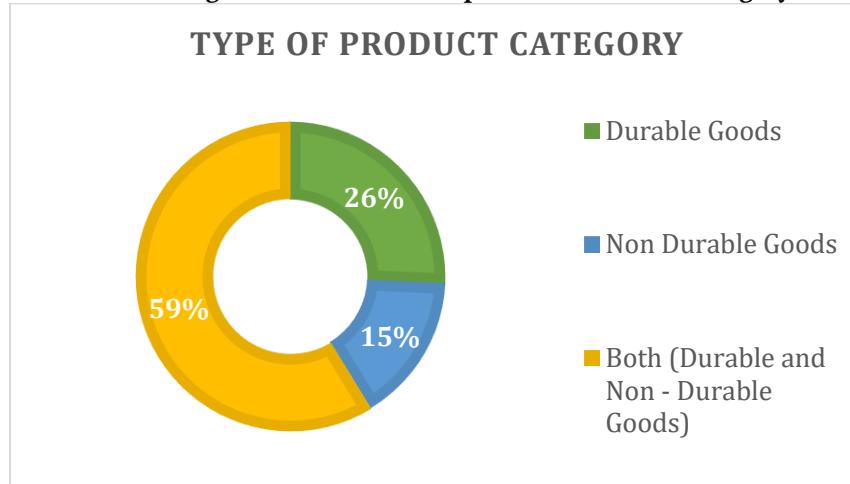
- o The first factor accounts for a total variance of 50.217%, it comprises of items such as – Fair Discounts, Wide Variety, 24/7 Shopping, Delivery at Door Step, Saving Transit Cost and Return / Replace of Products which has been named as “**Economical.**”
- o The second factor accounts for a total a variance of 10.498%, it comprises of items – Recall Notices and Influencer or Celebrity Endorsements which has been named as “**Marketing Tactics.**”
- o The third factor accounts for a total variance of 7.095%, it comprises of items – Detailed Product Description and Safe Shopping which has been named as “**Product Attributes.**”
- o The fourth factor accounts for a total variance of 4.524%, it comprises of items – Cash on Delivery (COD) Option and Shopping in Regional Language which has been named as “**Accessibility.**”

4. In order to evaluate the preferences for product category to shop online, it has been noted that more than half (approx.) 59% of the respondents prefer to shop both durable as well as non-durable goods online, as depicted in Chart 4.

Table 7 Type of Product Category Preferred by Online Shoppers

| Type | Frequency | Percentage |
|---------------------------------------|------------|--------------|
| Durable Goods | 195 | 25.7 |
| Non-Durable Goods | 118 | 15.6 |
| Both (Durable and Non- Durable Goods) | 445 | 58.7 |
| Total | 758 | 100.0 |

Chart 4 Percentage Distribution of Respondent's Product Category to Shop Online



5. Further, in order to examine how consumers, finalize their purchase decision, cluster analysis has been carried on. The respondents were divided into different clusters based on the homogeneity of their demographic and psychographic characteristics in order to examine the way by which respondents finalize their purchase decision. Hierarchical cluster analysis was conducted on the characteristics of the sample respondents to categorize them into similar clusters. To validate these findings and ascertain specific cluster memberships for each respondent, K-Means cluster analysis was then carried out. This analysis resulted in two clusters, and Table 8 below provides details on the composition of respondents within each cluster.

Table 8 Number of cases in each cluster

| | No. | No. of Members | Percentage |
|---------|-----|----------------|------------|
| Cluster | 1 | 327 | 43.14% |
| | 2 | 431 | 56.86% |
| Valid | | | 758 |
| Missing | | | 0.000 |

Based on the findings above, Cluster 2 is the largest group, encompassing approximately 57% of the respondents, while Cluster 1 accounts for about 43% of the respondents. Table 9 below summarizes the similarities and differences in the demographic profiles of these clusters.

Table 9 Demographic Composition of Clusters (n = 758)

| Characteristics | Cluster 1 | Cluster 2 |
|----------------------|--------------------|--------------------|
| Membership | 327 | 431 |
| Male | 63.30% | 48.72% |
| Female | 36.70% | 51.28% |
| Age | 20 to 30 years | 20 to 30 years |
| Education | Graduate | Graduate |
| Occupation | Student | Student |
| Annual Family Income | ₹ 2 lacs to 5 lacs | ₹ 2 lacs to 5 lacs |
| Zones | West Zone | West Zone |

According to the above results, out of a total of 327 respondents, 43% belong to Cluster 1. 63% of the members in Cluster 1 are male, with 37% of the members being female. The majority of responders fall between the "20 to 30 years" age group, with "graduation" as their basic level of education. Most respondents fall into the "student" category, with annual family incomes of "₹ 2 lacs to 5 lacs," and members of this cluster belong to the "West Zone." Cluster 2 (comprising of 57% respondents) is larger than Cluster 1. 51% of the members in Cluster 2 are female, with the remaining 49% being male. Similar to Cluster 1, the majority of respondents are between the ages of "20 to 30 years," and their basic educational background is "graduation." The majority of responders likewise fall into the category of "students" with annual family incomes between "₹ 2 lacs to 5 lacs." Members of cluster 2 also belong to the "West Zone" of Ahmedabad City.

Table 10 provides an overview of respondent characteristics across two distinct clusters, detailing their perceptions of online shopping, factors influencing their choice of online shopping websites, and preferences regarding different modes of e-marketing and their accessibility.

Table 10 Characteristics of Cluster Members

| Description | Cluster 1 | Cluster 2 |
|--|--|--|
| Preference of Product Category to Shop Online | Both Durable & Non - Durable Goods followed by only Non-Durable Goods Category | Both Durable & Non - Durable Goods followed by only Durable Goods Category |
| Annual Expenditure towards Online Shopping | ₹ 501 to ₹ 2500 spent annually | ₹ 501 to ₹ 2500 spent annually |
| Source of Supportive Information for Offline Shopping | Use of various e – marketing modes | Use of various e – marketing modes |
| Preference of E-Marketing Mode | Search Engine Marketing | Online Shopping Websites |
| Preference of Language | English | English |
| Preferred Website for Durable Goods | Amazon | Amazon |
| Preferred Website for Non - Durable Goods | Amazon | Amazon |

Similar Cluster Characteristics

- Members of both the clusters majorly shop both the types of product category online i.e., Durable Goods as well as Non-Durable Goods.
- The annual expenditure towards online shopping has been at similar level in both the clusters.
- Consumers have used e-marketing modes as a source of supportive information when making offline purchases.
- Respondents of both the cluster prefer getting information in “English language” over “Hindi Language or in their Mother Tongue Language.”
- Members of both the clusters prefer “Amazon” website for both “Durable Goods as well as Non – Durable Goods.”

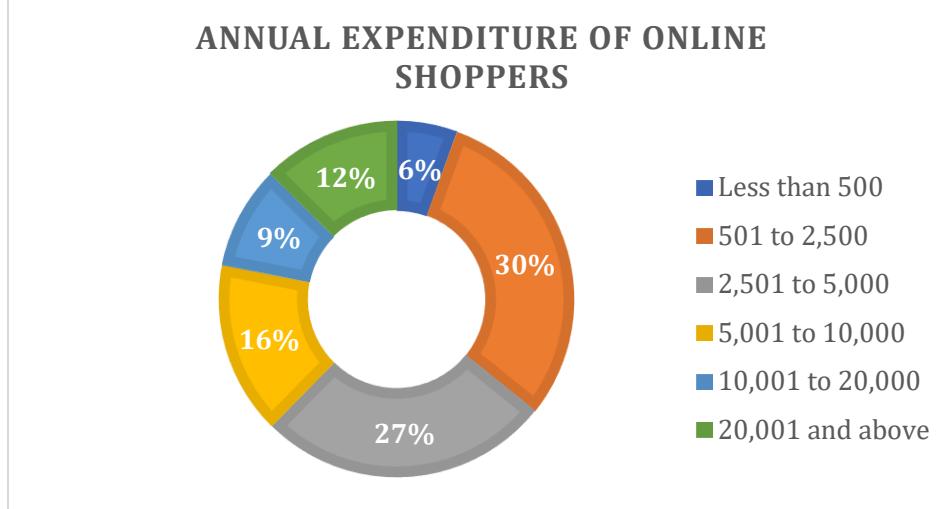
Differentiated Cluster Characteristics

- Apart from shopping goods of both the categories online, respondents of Cluster 1 also prefer shopping of more Non - Durable Goods whereas members of Cluster 2 also prefer shopping more Durable Goods Online.

- Members of Cluster 1 prefer “Search Engine Marketing” E-Marketing Mode such as Google, Yahoo!, Bing etc whereas members of Cluster 2 prefer “Online Shopping Websites” E-Marketing Mode to gain information for online shopping.

6. The annual expenditure made by respondents on online shopping has been depicted in below Chart 5. Annually 30% of consumers are likely to spend ₹ 501 to ₹ 2,500 whereas around 27% of consumers spend ₹ 2,501 to ₹ 5,000 on shopping online annually. Only 6% of shoppers spend less than ₹ 500 annually for online shopping.

Chart 5 Percentage Distribution of Respondent's Annual Expenditure on Online Shopping



7. In order to examine the effect of demographic profile of consumers on their preference for online shopping using artificial neural network. Variables under the study for artificial neural network are classified in below table 11

Table 11 Variables under study for ANN

| Dependent Variable | Independent Variable |
|--------------------------------------|---|
| Do you shop online? – Yes or No (YN) | <ul style="list-style-type: none"> • Mean Reasons for Shopping or Not Shopping Online (MR) • Gender (G) • Age (A) • Education (E) • Occupation (O) |

By allocating 90% of the samples for the training technique and the remaining 10% for the testing procedure, effect of demographic profile of consumers on their preference towards online shopping has been examined. Using a sample of 758 respondents, a fifteen-fold cross-validating approach was tested to determine the root mean square of errors (RMSE). The average RMSE values for training and testing are 0.614 and 0.608, respectively, according to table 12.

Table 12 Cross Entropy Error and RMSE Values

| Neural Network | Cross Entropy Error | | | | RMSE | | Total Samples |
|--------------------------|---------------------|-----------------|---------------|-----------------|--------------|--------------|---------------|
| | Training | Sample Size (N) | Testing | Sample Size (N) | Training | Testing | |
| 1 | 331.335 | 913 | 37.079 | 88 | 0.602 | 0.649 | 1001 |
| 2 | 352.437 | 906 | 28.826 | 95 | 0.624 | 0.551 | 1001 |
| 3 | 359.096 | 900 | 38.548 | 101 | 0.632 | 0.618 | 1001 |
| 4 | 335.667 | 909 | 28.884 | 92 | 0.608 | 0.560 | 1001 |
| 5 | 327.417 | 888 | 35.416 | 113 | 0.607 | 0.560 | 1001 |
| 6 | 333.017 | 895 | 36.411 | 106 | 0.610 | 0.586 | 1001 |
| 7 | 334.72 | 903 | 38.736 | 88 | 0.609 | 0.663 | 1001 |
| 8 | 337.961 | 910 | 39.103 | 91 | 0.609 | 0.656 | 1001 |
| 9 | 329.46 | 889 | 41.328 | 112 | 0.609 | 0.607 | 1001 |
| 10 | 350.184 | 897 | 37.802 | 104 | 0.625 | 0.603 | 1001 |
| 11 | 316.579 | 885 | 42.67 | 116 | 0.598 | 0.607 | 1001 |
| 12 | 337.603 | 909 | 31.316 | 92 | 0.609 | 0.583 | 1001 |
| 13 | 330.14 | 897 | 42.369 | 104 | 0.607 | 0.638 | 1001 |
| 14 | 353.744 | 900 | 30.372 | 101 | 0.627 | 0.548 | 1001 |
| 15 | 354.081 | 893 | 51.7 | 108 | 0.630 | 0.692 | 1001 |
| Average | 338.896 | | 37.371 | | .614 | .608 | |
| Standard Deviation | | | | | .011 | .044 | |
| Coefficient of Variation | | | | | .017 | .073 | |

RMSE = $\text{SQRT}(\text{CROSS ENTROPY ERROR} / N)$

The thirteenth neural network trial provides the most accurate results out of fifteen trials. The distribution of the sample for training and testing is shown in the case processing summary as 90:10.

Table 13 Case Processing Summary

| Sample | Training | N | Percent |
|----------|----------|------|---------|
| | | 897 | 89.6% |
| | Testing | 104 | 10.4% |
| Valid | | 1001 | 100.0% |
| Excluded | | 0 | |
| Total | | 1001 | |

The Table 14 depicts the input layer(covariates), hidden layer and output layer (dependent variables)

Table 14 Network Information

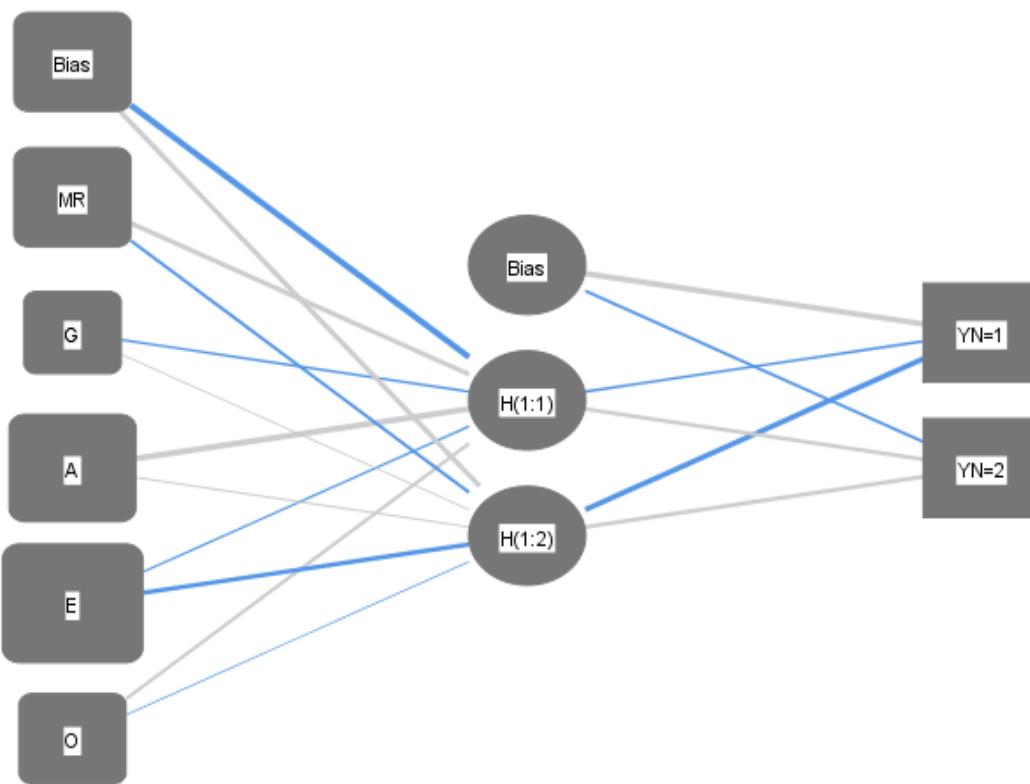
| Input Layer | Covariates | 1 | MR |
|-------------|------------|---|----|
| | | 2 | G |

| | | | |
|-----------------|--|---|----|
| | | 3 | A |
| | | 4 | E |
| | | 5 | O |
| | Number of Units ^a | | |
| | Rescaling Method for Covariates | | |
| Hidden Layer(s) | Number of Hidden Layers | | |
| | Number of Units in Hidden Layer 1 ^a | | |
| | Activation Function | | |
| Output Layer | Dependent Variables | 1 | YN |
| | Number of Units | | |
| | Activation Function | | |
| | Error Function | | |

a. Excluding the bias unit

Chart 6 Estimated Artificial Neural Network of Demographic Variables v/s Preference Towards Online Shopping

— Synaptic Weight > 0
— Synaptic Weight < 0



Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

The Model Summary table 15 depicts the error in training and testing at the thirteen trials.

Table 15 Model Summary

| | | |
|----------|-------------------------------|--|
| Training | Cross Entropy Error | 330.140 |
| | Percent Incorrect Predictions | 14.2% |
| | Stopping Rule Used | 1 consecutive step(s) with no decrease in error ^a |
| Testing | Training Time | 0:00:00.20 |
| | Cross Entropy Error | 42.369 |

| | | |
|---|-------------------------------|-------|
| | Percent Incorrect Predictions | 16.3% |
| Dependent Variable: Do you shop online? – Yes or No (YN) | | |
| a. Error computations are based on the testing sample. | | |

The relative importance of each variable together with successfully identified has been displayed to assess the strengths of each input neuron's ability to forecast in table 16

Table 16 Results of ANN Iterations

| Neural Network | Correct Classification | | Importance | | | | |
|----------------|------------------------|---------------|--------------|--------------|--------------|-------------|--------------|
| | Training | Testing | MR | G | A | E | O |
| 1 | 85.20% | 83.00% | 0.25 | 0.021 | 0.289 | 0.342 | 0.099 |
| 2 | 83.90% | 85.30% | 0.212 | 0.136 | 0.216 | 0.313 | 0.123 |
| 3 | 83.20% | 84.20% | 0.121 | 0.016 | 0.385 | 0.399 | 0.08 |
| 4 | 85.30% | 87.00% | 0.227 | 0.03 | 0.3 | 0.327 | 0.115 |
| 5 | 85.50% | 85.80% | 0.227 | 0.038 | 0.3 | 0.32 | 0.114 |
| 6 | 85.50% | 86.80% | 0.225 | 0.025 | 0.291 | 0.355 | 0.104 |
| 7 | 85.60% | 83.70% | 0.2 | 0.036 | 0.273 | 0.345 | 0.146 |
| 8 | 85.50% | 81.30% | 0.171 | 0.041 | 0.282 | 0.384 | 0.121 |
| 9 | 84.90% | 85.70% | 0.225 | 0.048 | 0.259 | 0.37 | 0.097 |
| 10 | 84.30% | 86.50% | 0.114 | 0.033 | 0.345 | 0.366 | 0.141 |
| 11 | 85.60% | 86.20% | 0.236 | 0.031 | 0.29 | 0.327 | 0.116 |
| 12 | 84.90% | 84.80% | 0.217 | 0.032 | 0.313 | 0.325 | 0.113 |
| 13 | 85.80% | 83.70% | 0.195 | 0.028 | 0.276 | 0.39 | 0.111 |
| 14 | 83.30% | 91.10% | 0.085 | 0.059 | 0.31 | 0.47 | 0.077 |
| 15 | 83.90% | 76.90% | 0.227 | 0.049 | 0.306 | 0.349 | 0.069 |

NOTE: MR = Mean of Reasons for Shopping or Not Shopping Online, G = Gender, A = Age, E= Education, O = Occupation. The importance and normalized importance of thirteen trial is depicted below table 17:

Table 17 Independent Variable Importance

| | Importance | Normalized Importance |
|----------------|------------|-----------------------|
| MR | .195 | 50.1% |
| Gender (G) | .028 | 7.2% |
| Age (A) | .276 | 70.7% |
| Education (E) | .390 | 100.0% |
| Occupation (O) | .111 | 28.6% |

The result shows that education is the most important predictor for consumers shopping online followed by age that has normalized importance of 70.7%. This is followed by mean of reasons for shopping or not shopping online (50.1%), occupation (28.6%) and gender (7.2%) as shown in above table 17.

FINDINGS, SUGGESTIONS & CONCLUSION

The findings indicate that the majority of online shoppers are females aged 20 to 30 years, who prefer buying both durable and non-durable goods online. Female shoppers outnumber male shoppers, and women tend to shop more emotionally and spend more time browsing, while men prefer a straightforward shopping approach. To cater to male shoppers, businesses should simplify the shopping process and prominently display essential product information to prevent them from leaving the site. Men also prioritize lower prices, so companies should offer competitive pricing upfront.

Economic factors like fair discounts, a wide variety of products, 24/7 shopping, doorstep delivery, saving transit costs, and easy returns/replacements are significant motivators for online shopping. Convenience is the biggest perk, allowing consumers to shop anytime without pollution concerns. Although celebrity endorsements don't directly lure consumers, they add a relatable human face to brands, aiding market penetration and brand differentiation.

Cluster 1 shoppers prefer non-durable goods and use search engine marketing, while Cluster 2 shoppers prefer durable goods and use online shopping websites. Search engine marketing channels like Google, Yahoo! or Bing are crucial for pre-purchase evaluations. Great price deals, discounts, and a wide variety of products attract consumers to online shopping websites, with Amazon being the most preferred in India.

Respondents typically spend between ₹501 and ₹2500 annually, indicating a preference for inexpensive goods. Education influences online shopping preferences, with consumers favoring affordable over high-priced items. Marketers should avoid discounts that cheapen high-end products and instead use round pricing to reflect quality and value. Upselling strategies, customer

guarantees, and support services, such as easy returns and 24/7 customer service, can enhance sales of expensive products. Using macro images or 360-degree views helps customers better understand the products.

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