Marketing Research for Online Shopping of Clothes/Apparels in India

Marketing Research for Online Shopping of Clothes/Apparels in India

TABLE OF CONTENTS

1   INTRODUCTION

Mr. Aneesh is an engineer by profession and has spent around 14 years of his career in design and development of Information Technology solutions for Internet Technologies. To fulfil his Entrepreneurial dream, he decides to establish an E-Commerce startup for selling clothing/apparels online. Aneesh wants to initially concentrate on the e-Retailing for those varieties of clothing which would help him in generating demand. This would help him in minimising the initial risk and by reducing the initial costs and losses incurring from promotion schemes and marketing. To arrive at the decision, Aneesh plans to first understand the preference and behaviour of the consumers and classify them accordingly. This would in turn help Aneesh to identify the type of Clothes he must consider initially to help his venture with a good start and enables him to then expand the venture towards a sustainable and profitable growth path. Hence, Aneesh approaches us to seek help in studying the consumer preference and behaviour towards purchasing clothing/apparels online.

2   RESEARCH OBJECTIVE

The Marketing Research team now has an assignment in hand to support Aneesh with regards to study of the current trends of Online shopping in India. The Research should be able to guide Aneesh in defining the viable Market Segment in this E-Commerce space by understanding the different classes of consumers, their behaviour, and the potential target regions within India such as the Metros or the Tier-I cities. The Research firm must also help Aneesh in gauging the trends of the existing E-commerce business models in the Clothing/Apparels space and the various factors influencing the outcome of this business model. Below are a few of the consumer behavioural aspects that must be captured as part of the Research.

- Preference towards types of clothes such as Casual, Kids, Ethnic and Formals wear

- Preference based on Price and Brand

- Preference pattern based on Age and Profession i.e., Infants, Kids, Student, Employed, Homemaker and Retired

- Customer expectations and current experience with product quality and shipment through online purchase

- Consumer preference for the existing Online stores

- Values perceived by customer from Online purchase mode

- Comparison of the consumer behaviour and preference between Online Purchase and Retail purchase modes

The Market Research firm must conduct Exploratory and Descriptive Research by adopting both Qualitative and Quantitative approaches. The Research team must collect Primary Data through various means such as Focus Group Interview, Depth Interview and Survey.

Online shopping is the form of electronic commerce which allows consumers or shoppers to buy products or services online using internet through computer, mobile and similar internet enabled gadgets. This is just an alternative to traditional purchase of products or services at a retail outlet. This form of business is known as B2C (Business to Consumer) Online Shopping. Of late, there are few online Retailers who introduced business for selling clothes and apparels. This form of business has come into existence in India during last 1/2 years or slightly more than this. At present, there are few of online retailers came into existence for supply of clothes and apparels. This form of business has come into existence in Urban India especially in Metros. In addition, the traditional retailers like Shoppers Stop are extending the service of selling clothes and apparels via internet.

At present there are few major online cloth retailers present in India. Some of them are listed below:

- **Myntra.com**
- **Jabong.com**
- **Zovi.com**
- **Koovs.com**
- **Shopslues.com**

Apparels and accessories will emerge as the biggest category in online shopping search this year, taking over from consumer electronics last year, in terms of absolute query volumes. According to a Google India study, search for consumer electronics was at 34 per cent, followed by apparels and accessories at 30 per cent in 2012. In 2013, the online query for apparels and accessories is seen going up to 36 per cent and consumer electronics down from 34 per cent to around 30 per cent. This is because of the more options available in apparels and accessories.
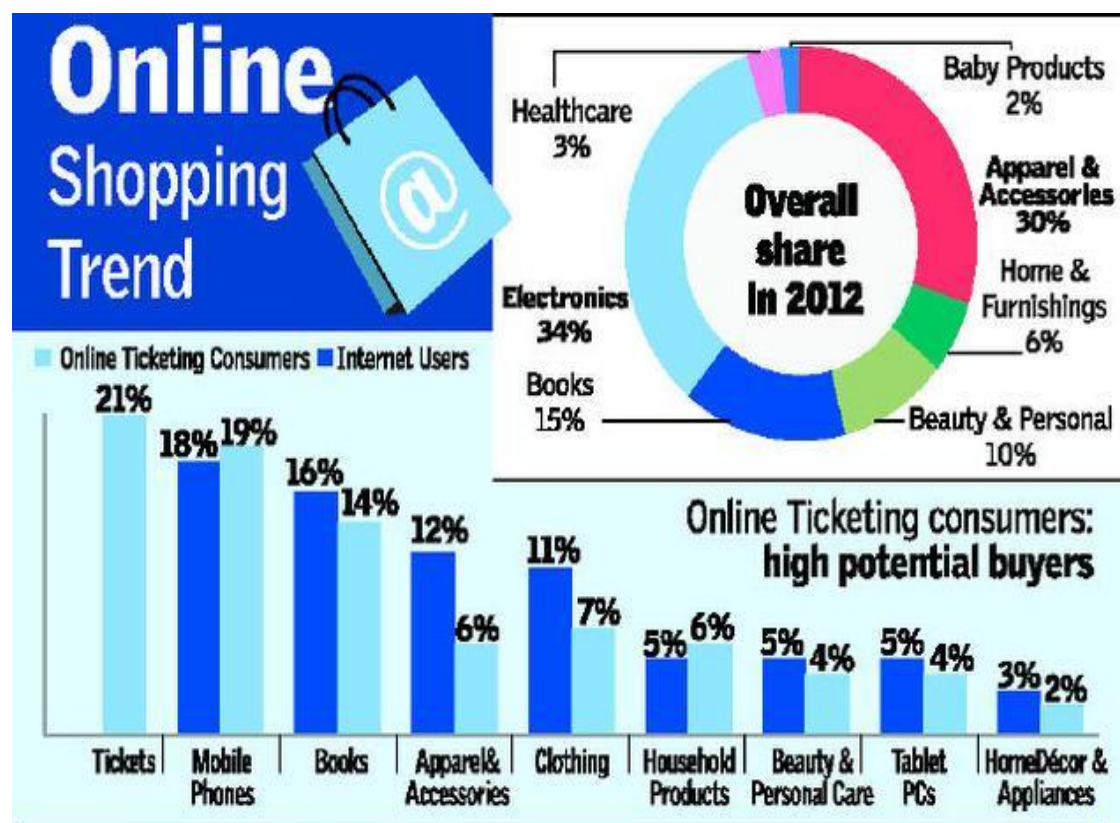
(Sourced from Google India)

Figure #1: Internet Search Trend for Online Shopping in India

Apparels and accessories was already among the top categories ever purchased online with 84 per cent in 2012, followed by electronics at 71 per cent, beauty and personal care at 64 per cent, books at 62 per cent and household products at 61 per cent. Online shopping in India saw 128 per cent growth in interest from consumers between 2011 and 2012 compared to only 40 per cent growth in 2010 to 2011, making 2012 the tipping point for online shopping in India.

As per Google India President, one of the major reasons of growth in online shopping was because of its growth from the small towns as many brands and physical stores such as future bazaar and Croma are not present in those areas. With the growth of mobile Internet users in India, mobile phones are also boosting up the demand for online shopping with Google reporting twice the growth in the number of queries in 2011 to 2012. With roughly eight million Indians shopping online in 2012, online shopping industry in India is growing rapidly and will continue to see exponential growth.

Online search for shopping purpose in India, saw 128% growth in interest from the consumers in the year 2011 to 2012 in comparison to only 40% growth in 2010 to 2011, making 2012 the tipping point for online shopping in India. In terms of product categories, consumer interest on Google search for apparels & accessories (30%) emerged as the second biggest product category after consumer electronics (34%).

Top Product Categories
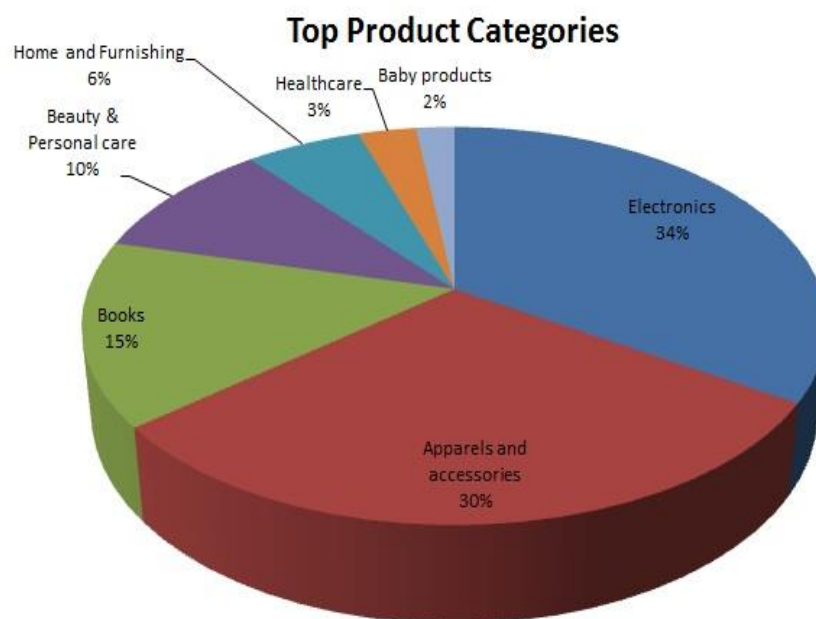
(Sourced from Google India)

Figure #2: **Top Product Categories of Online Search in India**

In a recent survey, it is found that a large number of women are using the Internet in India to take care of daily activities. As per a report from Google India, around 60 million women use the Internet to manage their day to day life. This figure represents more than half of the total 150 million Internet users in the country. A study titled 'Women & Web study' was conducted by Google India in order to have a better awareness of the use and the impact of the Internet on women, particularly on their decision making on buying online. Based on the search histories on the Internet, most Indian women bought clothing and accessories online. The research also reveals the growing number of users switching to

cell phones for browsing and making online purchases. Almost 25 percent of the searches have been from mobile phones according to Google India. Women who used online buying facilities were younger and had more money to spent.

Figure #3: Online Shopping sees more clicks and volumes

Online shoppers have not only doubled their average bill value in three years, but are also shopping more frequently than before. E-commerce sites such as Myntra, CaratLane, Indiaplaza, Buytheprice and Snapdeal.com are all reporting higher transaction bills now than in couple of years back. At Myntra.com, the average value per transaction has gone up from Rs 700 two years ago to Rs 1,300 now. People are also buying 1.5 items per transaction compared to one per cent earlier and are buying three to four times a year. Online jewellery retailer CaratLane too has seen a 50 per cent jump in bill size over last year. Every month it gets a few high-value solitaire orders online, from Rs 20 lakh to Rs 40 lakh. Myntra attributes this to the evolution of the online retail model and the increasing comfort levels and trust of people. Shoppers today also have a huge range to choose from. Myntra has a catalogue of

over 25,000 products across 300 brands. Two years ago, it had just 500 products from 10-12 brands.

However, online shopping is yet to pick up in India where television has the most perceived advertising persuasiveness across all age groups according to a survey conducted by Delloite. Companies in India might be rushing in to tap the e-shopping market, but still a lot has to be done to encourage consumer and see more transactions. Purchasing products is the least online activity done by those surveyed with only 15 per cent saying they shop online. The survey shows that combining online and offline research before deciding what/where to purchase is important for the majority of consumers. Interestingly, majority of consumers visited websites after watching ads in televisions, newspapers, magazines, or even billboards. Undoubtedly, television is still the reigning emperor and has the most perceived advertising persuasiveness across all age groups. Television remains the most common way to consume video, TV content and film, followed by the Internet. However, the proportion of consumers multitasking while watching television is substantial, with the most common activities being emailing, reading, and talking over phone. Television (along with newspapers) is rated as the strongest medium for advertising, with two-thirds saying it's among their top influences on their buying decisions. The vast majority of consumers continue to read magazines, However, affinity for magazines is considerably lower than TV or newspapers, and they're regarded as much less influential with regard to advertising.

A large majority of consumers, 72 per cent on an average, use search engines on a daily basis. This has been an amazing change compared with the 2009 trends where only 17 per cent used search engines. Conversations about social networking sites and websites have gained tremendously compared with 2009 survey where the range was 3-4 per cent compared with 45-47 per cent now. Interestingly, newspapers (53 per cent) are the most talked about media topic among consumers, followed by music (47) and social networking sites (47) and television shows (46).

3.1 RECENT TRENDS OF ONLINE RETAIL IN INDIA

As many as three in five Internet users visit retail sites which have registered a growth of 43% year on year. Mid of year 2012 saw a total of 37.5 million unique visitors from India visiting retail sites, with the apparel sub category being the fastest growing sub category at a year on year growth of 362%. Close contest between Jabong and Myntra in the lifestyle category.

Direct debit / Net Banking is the most popular payment method as per Q2 2012 data with 58% market share. For example, Visa at 21 % and Master Card at 12 %. with Rs. 1925/- average per transaction for Flipkart. There's a projected increase in cash on delivery payments particularly in the retail category.
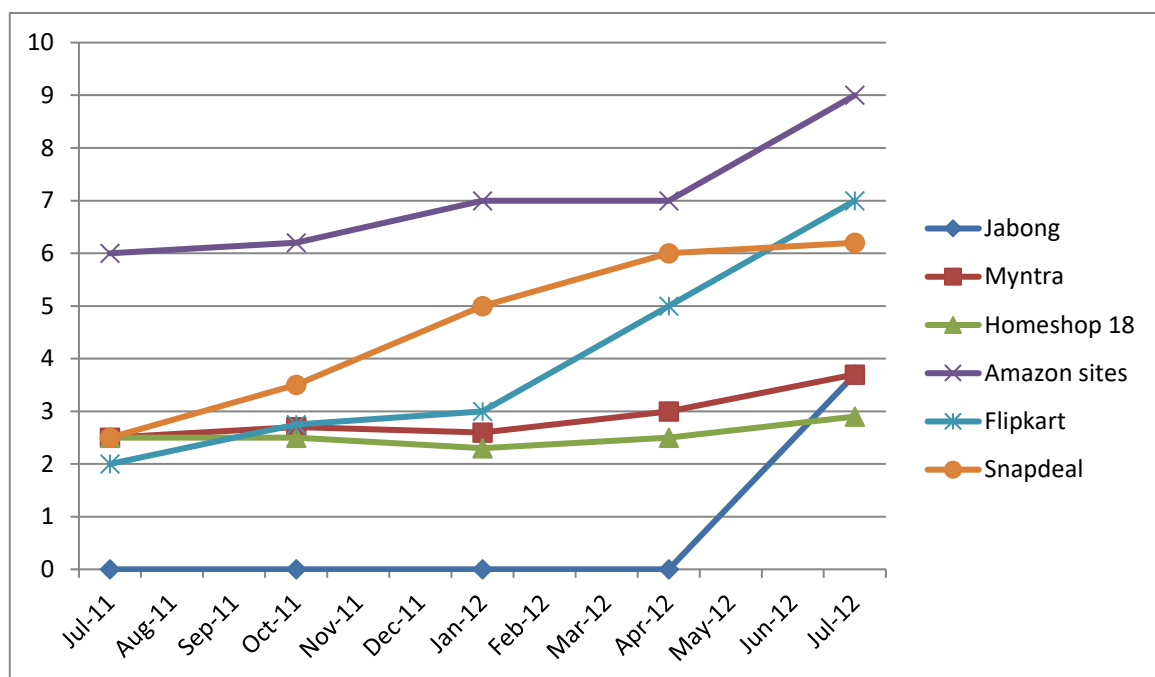
Figure #4: Recent E Commerce Transactions in India Market

3.2 THE INDIAN MARKET FOR APPARALS BUSINESS

Apparel constitutes 5-10 % of the total consumption in India. Consumption expenditure is expected to increase 3.8 times in the next 10 years. Normally apparel shopping in India depends on three major factors – occasions, emotions, functions. Indian consumers across segments look for occasions more than emotional and functional reasons to purchase apparel. Among occasions , festivals top the list followed by social occasions and weddings.

Category	Year 2000 (Rs Crore)	Increase (No of times)	2010 (Rs Crore)	Increase (No of times)	2020 (Rs Crore)
Total	1495000	3.3	4933500	3.6	17760600
Food	675000	2.4	1620000	2.7	4374000
Housing & consumer durables	235000	4	940000	4	3760000
Transport & Communication	215000	3.9	838500	3.9	3270150
Others	125000	5.2	650000	4.4	2860000
Apparel	90000	3.3	297000	3.8	1128600
Education & leisure	85000	4.2	357000	4.2	1495400
Health	70000	3.5	245000	3.8	

Figure #5: Projected Expenditure on Consumption 2020
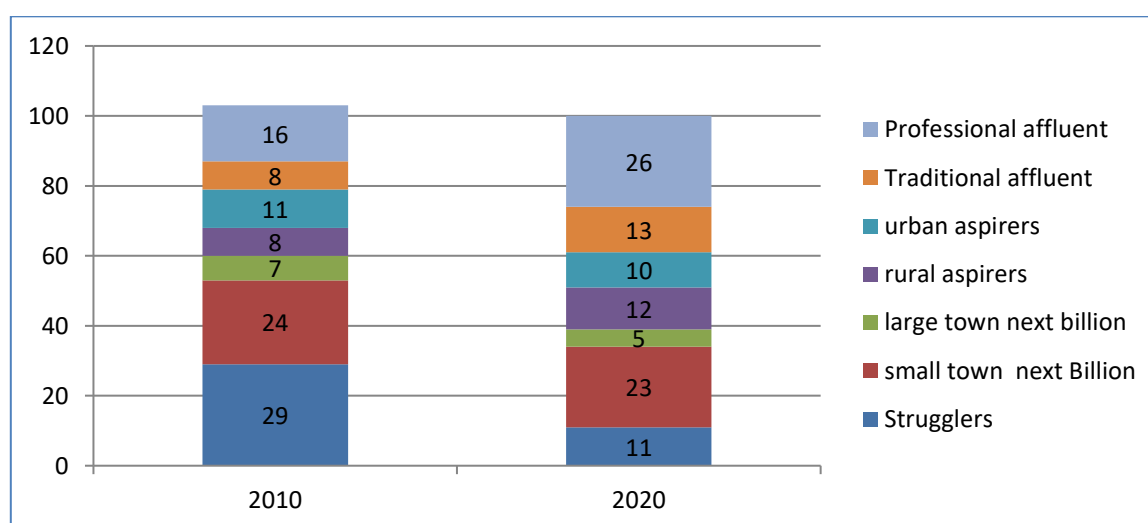
Figure #6: Apparel Consumption across categories – Figures in percentage
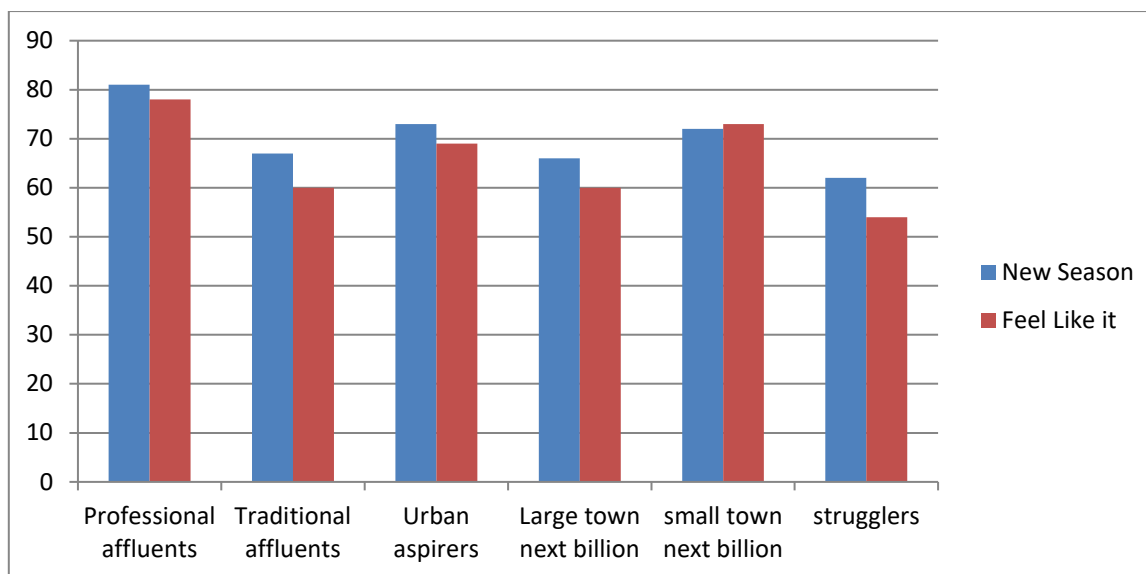
Figure #7: Determinants for apparel shopping (physical store)

Emotional reasons such as a new season and feel like it appear to be an upmarket urban phenomenon. Indian consumers across segments look for occasions more than emotional and functional reasons to shop for apparel. Among occasions, festivals top the list followed by special occasions and weddings. Professional affluent consumers also prefer to wait for festivals or special occasions to make their purchases. However Sale and discount schemes do entice the consumers especially the "affluents" and the "aspirers". Income has a role to play in the preference for location to shop.
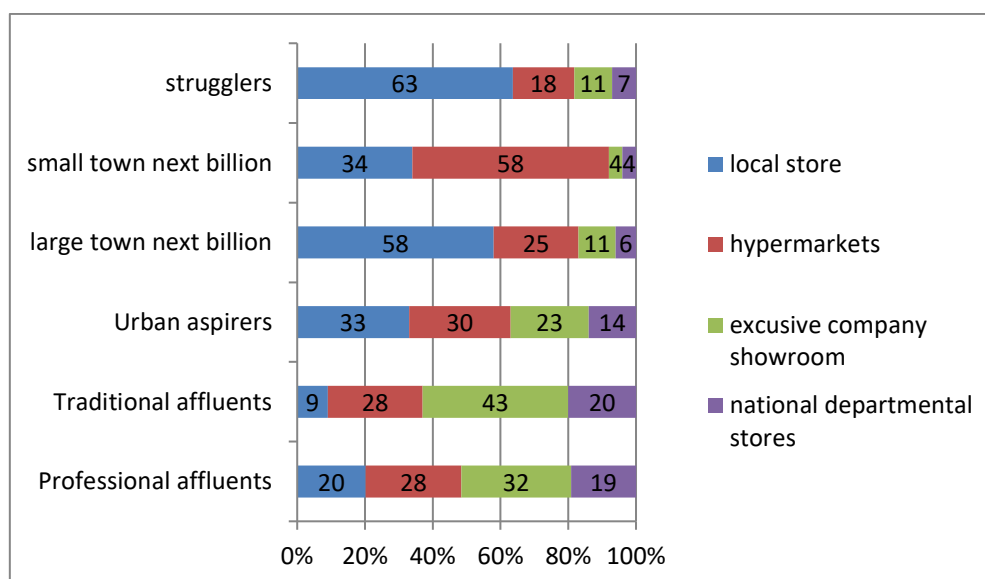
Figure #8: Percentage share of wallet - Modern trade v/s traditional channels

This was Part of our secondary research and the insights were used to construct our questionnaire. Some insights from "Why we buy – On the science of shopping" by Paco Underhill who is known as the guru of retail consulting.

Online buying behaviour of females:

Preshop: According to the author, women spend time searching online and check reviews and then either head to the physical store or save themselves the time by ordering online.

Secondary shopping therapy - Window shopping in total anonymity: According to the author women would prefer to do a lot of window shopping online for luxury products as it gives them total anonymity "It gives women instant access to boutiques and high end baubles they might not otherwise feel comfortable shopping for .no saleswomen with attitude."

Other useful general insights:

- Time Saving – The author emphasises that buyers prefer to shop from the convenience of their home (buying online) especially during festivals.

- Virtual flea market environment (market for recycled products) - According to the author used / second hand products mainly electronics and accessories have become a huge business model online , Amazon cited for recycling used books online.

- The author mentions about a few websites which provide great gifting solutions and have been successful by tying up with magazines for advertising their products.

- The downsides of shopping online were the customer service issues.

- Convergence and trends in emerging markets - The author talks about the link between the physical world and mobile telephony and the Internet And has predicted that convergence will happen faster in emerging markets like Africa and India , That technology will leap frog and emerging markets will adapt to new technology without going through the western technology evolution . In the authors words "From having nothing – no landline, no laptop – to suddenly having the internet at his or her fingertips". In the authors opinion convergence will first take place in emerging markets.

5 DATA COLLECTION – QUESTIONNAIRE AND HYPOTHESIS

5.1 QUALITATIVE ANALYSIS

5.1.1 FOCUS GROUP CUM DEPTH INTERVIEW

Focus Group Discussion was conducted on 24th of August, 2013. We have constructed a group from diversified background with blend of College students and young working professionals aged between 19 and 24. The time and Venue for the same is mentioned below:

Time: Evening 4:45 PM

Venue: Bangalore

Purpose: The purpose of the discussion was to elicit the consumer behaviour pertaining to Online Purchase of Clothes and Apparels. Based on the responses Survey Questionnaire were refined and finalised for data collection.

Scope: The scope of the discussion was defined by the moderators concentrating on the facts, figures, issues, reasons, preference related to online purchase of clothes.

Approach: The discussion was based on the response from the participants based on the questions put forward before the targeted audience.

Interviewees:

There were four interviewees present along with the two members from the Market Research team. These four interviewees were:

- Ms. Maya (Final Year student in Amrita College of Engineering)
- Mrs. Sana (Post Graduate and working with an IT corporate in Bangalore)
- Ms. Ramya (Engineering Graduate and an employee of Infosys Technologies, Bangalore)
- Ms.Thaneema   (Pre Univ student)

Views/Outcome from the discussion:

Maya: Maya prefers to buy footwear and shoes online because she is aware of the size and fit. There were some issues with online purchase is only due to bad network. Maya has purchased jerseys for basketball team at college. She also has recently purchased apparel online, two weeks back. Maya believes that in coming days there will be 70% purchase using online shopping for clothes and apparels.

Sana: Sana buys electronic items online generally. She has never purchased clothes and apparels online. As she is worried about the quality of items and the size, the look and feel of the same, she still buys it from physical stores. She further added that, for items like bag and kurta, the physical appearance is very important for her. Also, she wants to check if the clothes fit her before purchasing. She has purchased a Television set online from flipkart, but very much reluctant to buy clothes online.

Also, there are issues which she heard from many people like transaction failure and the issue of such failures were not getting proper attention from the customer care executive. She faced transactional failure and orders not booked with MakeMyTrip .com once.

She was not much aware of "Cash On Delivery with trial option". Given a choice of educated customer care executive, she would be delighted to use "Cash On Delivery with trial option" online service, even if there is internet connection issue.

She used online services at office hours without spending any extra time for shopping. This saved her time and in a city like Bangalore, it helps people to save travel cost, time, she added. Sana believes that in coming days there will be 50% purchase using online shopping for clothes and apparels, provided "Try and Buy" option is added.

Sana pointed out one unique point that feature wise, online shopping helps to filter the items or the size and price etc, which is an add-on in comparison with physical store.

Ramya: According to her, for specific brands and size, it is convenient to buy online clothes as everything is known to her. She prefers Online shopping when there is an option of cash on delivery. In a nutshell, "Don't pay, if you don't like". She has observed that her colleagues while working on their systems have their internet browsers on and keep checking websites

like myntra or jabong while working. Ramya believes that in coming days there will be 30% to 35% purchase using online shopping for clothes and apparels. Ramya has noticed that men prefer buying clothes online rather than visiting a store physically.

Thaneema: She stated that she would not be able to decide online the quality of the clothes based on picture displayed in the website. She also had faced issues with online purchase of books, the transaction failure happened at her end. She came across similar issues while booking movie tickets. Her perception regarding such failure was server issues related to the site. As per her opinion, effective and efficient customer care is necessary to handle such problems.

Thaneema 's Uncle who lives in UP prefers to shop online for gifting purposes . Her uncle gifted her ethnic outfit for Diwali. She finds this very convenient. Other respondent Sana, Maya and Ramya supported also that it is a positive side of online shopping. Thaneema believes that in coming days there will be 40% to 45% purchase using online shopping for clothes and apparels.

Myntra, jubong, ebay were the commonly mentioned sites by all the four members. Amongst them Myntra was mentioned by everybody for clothes and apparels.

6   SURVEY QUESTIONNAIRE

Below is the list of survey questions used for capturing data regarding purchase of clothes online. The targeted audiences for the survey are broadly classified on the basis of gender and profession. Categories considered under profession are Students, Salaried, Home Maker and Retired. And below are the captured attributes through the survey:

- Internet usage
- Preferred electronic device for online shopping
- Preference for purchase for clothes online
- Reason for not buying clothes online
- Preferred pattern for buying clothes
- Type of clothes purchased online
- Expected improvements based on experience with online purchase
- Attributes that influence the decision for purchasing clothes online

1. What is your gender?

○   Male

○   Female

2. Please mention your Age in years

3. In which city do you live?

4. What is your profession?

○   Student

○   Salaried

○   Self Employed

○ Home Maker

○ Retired

5. How is your Internet Usage?

○ Heavy(More than 4 hours per day)

○ Moderate(Between 2- 4 hours per day)

○ Low(1- 2 hours per day)

○ Rare

6. What electronic device do you use for shopping online?

☐ Desktop/Laptop

☐ Mobile Phone

☐ Tablet/Ipad

☐ Don't shop online

7. Currently how do you buy clothes/apparel?

○ Search extensively Online and buy from an Online store

○ Search extensively Online but buy from a physical store

○ Search offline and buy from an Online store

○ Do not search online prefer searching and buying from a physical store

8. Do you buy clothes/apparels online?

○ Yes

○ No

9. Why don't you prefer online purchase of clothes/apparels?

○ Internet payment transaction issues

○ Touch and feel is important for purchase

○ No preferred online store

○ Not tried so far

○ Not Applicable

10. Do you buy other products online (for example electronics/mobile phones)?

○ Yes

○ No

11. How frequently you shop online for clothes/apparel?

○ Regularly

○ Occasionally

○ Rarely

○ Never

12. Please mention the variety of clothing you prefer for online purchases

	Yes	No
Casual Wear	○ Casual Wear Yes	○ Casual Wear No
Home Wear	○ Home Wear Yes	○ Home Wear No
Ethnic Wear	○ Ethnic Wear Yes	○ Ethnic Wear No
Party Wear	○ Party Wear Yes	○ Party Wear No
Outfits for special occasions like festivals or marriages	○ Outfits for special occasions like festivals or marriages Yes	○ Outfits for special occasions like festivals or marriages No
Formals	○ Formals Yes	○ Formals No
Kids Wear	○ Kids Wear Yes	○ Kids Wear No
Baby Outfit	○ Baby Outfit Yes	○ Baby Outfit No

13. Most Preferred reason for online purchase over retail in-shop purchase

○ Lower price compared to physical store

○ Known brand

○ Wide variety/Choice

○ Gifting purpose

○ Festivals or special occasions

○ Do not prefer to buy online

14. What is your perception regarding clothes/apparels purchased online?

○ Is Convenient and Reliable

○ Is Convenient but not Reliable

○ Not Convenient but Reliable

○ Neither Convenient nor Reliable

○ Cannot say

15. What is your preferred payment option for online purchase?

○ Credit card without EMI option

○ Credit card with EMI option

○ Debit card

○ Net banking

○ Cash on delivery

16. For whom do you shop online (clothes/apparels)?

☐ Self

☐ Family

☐ Friends

☐ None

17. What is the typical budget (per month) you spend for online shopping of clothes/apparels?

○ NIL

○ Less than or equal to Rs. 2000/-

○ Between Rs. 2000/- to Rs. 5000/-

○ Between Rs. 5000/- to Rs. 10000/-

○ Between Rs. 10000/- to Rs. 20000/-

○ Above Rs.20000/-

18. When buying online, what do you value the most? On a scale of 1 through 5, list in order according to your preference, one represents your most valued choice. (1 being most important, 5 being least important)

Note: Sequence of options automatically aligns with your ranking.

[▼] Size and Fit

[▼] Style

[▼] Cost

[▼] Uniqueness and New Design

[▼] Convenience

19. What influences your decision most while making purchase online for clothes/apparels?

○ Referral through friends/Peer group/Family members

○ Social Media

○ Online Advertisement via other websites

○ Television Ad

○ Radio FM Advertisement

○ Newpapers/Magazines

○ Cannot Say

20. Given the cash back option, will you be interested in trying any new brands?

○ Yes

○ No

21. How satisfied were you while purchasing clothes/apparel online?

○ Very Satisfied

○ Satisfied

○ Neutral

○ Dissatisfied

○ Very dissatisfied

○ Not applicable – Did not purchase apparel online

22. Reasons for dissatisfaction for purchasing clothes online

○ Not happy with the product

○ No Exchange facility

○ No cash back

○ Delay in delivery

○ Internet Payment Transaction issues

○ Not applicable

23. Which aspect of online shopping do you think needs improvement? On a scale of 1 through 8, list in order According to your preference, one represents your most valued choice. (1 being most important, 8 being least important)

Note: Sequence of options automatically aligns with your ranking

[▼] Trial before purchase

[▼] Availability of brand of your choice

[▼] Lower Price

[▼] Exchange Facility

[▼] Prompt Customer Service

[▼] On Time Delivery

[▼] Visibility (More Advertisement)

[▼] Promotional Offer

24. What is your monthly household income?

○ Less than or equal to Rs. 20000

○ Rs. 20001 - Rs. 50000

◉ Rs. 50001 - Rs. 100000

○ Rs. 100001 - Rs. 150000

○ Rs. 150001 - Rs. 200000

○ More than Rs. 200000

The below table defines the list of variables defined for the statistical analysis and inference using the survey database. Each variable is designated with appropriate data type i.e., numeric or categorical and the list of possible values is also mapped against each.

In the list of variables, Age is the only Independent variable which is numeric and with continuous range. And the rest of the variables are categorical in nature.

Data Description	Data Type	Variable	Possible Data Values	Numeric Equivalent of Data Values
Gender	Nominal	Gender	Male	1
			Female	2
Age (in years)	Ratio	Age	Continuous range starting from 10 years	10 ……..
City of Residence	Nominal	City	Bangalore	1
			Calicut	2
			Chandigarh	3
			Chennai	4
			Cochin	5
			Coimbatore	6
			Delhi	7
			Faridabad	8
			Gurgaon	9
			Guwahati	10
			Hyderabad	11
			Kochi	12
			Lucknow	13
			Malappuram	14
			Mumbai	15
			New Delhi	16
			Noida	17
			Pune	18
			Roorkee	19
			Silchar	20
			Tatanagar	21
			Trivandrum	22
			Vadodara	23
Profession	Nominal	Profession	Student	1
			Salaried	2

			Self Employed	3
			Home Maker	4
			Retired	5
Internet Usage	Nominal	Internet_Usage	Heavy(More than 4 hours per day)	1
			Moderate(Between 2-4 hours per day)	2
			Low(1- 2 hours per day)	3
			Rare	4
Electronic device used for shopping online	Nominal	Elec_Device	Desktop/Laptop	1
			Mobile Phone	2
			Tablet/Ipad	3
			Don't shop online	4
Buying pattern of clothes	Nominal	Buying_Pattern	Search extensively Online and buy from an Online store	1
			Search extensively Online but buy from a physical store	2
			Search offline and buy from an Online store	3
			Do not search online prefer searching and buying from a physical store	4
Prefer buying clothes online?	Nominal	Buy_Clth_Online	Yes	1
			No	2
Reason for not buying online	Nominal	No_Online_Reason	Internet payment transaction issues	1
			Touch and feel is important for purchase	2
			No preferred online store	3
			Not tried so far	4
			Not Applicable	5
Prefer buying other products online ?	Nominal	Buy_Other_Online	Yes	1
			No	2
Frequency of online shopping for clothes	Nominal	Onl_Clth_Buy_Freq	Regularly	1
			Occasionally	2
			Rarely	3
			Never	4
Online purchase of Casual wear	Nominal	Casual_Wear_Online	Yes	1
			No	2
Online purchase	Nominal	Home_Wear_Online	Yes	1

			No	2
Online purchase of Ethnic wear	Nominal	**Ethnic_Wear_Online**	Yes	1
			No	2
Online purchase of Party wear	Nominal	**Party_Wear_Online**	Yes	1
			No	2
Online purchase of outfits for special occassions like festivals or marriages	Nominal	**Special_Outfit_Online**	Yes	1
			No	2
Online purchase of Formal wear	Nominal	**Formal_Wear_Online**	Yes	1
			No	2
Online purchase of Kids wear	Nominal	**Kids_Wear_Online**	Yes	1
			No	2
Online purchase of Baby outfit	Nominal	**Baby_Wear_Online**	Yes	1
			No	2
Most preferred reason for online purchase over retail purchase	Nominal	**Online_Buying_Reason**	Lower pricing compared to physical store	1
			Known brand	2
			Wide variety / Choice	3
			Gifting purpose	4
			Festivals or special occasions	5
			Do not prefer to buy online	6
Perception regarding clothes purchased online	Nominal	**Online_Buy_Perception**	Is Convenient and Reliable	1
			Is Convenient but not Reliable	2
			Not Convenient but Reliable	3
			Neither Convenient nor Reliable	4
			Cannot say	5
Preferred payment option for online purchase	Nominal	**Online_Pay_Option**	Credit card without EMI option	1
			Credit card with EMI option	2
			Debit card	3
			Netbanking	4
			Cash on delivery	5
For whom do you shop clothes online - Self	Nominal	**Online_Buy_For_Self**	Yes	1
			No	2
	Nominal	**Online_Buy_For_Family**	Yes	1
			No	2

- Family - Friends - None	Nominal	**Online_Buy_For_Friends**	Yes	1
			No	2
	Nominal	**Online_Buy_For_None**	Yes	1
			No	2
Budget for online shopping of clothes	Nominal	**Online_Cloth_Budget**	NIL	1
			Less than or equal to Rs. 2000/-	2
			Between Rs. 2000/- to Rs. 5000/-	3
			Between Rs. 5000/- to Rs. 10000/-	4
			Between Rs. 10000/- to Rs. 20000/-	5
			More than Rs. 20000/-	6
Ranking for "Size and Fit" preference option towards online purchase	Ordinal	**Rank_Size-&-Fit**	MOST IMPORTANT	1
			MORE IMPORTANT	2
			MODERATE IMPORTANCE	3
			LESS IMPORTANT	4
			LEAST IMPORTANT	5
Ranking for "Style" preference option towards online purchase	Ordinal	**Rank_Style**	MOST IMPORTANT	1
			MORE IMPORTANT	2
			MODERATE IMPORTANCE	3
			LESS IMPORTANT	4
			LEAST IMPORTANT	5
Ranking for "Cost" preference option towards online purchase	Ordinal	**Rank_Cost**	MOST IMPORTANT	1
			MORE IMPORTANT	2
			MODERATE IMPORTANCE	3
			LESS IMPORTANT	4
			LEAST IMPORTANT	5
Ranking for "Uniqueness and New Design" preference option towards online purchase	Ordinal	**Rank_Unique_Design**	MOST IMPORTANT	1
			MORE IMPORTANT	2
			MODERATE IMPORTANCE	3
			LESS IMPORTANT	4
			LEAST IMPORTANT	5
Ranking for "Convenience" preference option towards online purchase	Ordinal	**Rank_Convenience**	MOST IMPORTANT	1
			MORE IMPORTANT	2
			MODERATE IMPORTANCE	3
			LESS IMPORTANT	4
			LEAST IMPORTANT	5

Factor that influence decision for buying clothes online	Nominal	**Influence_To_Buy**	Referral through friends/Peer group/Family members	1
			Social Media	2
			Online Advertisement via other websites	3
			Television Ad	4
			Radio FM Advertisement	5
			Newpapers/Magazines	6
			Cannot Say	7
Online purchase with cash back option	Nominal	**Cash_Back_For_Online**	Yes	1
			No	2
Satisfaction level of online purchasers	Nominal	**Satisfaction_Level**	Not applicable – Did not purchase apparel online	1
			Very Satisfied	2
			Dissatisfied	3
			Neutral	4
			Satisfied	5
			Very Satisfied	6
Factors behind dissatisfaction from online purchase	Nominal	**Dissatisfaction_Reason**	Not happy with the product	1
			No Exchange facility	2
			No cash back	3
			Delay in delivery	4
			Internet Payment Transaction issues	5
			Not applicable	6
Ranking for improvement of "Trial Before Purchase"	Ordinal	**Rank_Trial_Before_Buying**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of "Availability of brand of your choice"	Ordinal	**Rank_Availability of_Brand**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5

			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of "Lower Price"	Ordinal	**Rank_Low_Price**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of "Exchange Facility"	Ordinal	**Rank_Exchange_Option**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of "Prompt Customer Service"	Ordinal	**Rank_Prompt_Service**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of "On Time Delivery"	Ordinal	**Rank_OnTime _Delivery**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of	Ordinal	**Rank_Visibility**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2

			MORE IMPORTANT	3
"Visibility (More Advertisement)"			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Ranking for improvement of "Promotional Offer"	Ordinal	**Rank_Promotion**	UTMOST IMPORTANT	1
			MOST IMPORTANT	2
			MORE IMPORTANT	3
			MODERATE IMPORTANT	4
			NEUTRAL	5
			LESS IMPORTANT	6
			LEAST IMPORTANT	7
			NOT AT ALL IMPORTANT	8
Monthly Household Income	Ordinal	**Household_Income**	Less than or equal to Rs. 20000	1
			Rs. 20001 - Rs. 50000	2
			Rs. 50001 - Rs. 100000	3
			Rs. 100001 - Rs. 150000	4
			Rs. 150001 - Rs. 200000	5
			Greater than Rs. 200000	6

The Market Research team could capture total one hundred fifty two survey entries. The demographic information and the other details related to the survey participants are presented below.

Gender Information:

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	114	71.2	75.0	75.0
	Female	38	23.8	25.0	100.0
	Total	152	95.0	100.0	
Missing	System	8	5.0		
Total		160	100.0		
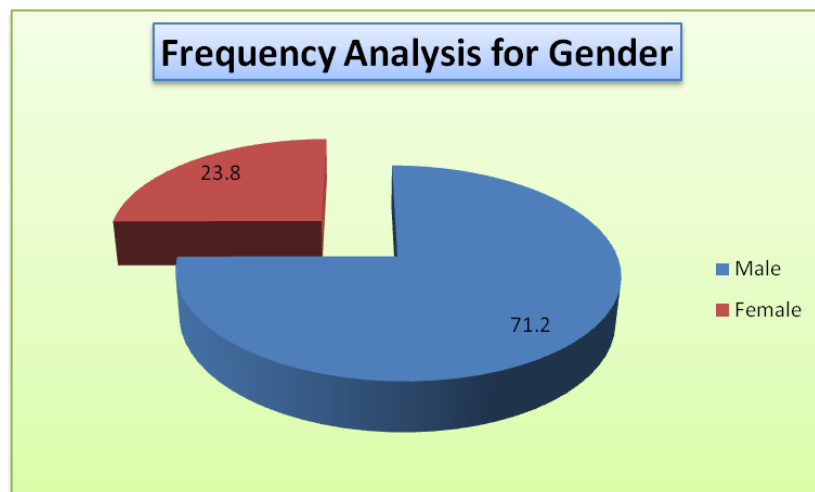
Out of 152 respondents, 38 respondents are Female contributing 23.75% and 114 respondents are Male contributing 71.25%.

Profession Information:

Profession

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	26	17.1	17.1	17.1
	Salaried	106	69.7	69.7	86.8
	Self Employed	11	7.2	7.2	94.1
	Home Maker	6	3.9	3.9	98.0
	Retired	3	2.0	2.0	100.0
	Total	152	100.0	100.0	
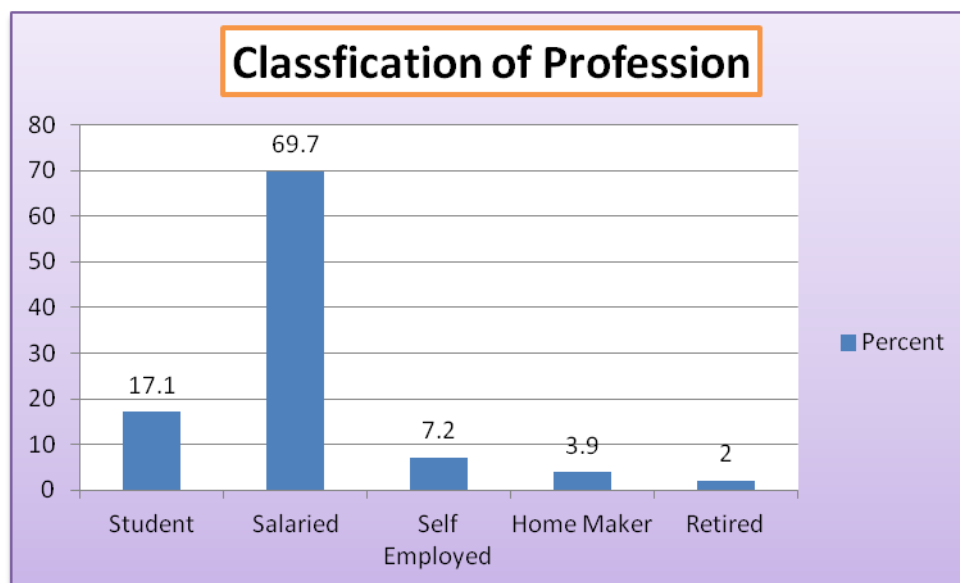
Out of 152 respondents, 26 respondents are students contributing 16.25%. 106 respondents are salaried contributing 66.25%. 11 respondents are self-employed contributing 6.87%. 6 respondents are home maker contributing 3.75%. 3 respondents are retired contributing 1.87%.

Income Details:

Monthly Household Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than or equal to Rs. 20000	16	10.0	10.5	10.5
	Rs. 20001 - Rs. 50000	26	16.2	17.1	27.6
	Rs. 50001 - Rs. 100000	33	20.6	21.7	49.3
	Rs. 100001 - Rs. 150000	36	22.5	23.7	73.0
	Rs. 150001 - Rs. 200000	15	9.4	9.9	82.9
	Greater than Rs. 200000	26	16.2	17.1	100.0
	Total	152	95.0	100.0	
Missing	System	8	5.0		
Total		160	100.0		
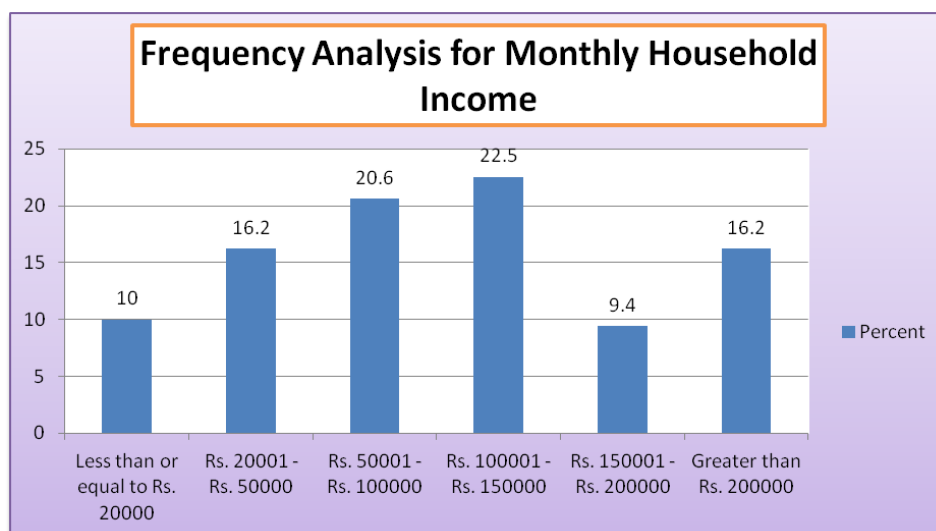
Out of 152 respondents, 16 respondents are having income less than Rs 20000. 26 respondents are having income Rs 20000 to Rs 50000. 33 respondents are having income Rs

50000 to Rs 100000. 36 respondents are having income Rs 100000 to Rs 150000. 36 respondents are having income Rs 150000 to Rs 200000. 26 respondents are having income more than Rs 200000. Majority of respondents are from 50000 to 150000.

Mean comparison between Age and Preference to Purchase Clothes Online:

Mean

Prefer buying clothes online?	Age (in years)
Yes	29.89
No	33.01
Total	32.07
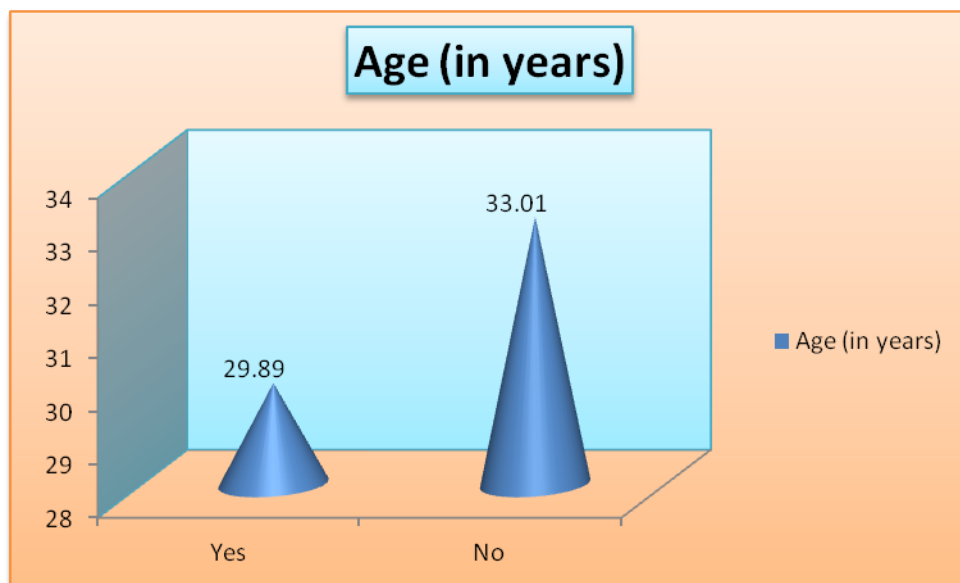
The average age of respondents who like to purchase clothes online is 29 years. The average age of respondents who don't like to purchase online is 33 years.

Internet Usage:

Internet Usage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Heavy(More than 4 hours per day)	67	41.9	44.1	44.1
	Moderate(Between 2- 4 hours per day)	54	33.8	35.5	79.6
	Low(1- 2 hours per day)	22	13.8	14.5	94.1
	Rare	9	5.6	5.9	100.0
	Total	152	95.0	100.0	
Missing	System	8	5.0		
Total		160	100.0		

Internet Usage
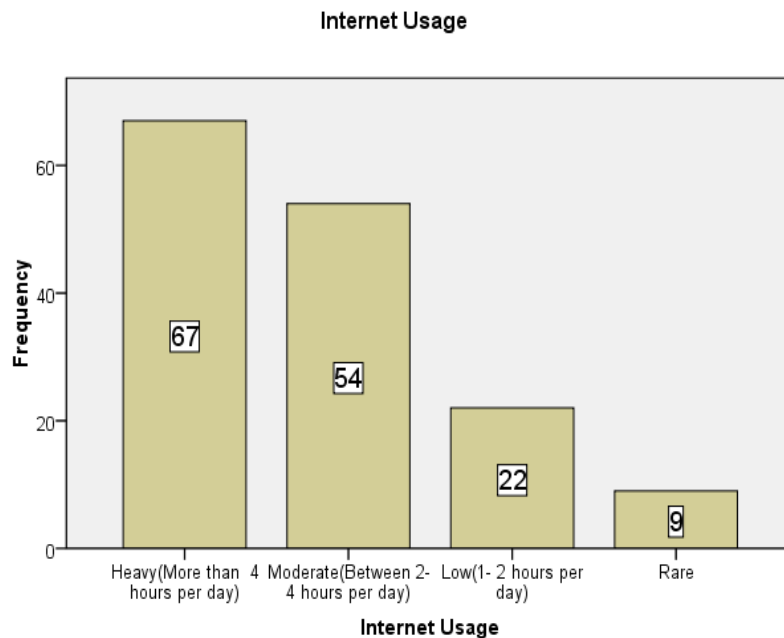
In the total respondents, 41% of respondents that is 67 people say that they use internet more than 4 hour per day, followed by 34% respondents that is 54 people use internet between 4 hour per day.

Electronic device used for Online shopping:

Electronic device used for shopping online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Desktop/Laptop	127	79.4	83.6	83.6
	Mobile Phone	6	3.8	3.9	87.5
	Tablet/Ipad	3	1.9	2.0	89.5
	Don't shop online	16	10.0	10.5	100.0
	Total	152	95.0	100.0	
Missing	System	8	5.0		
Total		160	100.0		

Electronic device used for shopping online
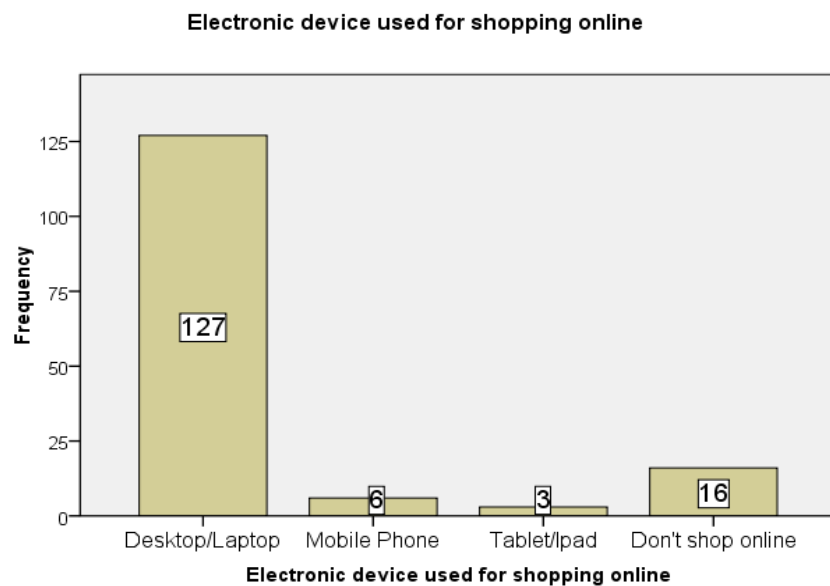
In all the respondents, 80% of respondents that is 127 respondents use desktop or laptop medium to purchase online, 4% prefer to shop online through mobile phone and 2% prefer to shop through tablet. This also indicates the E-commerce is more prevalent when compared to M-commerce.

41

9   STATISTICAL ANALYSIS OF THE SURVEY DATA AND INFERENCES

A set of Statistical tests that is Hypothesis tests are performed on the survey data to mainly understand the preferences, trends and the correlation between the variables attributes related to online buying behaviour of clothes. SPSS tool was used to perform the Hypothesis tests.

The tests were designed and run to understand the below listed attributes.

- Gender specific pattern for purchasing clothes (Retail and Online)
- Gender specific reasons for not purchasing clothes online
- Gender specific preference for purchasing clothes online
- Profession specific pattern for purchasing clothes (Retail and Online)
- Profession specific reasons for not purchasing clothes online
- Profession specific preference for purchasing clothes online
- Whether the preference for purchasing other products online has any influence on the preference for purchasing clothes online
- Whether the usage level of internet has any influence on the preference for purchasing clothes online
- Whether the general purchase pattern has any influence on the preference for purchasing clothes online
- Whether the type of electronic device used for internet browsing has any influence on the preference for purchasing clothes online
- Whether the monthly household income level has any influence on the preference for purchasing clothes online
- Whether the existing pattern for purchasing clothes has any influence on the preference for purchasing clothes online
- Type of clothes preferred or purchased online based on the gender
- Types of clothes preferred or purchased online based on the profession

9.1 HYPOTHESIS TESTS AND RESULTS

Below are the set of Hypothesis tests and their results. These tests were performed using SPSS tool. The majority of the tests involve only categorical variables of Nominal type and hence Chi-Square tests were performed to understand the degree of influence. And T-tests were performed for few of the variables that are of Ordinal type.

9.1.1 CHI-SQUARE TEST – GENDER WISE PURCHASING PATTERN OF CLOTHES

This test is performed to understand if there is any gender based difference in buying pattern of clothes. Null hypothesis is that the buying method of the clothes is independent of the gender.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Buying pattern of clothes * Gender	152	95.0%	8	5.0%	160	100.0%

Buying pattern of clothes * Gender Crosstabulation

			Gender
			Male
Buying pattern of clothes	Search extensively Online and buy from an Online store	Count	13
		Expected Count	13.5
		% within Buying pattern of clothes	72.2%
		% within Gender	11.4%
		% of Total	8.6%
	Search extensively Online but buy from a physical store	Count	27
		Expected Count	26.3
		% within Buying pattern of clothes	77.1%
		% within Gender	23.7%
		% of Total	17.8%
	Search offline and buy from an Online store	Count	4
		Expected Count	3.8
		% within Buying pattern of clothes	80.0%

44

			Female
		% within Gender	3.5%
		% of Total	2.6%
	Do not search online prefer searching and buying from a physical store	Count	70
		Expected Count	70.5
		% within Buying pattern of clothes	74.5%
		% within Gender	61.4%
		% of Total	46.1%
Total		Count	114
		Expected Count	114.0
		% within Buying pattern of clothes	75.0%
		% within Gender	100.0%
		% of Total	75.0%

Buying pattern of clothes * Gender Crosstabulation

			Gender
			Female
Buying pattern of clothes	Search extensively Online and	Count	5

45

	buy from an Online store	Expected Count	4.5
		% within Buying pattern of clothes	27.8%
		% within Gender	13.2%
		% of Total	3.3%
		Count	8
		Expected Count	8.8
	Search extensively Online but buy from a physical store	% within Buying pattern of clothes	22.9%
		% within Gender	21.1%
		% of Total	5.3%
		Count	1
		Expected Count	1.3
	Search offline and buy from an Online store	% within Buying pattern of clothes	20.0%
		% within Gender	2.6%
		% of Total	0.7%
	Do not search online prefer searching and buying from a physical store	Count	24
		Expected Count	23.5

		% within Buying pattern of clothes		25.5%
		% within Gender		63.2%
		% of Total		15.8%
		Count		38
		Expected Count		38.0
Total		% within Buying pattern of clothes		25.0%
		% within Gender		100.0%
		% of Total		25.0%

Buying pattern of clothes * Gender Crosstabulation

			Total
		Count	18
		Expected Count	18.0
Buying pattern of clothes	Search extensively Online and buy from an Online store	% within Buying pattern of clothes	100.0%
		% within Gender	11.8%
		% of Total	11.8%

	Search extensively Online but buy from a physical store	Count	35
		Expected Count	35.0
		% within Buying pattern of clothes	100.0%
		% within Gender	23.0%
		% of Total	23.0%
	Search offline and buy from an Online store	Count	5
		Expected Count	5.0
		% within Buying pattern of clothes	100.0%
		% within Gender	3.3%
		% of Total	3.3%
	Do not search online prefer searching and buying from a physical store	Count	94
		Expected Count	94.0
		% within Buying pattern of clothes	100.0%
		% within Gender	61.8%
		% of Total	61.8%
Total		Count	152

		Expected Count	152.0
		% within Buying pattern of clothes	100.0%
		% within Gender	100.0%
		% of Total	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.241[a]	3	.971
Likelihood Ratio	.244	3	.970
Linear-by-Linear Association	.002	1	.967
N of Valid Cases	152		

a. 3 cells (37.5%) have expected count less than 5. The minimum
expected count is 1.25.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %).

In the above result, the p-value of 0.971 is much higher than the commonly accepted levels of either 0.05 or 0.10. Hence, we cannot reject the null hypothesis. **There is no significant relation between the gender and the buying pattern of clothes**.

There is no significant relationship at 10% significance level between Gender and the buying pattern of clothes (chi-square = 0.241, df = 3, p = 0.971)

9.1.2 CHI-SQUARE TEST – GENDER WISE REASON FOR NOT BUYING PATTERN OF CLOTHES

This test is performed to understand if there is any gender based reason for not purchasing clothes online. Null hypothesis is that the reason for not purchasing clothes online is independent of the gender.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Reason for not buying online * Gender	152	95.0%	8	5.0%	160	100.0%

Reason for not buying online * Gender Crosstabulation

	Gender
	Male

Reason for not buying online	Internet payment transaction issues	Count	2
		Expected Count	3.0
		% within Reason for not buying online	50.0%
		% within Gender	1.8%
		% of Total	1.3%
	Touch and feel is important for purchase	Count	82
		Expected Count	76.5
		% within Reason for not buying online	80.4%
		% within Gender	71.9%
		% of Total	53.9%
	No preferred online store	Count	6
		Expected Count	4.5
		% within Reason for not buying online	100.0%
		% within Gender	5.3%
		% of Total	3.9%
	Not tried so far	Count	11

			Gender
		Expected Count	15.8
		% within Reason for not buying online	52.4%
		% within Gender	9.6%
		% of Total	7.2%
Not Applicable		Count	13
		Expected Count	14.3
		% within Reason for not buying online	68.4%
		% within Gender	11.4%
		% of Total	8.6%
Total		Count	114
		Expected Count	114.0
		% within Reason for not buying online	75.0%
		% within Gender	100.0%
		% of Total	75.0%

Reason for not buying online * Gender Crosstabulation

	Gender

			Female
Reason for not buying online	Internet payment transaction issues	Count	2
		Expected Count	1.0
		% within Reason for not buying online	50.0%
		% within Gender	5.3%
		% of Total	1.3%
	Touch and feel is important for purchase	Count	20
		Expected Count	25.5
		% within Reason for not buying online	19.6%
		% within Gender	52.6%
		% of Total	13.2%
	No preferred online store	Count	0
		Expected Count	1.5
		% within Reason for not buying online	0.0%
		% within Gender	0.0%
		% of Total	0.0%

	Not tried so far	Count	10
		Expected Count	5.3
		% within Reason for not buying online	47.6%
		% within Gender	26.3%
		% of Total	6.6%
	Not Applicable	Count	6
		Expected Count	4.8
		% within Reason for not buying online	31.6%
		% within Gender	15.8%
		% of Total	3.9%
Total		Count	38
		Expected Count	38.0
		% within Reason for not buying online	25.0%
		% within Gender	100.0%
		% of Total	25.0%

Reason for not buying online * Gender Crosstabulation

			Total
Reason for not buying online	Internet payment transaction issues	Count	4
		Expected Count	4.0
		% within Reason for not buying online	100.0%
		% within Gender	2.6%
		% of Total	2.6%
	Touch and feel is important for purchase	Count	102
		Expected Count	102.0
		% within Reason for not buying online	100.0%
		% within Gender	67.1%
		% of Total	67.1%
	No preferred online store	Count	6
		Expected Count	6.0
		% within Reason for not buying online	100.0%
		% within Gender	3.9%
		% of Total	3.9%

55

	Not tried so far	Count	21
		Expected Count	21.0
		% within Reason for not buying online	100.0%
		% within Gender	13.8%
		% of Total	13.8%
	Not Applicable	Count	19
		Expected Count	19.0
		% within Reason for not buying online	100.0%
		% within Gender	12.5%
		% of Total	12.5%
Total		Count	152
		Expected Count	152.0
		% within Reason for not buying online	100.0%
		% within Gender	100.0%
		% of Total	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.084[a]	4	.026
Likelihood Ratio	11.678	4	.020
Linear-by-Linear Association	3.094	1	.079
N of Valid Cases	152		

a. 5 cells (50.0%) have expected count less than 5. The minimum
expected count is 1.00.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.026 is lower than the commonly accepted level of 0.05. Hence, we must reject the null hypothesis. **There is a relation between the gender and the preference for not buying clothes online. Male tend to have less preference towards buying clothes online when compared to female. And Touch and feel is the most important factor that influence the preference for not buying clothes online.**

There is a relationship at 5 % significance level between Gender and the preference for not buying clothes online (chi-square = 11.084, df = 4, p = 0.026)

9.1.3 CHI-SQUARE TEST – GENDER WISE PREFERENCE FOR PURCHASING CLOTHES ONLINE

This test is performed to understand if there is any gender based preference for purchasing clothes online. Null hypothesis is that the preference for purchasing clothes online is independent of the gender.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Prefer buying clothes online?	152	95.0%	8	5.0%	160	100.0%

Gender * Prefer buying clothes online? Crosstabulation

		Prefer buying clothes online?		Total
		Yes	No	
Gender Male	Count	35	79	114
	Expected Count	34.5	79.5	114.0
	% within Gender	30.7%	69.3%	100.0%
	% within Prefer buying clothes online?	76.1%	74.5%	75.0%

		% of Total	23.0%	52.0%	75.0%
Female		Count	11	27	38
		Expected Count	11.5	26.5	38.0
		% within Gender	28.9%	71.1%	100.0%
		% within Prefer buying clothes online?	23.9%	25.5%	25.0%
		% of Total	7.2%	17.8%	25.0%
Total		Count	46	106	152
		Expected Count	46.0	106.0	152.0
		% within Gender	30.3%	69.7%	100.0%
		% within Prefer buying clothes online?	100.0%	100.0%	100.0%
		% of Total	30.3%	69.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.042[a]	1	.838		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.042	1	.838		
Fisher's Exact Test				1.000	.505

Linear-by-Linear Association	.041	1	.839		
N of Valid Cases	152				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.50.

b. Computed only for a 2x2 table

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.838 is much higher than the commonly accepted levels of either 0.05 or 0.10. Hence, we cannot reject the null hypothesis. **There is no significant relation between the gender and the preference for buying clothes online.**

There is no significant relationship at 10% significance level between gender and preference for buying clothes online (chi-square = 0.042, df = 1, p = 0.838)

9.1.4 CHI-SQUARE TEST – RELATION BETWEEN PREFERENCE FOR PURCHASING CLOTHES AND PREFERENCE FOR OTHER PRODUCTS ONLINE

This test is performed to understand if there is any relation between preference for purchasing clothes online and the preference for purchasing other products online. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Case Processing Summary

	Cases

60

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Prefer buying clothes online? * Prefer buying other products online ?	152	95.0%	8	5.0%	160	100.0%

Prefer buying clothes online? * Prefer buying other products online ? Crosstabulation

			Prefer buying other products online ?	
			Yes	No
Prefer buying clothes online?	Yes	Count	42	4
		Expected Count	36.0	10.0
		% within Prefer buying clothes online?	91.3%	8.7%
		% within Prefer buying other products online ?	35.3%	12.1%
		% of Total	27.6%	2.6%
	No	Count	77	29
		Expected Count	83.0	23.0
		% within Prefer buying clothes online?	72.6%	27.4%
		% within Prefer buying other products online ?	64.7%	87.9%

	% of Total	50.7%	19.1%
	Count	119	33
	Expected Count	119.0	33.0
Total	% within Prefer buying clothes online?	78.3%	21.7%
	% within Prefer buying other products online ?	100.0%	100.0%
	% of Total	78.3%	21.7%

Prefer buying clothes online? * Prefer buying other products online ? Crosstabulation

			Total
		Count	46
		Expected Count	46.0
	Yes	% within Prefer buying clothes online?	100.0%
		% within Prefer buying other products online ?	30.3%
Prefer buying clothes online?		% of Total	30.3%
		Count	106
	No	Expected Count	106.0
		% within Prefer buying clothes online?	100.0%

		% within Prefer buying other products online ?	69.7%
		% of Total	69.7%
		Count	152
		Expected Count	152.0
Total		% within Prefer buying clothes online?	100.0%
		% within Prefer buying other products online ?	100.0%
		% of Total	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.574[a]	1	.010		
Continuity Correction[b]	5.521	1	.019		
Likelihood Ratio	7.478	1	.006		
Fisher's Exact Test				.010	.007
Linear-by-Linear Association	6.530	1	.011		
N of Valid Cases	152				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.99.

b. Computed only for a 2x2 table

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.01 is much lesser than the commonly accepted levels of either 0.05 or 0.10. Hence, we must reject the null hypothesis. **There is a direct relation between the preference for buying clothes online and the preference for buying other products online.**

There is a direct relationship at 10% significance level between the preference for buying clothes online and the preference for buying other products online (chi-square = 6.574, df = 1, p = 0.01).

9.1.5 CHI-SQUARE TEST – RELATION BETWEEN INTERNET USAGE LEVEL AND PREFERENCE FOR PURCHASING CLOTHES ONLINE

This test is performed to understand if there is any relation between the Internet usage level and the preference for purchasing clothes online. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

Internet Usage * Prefer buying clothes online?	152	95.0%	8	5.0%	160	100.0%

Internet Usage * Prefer buying clothes online? Crosstabulation

			Prefer buying clothes online?
			Yes
Internet Usage	Heavy(More than 4 hours per day)	Count	21
		Expected Count	20.3
		% within Internet Usage	31.3%
		% within Prefer buying clothes online?	45.7%
		% of Total	13.8%
	Moderate(Between 2- 4 hours per day)	Count	19
		Expected Count	16.3
		% within Internet Usage	35.2%
		% within Prefer buying clothes online?	41.3%
		% of Total	12.5%
	Low(1- 2 hours per day)	Count	5
		Expected Count	6.7

		% within Internet Usage	22.7%
		% within Prefer buying clothes online?	10.9%
		% of Total	3.3%
	Rare	Count	1
		Expected Count	2.7
		% within Internet Usage	11.1%
		% within Prefer buying clothes online?	2.2%
		% of Total	0.7%
Total		Count	46
		Expected Count	46.0
		% within Internet Usage	30.3%
		% within Prefer buying clothes online?	100.0%
		% of Total	30.3%

Internet Usage * Prefer buying clothes online? Crosstabulation

	Prefer buying clothes online?	Total
	No	

		Count	46	67
		Expected Count	46.7	67.0
	Heavy(More than 4 hours per day)	% within Internet Usage	68.7%	100.0%
		% within Prefer buying clothes online?	43.4%	44.1%
		% of Total	30.3%	44.1%
		Count	35	54
		Expected Count	37.7	54.0
	Moderate(Between 2- 4 hours per day)	% within Internet Usage	64.8%	100.0%
Internet Usage		% within Prefer buying clothes online?	33.0%	35.5%
		% of Total	23.0%	35.5%
		Count	17	22
		Expected Count	15.3	22.0
	Low(1- 2 hours per day)	% within Internet Usage	77.3%	100.0%
		% within Prefer buying clothes online?	16.0%	14.5%
		% of Total	11.2%	14.5%
	Rare	Count	8	9

67

	Expected Count	6.3	9.0
	% within Internet Usage	88.9%	100.0%
	% within Prefer buying clothes online?	7.5%	5.9%
	% of Total	5.3%	5.9%
	Count	106	152
	Expected Count	106.0	152.0
Total	% within Internet Usage	69.7%	100.0%
	% within Prefer buying clothes online?	100.0%	100.0%
	% of Total	69.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.813[a]	3	.421
Likelihood Ratio	3.143	3	.370
Linear-by-Linear Association	1.331	1	.249
N of Valid Cases	152		

a. 1 cells (12.5%) have expected count less than 5. The minimum
expected count is 2.72.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.421 is higher than the commonly accepted levels of either 0.05 or 0.10. Hence, we cannot reject the null hypothesis. **There is no relation between the Internet usage level and the preference for buying clothes online.**

There is no significant relationship at 10% significance level between Internet usage level and preference for buying clothes online (chi-square = 2.813, df = 3, p = 0.421).

9.1.6 CHI-SQUARE TEST – RELATION BETWEEN PURCHASE PATTERN FOR CLOTHES AND PREFERENCE FOR PURCHASING CLOTHES ONLINE

This test is performed to understand if there is any relation between the pattern of clothes purchase and the preference for purchasing clothes online. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Prefer buying clothes online? * Buying pattern of clothes	152	95.0%	8	5.0%	160	100.0%

Prefer buying clothes online? * Buying pattern of clothes Crosstabulation

			Buying pattern of clothes	
			Search extensively Online and buy from an Online store	Search extensively Online but buy from a physical store
Prefer buying clothes online?	Yes	Count	16	16
		Expected Count	5.4	10.6
		% within Prefer buying clothes online?	34.8%	34.8%
		% within Buying pattern of clothes	88.9%	45.7%
		% of Total	10.5%	10.5%
	No	Count	2	19
		Expected Count	12.6	24.4
		% within Prefer buying clothes online?	1.9%	17.9%
		% within Buying pattern of clothes	11.1%	54.3%
		% of Total	1.3%	12.5%
Total		Count	18	35

			Search offline and buy from an Online store	Do not search online prefer searching and buying from a physical store
		Expected Count	18.0	35.0
		% within Prefer buying clothes online?	11.8%	23.0%
		% within Buying pattern of clothes	100.0%	100.0%
		% of Total	11.8%	23.0%

Prefer buying clothes online? * Buying pattern of clothes Crosstabulation

			Buying pattern of clothes	
			Search offline and buy from an Online store	Do not search online prefer searching and buying from a physical store
Prefer buying clothes online?	Yes	Count	4	10
		Expected Count	1.5	28.4
		% within Prefer buying clothes online?	8.7%	21.7%
		% within Buying pattern of clothes	80.0%	10.6%
		% of Total	2.6%	6.6%
	No	Count	1	84
		Expected Count	3.5	65.6

	% within Prefer buying clothes online?	0.9%	79.2%
	% within Buying pattern of clothes	20.0%	89.4%
	% of Total	0.7%	55.3%
	Count	5	94
	Expected Count	5.0	94.0
Total	% within Prefer buying clothes online?	3.3%	61.8%
	% within Buying pattern of clothes	100.0%	100.0%
	% of Total	3.3%	61.8%

Prefer buying clothes online? * Buying pattern of clothes Crosstabulation

			Total
		Count	46
		Expected Count	46.0
Prefer buying clothes online?	Yes	% within Prefer buying clothes online?	100.0%
		% within Buying pattern of clothes	30.3%
		% of Total	30.3%

		Count	106
		Expected Count	106.0
	No	% within Prefer buying clothes online?	100.0%
		% within Buying pattern of clothes	69.7%
		% of Total	69.7%
		Count	152
		Expected Count	152.0
Total		% within Prefer buying clothes online?	100.0%
		% within Buying pattern of clothes	100.0%
		% of Total	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	56.288a	3	.000
Likelihood Ratio	56.840	3	.000
Linear-by-Linear Association	48.174	1	.000
N of Valid Cases	152		

a. 2 cells (25.0%) have expected count less than 5. The minimum
expected count is 1.51.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.000 is lower than the commonly accepted levels of either 0.05 or 0.10. Hence, we must reject the null hypothesis. **There is direct relation between the preference of buying clothes online and the pattern for buying clothes.**

There is a direct relationship at 10% significance level between the preference of buying clothes online and the pattern for buying clothes (chi-square = 56.288, df = 3, p = 0.000).

9.1.7 CHI-SQUARE TEST – RELATION BETWEEN PROFESSION AND PATTERN FOR PURCHASING CLOTHES ONLINE

This test is performed to understand if there is any relation between the pattern of clothes purchase and the profession. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

Profession * Buying pattern of clothes	152	95.0%	8	5.0%	160	100.0%

Profession * Buying pattern of clothes Crosstabulation

			Buying pattern of clothes	
			Search extensively Online and buy from an Online store	Search extensively Online but buy from a physical store
Profession	Student	Count	3	5
		Expected Count	3.1	6.0
		% within Profession	11.5%	19.2%
		% within Buying pattern of clothes	16.7%	14.3%
		% of Total	2.0%	3.3%
	Salaried	Count	10	27
		Expected Count	12.6	24.4
		% within Profession	9.4%	25.5%
		% within Buying pattern of clothes	55.6%	77.1%
		% of Total	6.6%	17.8%
	Self Employed	Count	2	3

	Expected Count	1.3	2.5
	% within Profession	18.2%	27.3%
	% within Buying pattern of clothes	11.1%	8.6%
	% of Total	1.3%	2.0%
	Count	2	0
	Expected Count	.7	1.4
Home Maker	% within Profession	33.3%	0.0%
	% within Buying pattern of clothes	11.1%	0.0%
	% of Total	1.3%	0.0%
Retired	Count	1	0

Profession * Buying pattern of clothes Crosstabulation

			Buying pattern of clothes		Total
			Search offline and buy from an Online store	Do not search online prefer searching and buying from a physical store	
Profession	Student	Count	0	18	26
		Expected Count	.9	16.1	26.0

76

	% within Profession	0.0%	69.2%	100.0%
	% within Buying pattern of clothes	0.0%	19.1%	17.1%
	% of Total	0.0%	11.8%	17.1%
	Count	5	64	106
	Expected Count	3.5	65.6	106.0
Salaried	% within Profession	4.7%	60.4%	100.0%
	% within Buying pattern of clothes	100.0%	68.1%	69.7%
	% of Total	3.3%	42.1%	69.7%
	Count	0	6	11
	Expected Count	.4	6.8	11.0
Self Employed	% within Profession	0.0%	54.5%	100.0%
	% within Buying pattern of clothes	0.0%	6.4%	7.2%
	% of Total	0.0%	3.9%	7.2%
	Count	0	4	6
Home Maker	Expected Count	.2	3.7	6.0
	% within Profession	0.0%	66.7%	100.0%

			0.0%	4.3%	3.9%
		% within Buying pattern of clothes	0.0%	4.3%	3.9%
		% of Total	0.0%	2.6%	3.9%
	Retired	Count	0	2	3

Profession * Buying pattern of clothes Crosstabulation

			Buying pattern of clothes	
			Search extensively Online and buy from an Online store	Search extensively Online but buy from a physical store
Profession	Retired	Expected Count	.4	.7
		% within Profession	33.3%	0.0%
		% within Buying pattern of clothes	5.6%	0.0%
		% of Total	0.7%	0.0%
Total		Count	18	35
		Expected Count	18.0	35.0
		% within Profession	11.8%	23.0%
		% within Buying pattern of clothes	100.0%	100.0%
		% of Total	11.8%	23.0%

Profession * Buying pattern of clothes Crosstabulation

			Buying pattern of clothes		Total
			Search offline and buy from an Online store	Do not search online prefer searching and buying from a physical store	
Profession	Retired	Expected Count	.1	1.9	3.0
		% within Profession	0.0%	66.7%	100.0%
		% within Buying pattern of clothes	0.0%	2.1%	2.0%
		% of Total	0.0%	1.3%	2.0%
		Count	5	94	152
		Expected Count	5.0	94.0	152.0
		% within Profession	3.3%	61.8%	100.0%
Total		% within Buying pattern of clothes	100.0%	100.0%	100.0%
		% of Total	3.3%	61.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.566[a]	12	.654

Likelihood Ratio	11.880	12	.455
Linear-by-Linear Association	.691	1	.406
N of Valid Cases	152		

a. 14 cells (70.0%) have expected count less than 5. The minimum
expected count is .10.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.654 is much higher than the commonly accepted levels of either 0.05 or 0.10. Hence, we cannot reject the null hypothesis**. There is no relation between the profession and the buying pattern of clothes.**

There is no significant relationship at 10% significance level between Gender and the buying pattern of clothes (chi-square = 9.566, df = 12, p = 0.654).

9.1.8 CHI-SQUARE TEST – RELATION BETWEEN PROFESSION AND PREFERENCE FOR PURCHASING CLOTHES ONLINE

This test is performed to understand if there is any relation between the preference for purchasing clothes online and the profession. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Prefer buying clothes online? * Profession	152	95.0%	8	5.0%	160	100.0%

Prefer buying clothes online? * Profession Crosstabulation

			Profession		
			Student	Salaried	Self Employed
Prefer buying clothes online?	Yes	Count	10	28	6
		Expected Count	7.9	32.1	3.3
		% within Prefer buying clothes online?	21.7%	60.9%	13.0%
		% within Profession	38.5%	26.4%	54.5%

		% of Total	6.6%	18.4%	3.9%
	No	Count	16	78	5
		Expected Count	18.1	73.9	7.7
		% within Prefer buying clothes online?	15.1%	73.6%	4.7%
		% within Profession	61.5%	73.6%	45.5%
		% of Total	10.5%	51.3%	3.3%
Total		Count	26	106	11
		Expected Count	26.0	106.0	11.0
		% within Prefer buying clothes online?	17.1%	69.7%	7.2%
		% within Profession	100.0%	100.0%	100.0%
		% of Total	17.1%	69.7%	7.2%

Prefer buying clothes online? * Profession Crosstabulation

			Profession		Total
			Home Maker	Retired	
Prefer buying clothes online?	Yes	Count	2	0	46
		Expected Count	1.8	.9	46.0

		% within Prefer buying clothes online?	4.3%	0.0%	100.0%
		% within Profession	33.3%	0.0%	30.3%
		% of Total	1.3%	0.0%	30.3%
	No	Count	4	3	106
		Expected Count	4.2	2.1	106.0
		% within Prefer buying clothes online?	3.8%	2.8%	100.0%
		% within Profession	66.7%	100.0%	69.7%
		% of Total	2.6%	2.0%	69.7%
Total		Count	6	3	152
		Expected Count	6.0	3.0	152.0
		% within Prefer buying clothes online?	3.9%	2.0%	100.0%
		% within Profession	100.0%	100.0%	100.0%
		% of Total	3.9%	2.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.974[a]	4	.201

Likelihood Ratio	6.534	4	.163
Linear-by-Linear Association	.177	1	.674
N of Valid Cases	152		

a. 5 cells (50.0%) have expected count less than 5. The minimum
expected count is .91.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.201 is higher than the commonly accepted levels of either 0.05 or 0.10. Hence, we cannot reject the null hypothesis. **There is no relation between the profession and the preference for buying clothes online.**

There is no relationship at 10% significance level between profession and preference for buying clothes online (chi-square = 5.974, df = 4, p = 0.201).

9.1.9 CHI-SQUARE TEST – RELATION BETWEEN PROFESSION AND REASON FOR NOT PURCHASING CLOTHES ONLINE

This test is performed to understand if there is any relation between the reason for not purchasing clothes online and the profession. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Reason for not buying online * Profession	152	95.0%	8	5.0%	160	100.0%

Reason for not buying online * Profession Crosstabulation

			Profession
			Student
Reason for not buying online	Internet payment transaction issues	Count	2
		Expected Count	.7
		% within Reason for not buying online	50.0%
		% within Profession	7.7%

		% of Total	1.3%
Touch and feel is important for purchase		Count	19
		Expected Count	17.4
		% within Reason for not buying online	18.6%
		% within Profession	73.1%
		% of Total	12.5%
No preferred online store		Count	2
		Expected Count	1.0
		% within Reason for not buying online	33.3%
		% within Profession	7.7%
		% of Total	1.3%
Not tried so far		Count	1
		Expected Count	3.6
		% within Reason for not buying online	4.8%
		% within Profession	3.8%
		% of Total	0.7%

	Not Applicable	Count	2
		Expected Count	3.3
		% within Reason for not buying online	10.5%
		% within Profession	7.7%
		% of Total	1.3%
Total		Count	26
		Expected Count	26.0
		% within Reason for not buying online	17.1%
		% within Profession	100.0%
		% of Total	17.1%

Reason for not buying online * Profession Crosstabulation

			Profession
			Salaried
Reason for not buying online	Internet payment transaction issues	Count	2
		Expected Count	2.8
		% within Reason for not buying online	50.0%

		% within Profession	1.9%
		% of Total	1.3%
		Count	76
		Expected Count	71.1
	Touch and feel is important for purchase	% within Reason for not buying online	74.5%
		% within Profession	71.7%
		% of Total	50.0%
		Count	4
		Expected Count	4.2
	No preferred online store	% within Reason for not buying online	66.7%
		% within Profession	3.8%
		% of Total	2.6%
		Count	14
		Expected Count	14.6
	Not tried so far	% within Reason for not buying online	66.7%
		% within Profession	13.2%

		% of Total	9.2%
	Not Applicable	Count	10
		Expected Count	13.3
		% within Reason for not buying online	52.6%
		% within Profession	9.4%
		% of Total	6.6%
Total		Count	106
		Expected Count	106.0
		% within Reason for not buying online	69.7%
		% within Profession	100.0%
		% of Total	69.7%

Reason for not buying online * Profession Crosstabulation

			Profession
			Self Employed
Reason for not buying online	Internet payment transaction issues	Count	0
		Expected Count	.3

		% within Reason for not buying online	0.0%
		% within Profession	0.0%
		% of Total	0.0%
		Count	5
		Expected Count	7.4
	Touch and feel is important for purchase	% within Reason for not buying online	4.9%
		% within Profession	45.5%
		% of Total	3.3%
		Count	0
		Expected Count	.4
	No preferred online store	% within Reason for not buying online	0.0%
		% within Profession	0.0%
		% of Total	0.0%
		Count	3
	Not tried so far	Expected Count	1.5
		% within Reason for not buying online	14.3%

		% within Profession	27.3%
		% of Total	2.0%
	Not Applicable	Count	3
		Expected Count	1.4
		% within Reason for not buying online	15.8%
		% within Profession	27.3%
		% of Total	2.0%
Total		Count	11
		Expected Count	11.0
		% within Reason for not buying online	7.2%
		% within Profession	100.0%
		% of Total	7.2%

Reason for not buying online * Profession Crosstabulation

			Profession
			Home Maker
Reason for not buying online	Internet payment transaction issues	Count	0
		Expected Count	.2

		% within Reason for not buying online	0.0%
		% within Profession	0.0%
		% of Total	0.0%
		Count	1
		Expected Count	4.0
	Touch and feel is important for purchase	% within Reason for not buying online	1.0%
		% within Profession	16.7%
		% of Total	0.7%
		Count	0
		Expected Count	.2
	No preferred online store	% within Reason for not buying online	0.0%
		% within Profession	0.0%
		% of Total	0.0%
		Count	3
	Not tried so far	Expected Count	.8
		% within Reason for not buying online	14.3%

			% within Profession	50.0%
			% of Total	2.0%
	Not Applicable		Count	2
			Expected Count	.8
			% within Reason for not buying online	10.5%
			% within Profession	33.3%
			% of Total	1.3%
			Count	6
			Expected Count	6.0
Total			% within Reason for not buying online	3.9%
			% within Profession	100.0%
			% of Total	3.9%

Reason for not buying online * Profession Crosstabulation

			Profession
			Retired
Reason for not buying online	Internet payment transaction issues	Count	0
		Expected Count	.1

		% within Reason for not buying online	0.0%
		% within Profession	0.0%
		% of Total	0.0%
Touch and feel is important for purchase		Count	1
		Expected Count	2.0
		% within Reason for not buying online	1.0%
		% within Profession	33.3%
		% of Total	0.7%
No preferred online store		Count	0
		Expected Count	.1
		% within Reason for not buying online	0.0%
		% within Profession	0.0%
		% of Total	0.0%
Not tried so far		Count	0
		Expected Count	.4
		% within Reason for not buying online	0.0%

		% within Profession	0.0%
		% of Total	0.0%
		Count	2
		Expected Count	.4
	Not Applicable	% within Reason for not buying online	10.5%
		% within Profession	66.7%
		% of Total	1.3%
		Count	3
		Expected Count	3.0
Total		% within Reason for not buying online	2.0%
		% within Profession	100.0%
		% of Total	2.0%

Reason for not buying online * Profession Crosstabulation

			Total
Reason for not buying online	Internet payment transaction issues	Count	4
		Expected Count	4.0

		% within Reason for not buying online	100.0%
		% within Profession	2.6%
		% of Total	2.6%
		Count	102
		Expected Count	102.0
	Touch and feel is important for purchase	% within Reason for not buying online	100.0%
		% within Profession	67.1%
		% of Total	67.1%
		Count	6
		Expected Count	6.0
	No preferred online store	% within Reason for not buying online	100.0%
		% within Profession	3.9%
		% of Total	3.9%
		Count	21
	Not tried so far	Expected Count	21.0
		% within Reason for not buying online	100.0%

		% within Profession	13.8%
		% of Total	13.8%
		Count	19
		Expected Count	19.0
	Not Applicable	% within Reason for not buying online	100.0%
		% within Profession	12.5%
		% of Total	12.5%
		Count	152
		Expected Count	152.0
Total		% within Reason for not buying online	100.0%
		% within Profession	100.0%
		% of Total	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.790[a]	16	.014
Likelihood Ratio	26.199	16	.051
Linear-by-Linear Association	17.617	1	.000

N of Valid Cases	152		

a. 20 cells (80.0%) have expected count less than 5. The minimum
expected count is .08.

Test Inference:

The last box labelled Chi-Square Tests gives the results of the chi-square test. Several statistics are reported here but the one most commonly used is the "Pearson Chi-square". One must reject the null hypothesis if 2-sided significance reported in the last column and in the row corresponding to the Pearson Chi-square is less than the significance level selected (5 % or 10 %). In the above result, the p-value of 0.014 is lesser than the commonly accepted level of 0.05. Hence, we must reject the null hypothesis. **There is a relation between the profession and reason behind not buying clothes online. Salaried and Students mostly feel that the importance of touch and feel is the reason for not preferring purchase of clothes online.**

There is a relationship at 5 % significance level between the profession and the reason for not preferring purchase of clothes online (chi-square = 30.790, df = 16, p = 0.014).

This test is performed to understand if there is any relation between the preference for purchasing clothes online and gender. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Chi-square Test

Frequency of online shopping for clothes * Gender Cross tabulation						Chi Square	P Value
		Gender				Total	
		Male (N)	Male (%)	Female (N)	Female (%)		
Frequency of online shopping for clothes	Regularly	13	11%	2	5%	15	3.036	0.386
	Occasionally	25	22%	6	16%	31		
	Rarely	31	27%	15	39%	46		
	Never	45	39%	15	39%	60		
Total		114		38		152		

Test Inference:

The above table defines association between gender and frequently online shopping for clothes. As per the Chi-square test, the significance level is 0.386 and is more than 0.05. This indicates that we cannot reject the Null hypothesis. **There is no relationship between gender and frequency of online shopping.**

This test is performed to understand if there is any relation between the preference for purchasing clothes online and the type of electronic device used for online shopping. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Chi-square Test

			Electronic device used for shopping online				Total	Chi square Value	P value
			Desktop/Laptop	Mobile Phone	Tablet/Ipad	Don't shop online			
Prefer buying clothes online?	Yes	Count	44	2	0	0	46	9.42	0.024**
		% Electronic device used for shopping online	34.6%	33.3%	.0%	.0%	30.3%		
	No	Count	83	4	3	16	106		
		% Electronic device used for shopping online	65.4%	66.7%	100.0%	100.0%	69.7%		
Total		Count	127	6	3	16	152		
		% Electronic device used for shopping online	100.0%	100.0%	100.0%	100.0%	100.0%		

Test Inference:

From Chi square test between buying clothes online and electronic device used for online shopping, the significance level is 0.024 and this is lesser than 0.05. This means that

we must reject the Null hypothesis. **There is significant relationship between the type of electronic device used for shopping online and the preference for purchasing clothes online. 34% of respondents prefer Laptop/Desktop for shopping and 33% of respondents use Mobile for shopping online.**

9.1.12 CHI-SQUARE TEST – RELATION BETWEEN PREFERENCE FOR ONLINE PURCHASE OF CLOTHES AND MONTHLY HOUSEHOLD INCOME LEVEL

This test is performed to understand if there is any relation between the preference for purchasing clothes online and the monthly household income level. Null hypothesis is that there is no relation between the two.

Hypothesis Test Result:

Chi-square Test

			Monthly Household Income						Total	Chi square Value	P value
			Less than or equal to Rs. 20000	Rs. 20001 - Rs. 50000	Rs. 50001 - Rs. 100000	Rs. 100001 - Rs. 150000	Rs. 150001 - Rs. 200000	Greater than Rs. 200000			
Prefer buying clothes online?	Yes	Count	4	9	12	7	7	7	46	5.072	0.042 *
		% Monthly Household Income	25.0%	34.6%	36.4%	19.4%	46.7%	26.9%	30.3%		
	No	Count	12	17	21	29	8	19	106		
		%Monthly Household Income	75.0%	65.4%	63.6%	80.6%	53.3%	73.1%	69.7%		
Total		Count	16	26	33	36	15	26	152		

			Monthly Household Income						Total	Chi square Value	P value
			Less than or equal to Rs. 20000	Rs. 20001 - Rs. 50000	Rs. 50001 - Rs. 100000	Rs. 100001 - Rs. 150000	Rs. 150001 - Rs. 200000	Greater than Rs. 200000			
Prefer buying clothes online?	Yes	Count	4	9	12	7	7	7	46	5.072	0.042 *
		% Monthly Household Income	25.0%	34.6%	36.4%	19.4%	46.7%	26.9%	30.3%		
	No	Count	12	17	21	29	8	19	106		
		%Monthly Household Income	75.0%	65.4%	63.6%	80.6%	53.3%	73.1%	69.7%		
Total		Count	16	26	33	36	15	26	152		
		% within Monthly Household Income	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Test Inference:

From Chi square test between the monthly household income and the preference for purchasing clothes online, the significance level obtained is 0.042 which is lesser than 0.05. Hence, we must reject the Null hypothesis. **There is a significant relationship between monthly income and buying of clothes through online.**

9.1.13 T TEST – FACTORS INFLUENCING PREFERENCE FOR ONLINE PURCHASE OF CLOTHES

Below are the various hypotheses tested to understand the level of influence of the various factors on preference towards purchase of clothes online. T-test is performed for these hypotheses.

1. **H0:** There is no significant Ranking for "Size and Fit" preference option towards online purchase

   H1: There is significant Ranking for "Size and Fit" preference option towards online purchase

2. **H0:** There is no significant Ranking for "Style" preference option towards online purchase

   H1: There is significant Ranking for "Style" preference option towards online purchase

3. **H0:** There is no significant Ranking for "Cost" preference option towards online purchase

   H1: There is significant Ranking for "Cost" preference option towards online purchase

4. **H0:** There is no significant Ranking for "Uniqueness and New Design" preference option towards online purchase

   H1: There is significant Ranking for "Uniqueness and New Design" preference option towards online purchase

5. **H0:** There is no significant Ranking for "Convenience" preference option towards online purchase

   H1: There is significant Ranking for "Convenience" preference option towards online purchase

6. **H0:** There is no significant Ranking for improvement of "Trial Before Purchase"

   H1: There is significant Ranking for improvement of "Trial Before Purchase"

Hypothesis Test Result:

T Tests

	Prefer buying clothes online?	N	Mean	Std. Deviation	T Test (P value)
Ranking for "Size and Fit" preference option towards online purchase	Yes	46	2.28	1.425	0.756
	No	106	2.09	1.377	(0.44)
Ranking for "Style" preference option towards online purchase	Yes	46	2.59	1.292	-.082
	No	106	2.60	1.093	(.934)
Ranking for "Cost" preference option towards online purchase	Yes	46	2.65	1.079	.354
	No	106	2.85	1.248	(.197)
Ranking for "Uniqueness and New Design" preference option towards online purchase	Yes	46	3.37	1.181	.175
	No	106	3.65	1.163	(-.281)
Ranking for "Convenience" preference option towards online purchase	Yes	46	4.11	1.320	1.251
	No	106	3.80	1.417	(.213)
Ranking for improvement of "Trial Before Purchase"	Yes	46	2.28	1.734	-.230
	No	106	2.37	2.157	(.813)
Ranking for improvement of "Availability of brand of your choice"	Yes	46	3.65	1.980	1.097
	No	106	3.30	1.730	(.274)
Ranking for improvement of "Lower Price"	Yes	46	3.70	1.590	1.366
	No	106	3.30	1.651	(.174)
Ranking for improvement of "Exchange Facility"	Yes	46	3.91	1.987	1.121
	No	106	3.59	1.419	(.264)
Ranking for improvement of "Prompt Customer	Yes	46	5.35	1.418	2.213

Service"	No	106	4.73	1.659	(.028)
Ranking for improvement of "On Time Delivery"	Yes	46	4.30	2.032	3.964
	No	106	5.38	1.261	(.000)
Ranking for improvement of "Visibility (More Advertisement)"	Yes	46	6.80	1.485	.051
	No	106	6.79	1.255	(.960)
Ranking for improvement of "Promotional Offer"	Yes	46	6.00	2.431	-1.288
	No	106	6.54	2.335	(.200)

Test Inference:

- The mean value of respondents i.e 2.28 who want to prefer online shopping of clothes for "Size and Fit" factor is more than the mean value of respondents i.e 2.09 who don't want to shop online, which implies that "Size and Fit" factor effects majority of respondents preferring them to online shopping of clothes . Factor is not significant as p value 0.44 is greater than 0.05.

- The mean value of respondents willing to shop online and who are not willing to shop online is almost same for the factor "Style" preference, which implies that "Style" factor doesn't effects for online shopping of clothes . Factor is not significant as p value is 0.934 is greater than 0.05.

- Mean value of respondents who want to prefer online shopping of clothes for "Cost" preference factor is 2.65 is less than the mean value of respondents who don't want to shop online i.e 2.85, which implies that "Cost" preference factor effects respondents preferring them not to have online shopping of clothes due to Cost. Factor is not significant as p value 0.197 is greater than 0.05.

- Mean value of respondents who want to prefer online shopping of clothes for "Uniqueness and New Design" preference factor is 3.37 is less than the mean value of

respondents who don't want to shop online i.e 3.65, which implies that "Uniqueness and New Design" is not much preferable for online shopping of clothes. Factor is not significant as p value -0.213.

- Mean value of respondents who want to prefer online shopping of clothes for "Convenience" preference factor is 4.11 is greater than the mean value of respondents who don't want to shop online i.e 3.80, which implies that "Convenience" factor implies respondents for online shopping of clothes. Factor is not significant as p value 0.213 is greater than 0.05.

- Mean value of respondents who are preferring online shopping of clothes wants improvement in "Trial Before Purchase" preference factor is 2.28 is less than the mean value of respondents who don't want to shop online i.e 2.37, which implies that online shopping respondents want to have improvements "Trial Before Purchase" . Factor is not significant as p value 0.813 is greater than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 3.65 which is more than the mean value of respondents who don't want to shop online i.e 3.30, which implies that respondents go for online shopping needs improvement in "Availability of brand of their choice". Factor is not significant as p value 0.274 is greater than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 3.70 which is more than the mean value of respondents who don't want to shop online i.e 3.30, which implies that respondents go for online shopping needs improvement in "lower price" factor. Factor is not significant as p value 0.174 is greater than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 3.91 which is more than the mean value of respondents who don't want to shop online i.e 3.59, which implies that respondents of online shopping needs improvement in "Exchange Facility" factor. Factor is not significant as p value 0.264 is greater than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 5.35 which is more than the mean value of respondents who don't want to shop online i.e 4.73, which implies that respondents of online shopping needs improvement in "Prompt Customer Service" factor. Factor is significant as p value 0.028 which is lesser than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 4.30 which is less than the mean value of respondents who don't want to shop online i.e 5.38, which implies that "On Time Delivery" factor influences respondents who prefer online shopping. Factor is significant as p value 0.00 which is lesser than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 6.80 which is almost similar to the mean value of respondents who don't want to shop online i.e 6.79, which implies that respondents doesn't require much improvement of "Visibility (More Advertisement)" factor. Factor is not significant as p value 0.96 which is greater than 0.05.

- Mean value of respondents who are preferring online shopping of clothes is 6.00 which is lesser than the mean value of respondents who don't want to shop online i.e 6.54, which implies that online shopping respondents doesn't require improvement in "Promotional Offer" as companies are providing more online promotional offers. Factor is not significant as p value 0.20 which is greater than 0.05.

Below are the various hypotheses tested to understand the gender wise preference level for the different types of clothes for online purchase. Chi-square test is performed for these hypotheses.

1. **H0**: There is no significant relation between purchase of casual wear and online shopping

   H1: There is significant relation between purchase of casual wear and online shopping

2. **H0**: There is no significant relation between purchase of Home wear and online shopping

   H1: There is significant relation between purchase of Home wear and online shopping

3. **H0**: There is no significant relation between purchase of Ethnic wear and online shopping

   H1: There is significant relation between purchase of Ethnic wear and online shopping

4. **H0**: There is no significant relation between purchase of Party wear and online shopping

   H1: There is significant relation between purchase of Party wear and online shopping

5. **H0**: There is no significant relation between purchase of outfits for special occasions like festivals or marriages and online shopping

   H1: There is significant relation between purchase of outfits for special occasions like festivals or marriages and online shopping

6. **H0**: There is no significant relation between purchase of Formal wear and online shopping

   H1: There is significant relation between purchase of Formal wear and online shopping

7. **H0**: There is no significant relation between purchase of Kids wears and online shopping

   H1: There is significant relation between purchase of Kids wears and online shopping

8. **H0**: There is no significant relation between purchase of Baby outfit and online shopping

 H1: There is significant relation between purchase of Baby outfit and online shopping

Hypothesis Test Result:

Chi-square Tests

		Male	Female	Chi Square	P value
Online purchase of Casual wear	Yes	49	23	3.519	0.061
	No	65	15		
Online purchases of Home wear?	Yes	47	19	0.893	0.345
	No	67	19		
Online purchase of Ethnic wear?	Yes	15	10	3.591	0.058
	No	99	28		
Online purchase of Party wear?	Yes	22	5	0.736	0.391
	No	92	33		
Online purchase of outfits for special occasions like festivals or marriages	Yes	11	4	0.025	0.875
	No	103	34		
Online purchase of Formal wear?	Yes	29	5	2.475	0.116
	No	85	33		
Online purchase of Kids wears?	Yes	29	11	0.181	0.671
	No	85	27		
Online purchase of Baby outfit?	Yes	24	8	0.893	0.345
	No	90	30		

Test Inference:

Casual wear:
- The online purchase of casual wear is not significant as p value that is 0.061 is greater than 0.05. Hence, we cannot reject the hypothesis.
- Majority of males do not prefer to shop online for Casual wear.
- Majority of females prefer for online shopping of Casual wear.

Home Wear:
- The online purchase of home wear is not significant as p value that is 0.345 is greater than 0.05. Hence, we cannot reject the hypothesis.
- Majority of males does not prefer to shop online for home wear.
- In case of females there is no difference for online shopping of home wears.

Ethnic wear:
- The online purchase of casual wear is not significant as p value that is 0.058 is almost close to 0.05. Here we must accept the hypothesis.
- Majority of male do not prefer online shopping for Ethnic wears.
- Majority of female do not prefer online shopping of Ethnic wears.

Party wear:
- The online purchase of casual wear is not significant as p value that is 0.391 is greater than 0.05. Hence, we cannot reject the hypothesis.
- There is a huge difference in preferences of males does not shop online and who does shop online for party wears, as 22 prefer and 92 doesn't prefer to shop online for party wear.
- There is a huge difference in preference females, only 5 prefer for online shopping of party wears and 33 doesn't prefer online shopping of party wear.

Outfits for special occasions like festivals or marriages:
- The online purchase of outfits for special occasions like festivals or marriages is not significant as p value that is 0.875 is greater than 0.05. Hence, we cannot reject the hypothesis.
- There is a huge difference in preferences of males does not shop online and who does shop online for outfits for special occasions like festivals or marriages, as 11

prefer and 103 doesn't prefer to shop online for outfits for special occasions like festivals or marriages.

- Whereas in case of females also , there is a huge differences in preference females, only 4 prefer for online shopping of online for outfits for special occasions like festivals or marriages and 34 doesn't prefer online shopping of online for outfits for special occasions like festivals or marriages.

Formal wear:

- The online purchase of formal wear is not significant as p value that is 0.116 is greater than 0.05. Hence, we cannot reject the hypothesis.
- Majority of males doesn't prefer to shop online for formal wear, as 29 prefer and 85 do not prefer to shop online for formal wear.
- There is a huge difference in preference females, only 5 prefer for online shopping of formal wears and 33 doesn't prefer online shopping of formal wear.

Kids wear:

- The online purchase of casual wear is not significant as p value that is 0.061 is greater than 0.05. Hence, we cannot reject the hypothesis.
- Majority of males does not prefer to shop online for kids wears as 29 prefer and 85 do not prefer to shop online.
- Majority of females does not prefer to shop online for kids wears as 11 prefer and 27 do not prefer to shop online.

Baby Outfit:

- The online purchase of outfits for baby outfit is not significant as p value that is 0.345 is greater than 0.05. Hence, we cannot reject the hypothesis.
- There is a huge difference in preferences of males who does not shop online and who does shop online for baby outfits, as 24 prefer and 90 do not prefer to shop online for baby outfits.
- Whereas in case of females also, there is a huge difference in preference females, only 8 prefer for online shopping of online for baby outfits and 30 do not prefer online shopping of online for baby outfits.

Below are the inferences that are drawn from the results of various hypothesis tests performed on the survey results.

Gender specific trends towards Online purchase:

- There is no gender based difference in purchase pattern for clothes (Retail and Online).
- "Touch and feel" factor as the major reason for not preferring purchase of clothes online.
- There is no gender based difference in preference towards purchase of clothes online.

Profession specific trends towards Online purchase:

- There is no specific patterns towards purchase of clothes (Retail and Online) among the different profession groups (Salaried, Self-employed, Student, Home maker and Retired)
- There is no specific pattern with regards to preference towards Online purchase of clothes among the different profession groups.
- Among the profession groups, the Salaried and Student group feels that "Touch and feel" factor as the major reason for not preferring purchase of clothes online.

Demographic Influence on Online Purchase of Clothes:

- Average age of respondents who like to purchase online is 29 years.
- Major respondents use desktop or laptop to purchase online. This is followed by mobile phone usage to online purchase. This also indicate that E-commerce is much prevalent than M-commerce.
- Frequency of online shopping for clothes by females is more than that of male.
- Self-employed and students prefer online shopping more when compared to Salaried, Home makers and retired.
- Moderate (between 2 to 4 hours per day) and Heavy (more than 4 hours per day) users are the majority who prefer purchasing clothes online.
- Respondents with monthly household income of Rs. 150001 - Rs. 200000 are the majority to purchase clothes online.

Factors influencing the preference towards Online purchase of clothes:

- Majority of people prefer online shopping mainly because of convenience, size and fit factor

- Style, Uniqueness and New Design factors do not influence the preference for purchasing clothes online.

- Majority of respondents shopping online of clothes needs improvements in Availability of brand of their choice, lower price, Exchange Facility, Prompt Customer Service.

- Respondents preferring online shopping of clothes do not have any specific preference towards "Promotional Offer".

Preference towards the type of clothes for Online purchase:

- Females prefer online shopping of Casual wear when compared to males.

- Majority of male do not prefer to shop online for home wears.

- Both males and females do not prefer to shop online for Ethnic wear.

- Both males and females do not prefer to shop online for Party wear.

- Majority of both males and females do not prefer to shop online for Outfits for special occasions like festivals or marriages.

- Both males and females do not prefer much to shop online for Formal wear.

- Both males and females do not prefer much to shop online for Baby Outfit.

- Both males and females do not prefer much to shop online for Kids wears.

11 IMPLICATIONS FOR MANAGERIAL DECISION

As per the findings from Survey results, only Casual wear and Home wear are the type of clothes preferred for Online purchase. Online purchase of Kids wear is not preferred. Hence, the Market Research team would recommend Mr. Aneesh that Apparal E-business is a sustainable business option but is currently the portfolio is restricted to only Casual and Home wears and that too for teenage and adults age group. And more specifically to the female gender.

There is no specific gender and profession based difference in purchase pattern for clothes (both through Retail and Online) and the preference level for online purchase. The "Touch and feel" factor is the most important factor which influence the purchase decision for clothes through Online. Hence, the Market Research team would recommend Mr. Aneesh to include "Cash Back" option for initial period till customer confidence is lifted and to enable market penetration. In addition to "Cash Back" as the short term option, the business model must allow "Exchange within limited time" option as a long term or a permanent mode to maintain the customer confidence towards preference for purchasing clothes online. The "Cash on delivery" purchasing option has a greater level of influence in boosting the sales volumes and this must be always incorporated in the E-business model.

The major reason for purchasing clothes online is the convenience factor. Availability of varied style, unique designs has no influence on purchase decision through Online. Those who prefer purchasing clothes online are not keen towards any promotional offers. Majority of respondents who have online shopping experience for clothes have indicated a need for improvement towards Availability of brand of their choice, lower price, Exchange Facility, Prompt Customer Service. Hence, the Apparal E-business venture must be a multi brand online store with all the popular brands of casual and home wears. With regards to low cost expectations, the E-business venture must always deliver this value to the customers by maintaining a lower price when compared to the Retail outlets. With regards to customer

service, the E-business model must work out an efficient supply chain and distribution model to reduce the lead time in delivering the purchased good. The Market Research team recommends that the customer is indicated the approximate lead shipment time for each order placed online.

Special add-on discounts for Students profession group and for Female gender on the Casual and Home wears could help the E-business model to increase the sales volume and market penetration better and at relatively faster rate.

12 REFERENCES

- "The Marketing Whitebook 2013 - 2014" from BusinessWorld

- "Why We Buy – The Science of Shopping" by Paco Underhill

- "Buyology – How everything we believe about why we buy is wrong" by Martin Lindstrom

- "The Art of Choosing" by Sheena Iyengar

- "Consumer Behaviour" by Leon G. Schiffman, Leslie Lazar kanuk and S Ramesh Kumar

- "Statistical Methods for Practice and Research" by Ajai S Gaur and Sanjaya S Gaur

- http://www.thehindubusinessline.com/industry-and-economy/info-tech/apparels-accessories-to-emerge-as-top-category-in-online-shopping-search-study/article4353375.ece

- Apparels, accessories to emerge as top category in online shopping ...

- www.thehindubusinessline.com/.../apparels...online-shopping.../article43...

- Articles about Online Shopping - Times Of India

- No touch & feel: Online apparel shopping rises - Times Of India

- India Women Shift to Online Shopping for Apparels, Baby Foods and ...

- Online Apparel Shopping Sites in India - Online Clothing Study

- Online Retail Stores India | Online Apparel Retailers India | Indian ...