Online Shopping Behavior in Pakistan

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Abstract

The purpose of this paper is to study the consumer behavior of online shoppers in Pakistan in order to gain insights into their attitudes, preferences, decision-making frame work, and life styles. The target population for this study consisted of the urban consumers who are educated and belong to upper and upper-middle socio-economic classes. Within online shopping, two major categories could be established, namely “Electronics” and “Clothing”. As per our analysis, the experience expected from both the medium is different. For purchasing a commodity offline, the customer would rate the overall shopping experience higher as opposed to convenience. Now we had to establish that what type of goods would be preferred online as opposed to through brick & mortar, and vice-versa.

Keywords: online, brick & mortar, electronics, clothingl.

Introduction

To study the consumer behavior of online shoppers in Pakistan in order to gain insights into their attitudes and preferences, decision-making frame work, attributes for store selection and life styles encouraging online shopping. The target population for this study consists of the urban consumers who are educated and belong to Upper and upper-middle socio-economic classes (SEC A and SEC B) who can be divided into two broad segments, first having ages from 16-25 and second with age 25 years and above. The first stated segment is the major segment and insights about its behavior towards online shopping can provide a sound basis for further research. A substantial size of this segment comprises of students. An effective presence on social media websites is necessary and used as a channel to draw more traffic which is another reason for youth segment for being the majority of consumers. Since this industry is still in its infancy in Pakistan, the innovators and early adopters who are in bulk at this time mostly belong to the description above. This consumer segment is experiencing an increase in spending power which is mostly consumed by purchases of clothing and accessories, food and electronic products such as cameras, cell phones, tablets, computer or computer related stuff. Thus we see a resemblance among these products and the product lines of major online shopping sites.

The second segment consists of working professionals or business men who have sufficient income to purchase products online. Their purchases are less both in frequency and quantity as compared to the former segment.

Methodology

Five In-depth interviews were conducted and the methodology was to select a mix of people who are frequent online buyers, those who have bought once or twice in past 1 year and a prospective online shopper for online websites. Interviewing such a blend of interviewee's facilitated us in establishing the attributes leading to purchase (switching behavior) and factors valued the most before making purchase by current online shoppers.

A focus group was also conducted which helped in determining the online shopping behavior in Pakistan and the key attributes that contribute to the switching behavior. 5 participants from the identified segments were invited to be the partakers.

Lastly, a survey question was modeled on the schematic provided by qualitative input, after which the researchers went through numerous iterations to come up with the final questionnaire.

Findings

Findings from in depth interviews

The respondents were frequent online shoppers who had prior experience of online shopping and had a set of preferences that he desired from specific shopping experiences. The

respondents generally regarded clothes shopping as a highly involved purchase. In case of online shopping behavior, the respondents bought products to which they referred to as "standardized' products[1]. These included cell phones, laptops and TVs. One of the major reasons that numerous respondents mentioned for their online purchases was price economy. A frequent online store that the respondent visited was homeshopping.pk. They found homeshoping.pk to be the most price-effective as compared to other websites and even to wholesale shops at Saddar[2]. According to a respondent, a certain TV was priced at Rs 38,000 at a nearby shop, whereas at Saddar it was Rs 36,000 and at daraz.pk it was 42,000. The respondent purchased the TV from homeshopping.pk at Rs 32,000. When questioned about whether lower prices created any doubt or not, the respondent answered that he had shopped from there before so he was satisfied with the service and quality. As far as the riskiness of online shopping was concerned, the respondent said that the cash on delivery factor was instrumental in mitigating that risk. When asked about other categories, e.g. garments or shoes, the respondent mentioned that he would like to try them before purchasing. However, when questioned about the possibility, whether a software were to be developed which would calculate the exact dimension of the shoe size or the shirt size, then the respondent suggested that he may switch to purchasing these 'customized' items online.

The belief statements of some of the respondents are as follows;

1. Price is an important criterion.
2. Homeshopping.pk is price effective.
3. Homeshopping.pk is even cheaper than Saddar.
4. Daraz.pk is overpriced.
5. Service is an important criterion as well.

[1] Products which the respondent thought would be the same at every channel, e.g. electronics.
[2] Wholesale Electronic Market in Karachi.

6. Homeshopping.pk has a good service.
7. Online shopping is convenient.
8. Cash on delivery is highly important for my purchase.

Upon much discussion with the interviewee, it was found that price was a fundamental factor in their decision for selection of a retail channel, and that price and quality did not inversely correlate.

The behavioral statements of some of the respondents are as follows;

1. I buy standard products, usually electronics.
2. I bought three cell phones, one television and one laptop.
3. I made all my online purchases from homeshopiping.pk.
4. I would not buy clothes from an online store.
5. I spend 3 to 4 hours on shopping for clothes.
6. I like to try out clothes and feel the fabric before I buy them.
7. If I can somehow get a trial and a good price then I might buy clothes online as well.
8. I confirm the prices from Google, nearby shops and Saddar before I make my purchase online
9. First I select the products I need, and then I do price comparison.

As seen from the behavior, the interviewees were interested in a certain category if they decided to make an online purchase. Even after deciding for an online purchase they would do their research so that they're certain about the product requirements. And finally after deciding the price they research on prices and make purchase from wherever they get the best price. Even though homeshopping.pk gives the convenience the respondents need, the respondents majorly inclines towards homeshoipnng.pk is because of the high discounts.

The respondent's Experience Map can be expressed in **figure 1**.

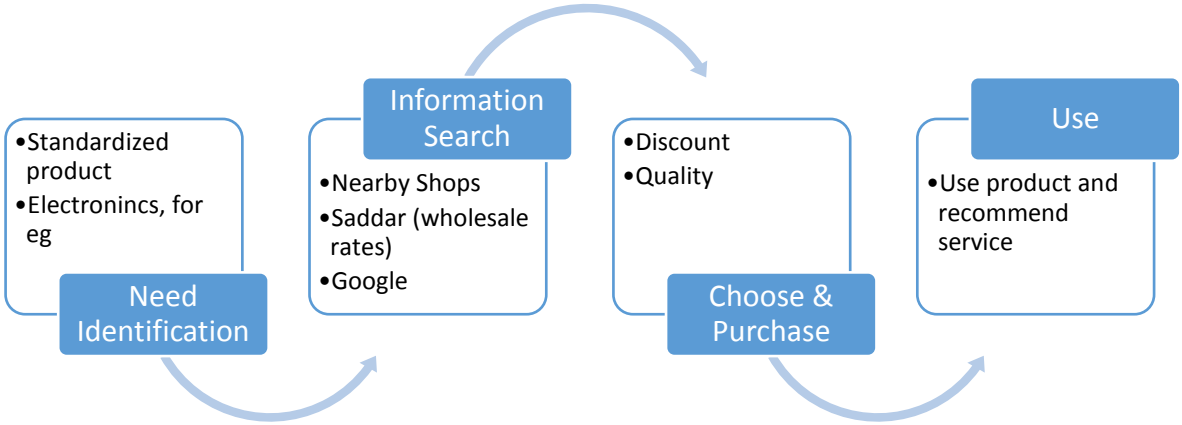


Figure 1

The nature of the product is very specific which prompted the respondents to search for price comparisons. Price economy and discounts prove to be the biggest factor in purchasing online.

Findings from focus group

The number of participant was 5, with their previous online purchases listed below;

- P1 (purchased cell phone Sony Xperia online)
- P2 (purchased t-shirts, laptop, cell phone, shoes)
- P3 (Purchased Nike shoes. jewelry online)
- P4 (Purchased Laptop online)
- P5 (Didn't purchase anything online)

Moderator asked questions which were further intrigued according to the responses of participants a few of the questions are given below:

- How much time do you spend daily on internet?
- How many times did you shop last year? What did you buy?

- How many times did you purchase online in past year?
- What are the attributes that made you buy online?
- What is the worst thing about online shopping?
- How extensive do you search for the products online?
- Comparison of online vs. offline? Why do you prefer one over other?
- How much are you willing to spend online?

Out of the members who took part in our study, 2 were professionals and 3 were students. Their age was between 24-34 years. 1 out of 5 had never purchased online, 1 was frequent buyer and other 3 had only bought 1-2 things in past year but they ranged Rs. 15000-100000.

All the participants on average said they spend 2-3 hours on internet excluding the assignments and professional work. When the moderator asked about how many times they had shopped and what did they buy in last one year, 2 respondents were of the view that they usually buy clothes 2 times a year but more often go for grocery shopping while 1 of the respondent mentioned a list of items that he purchased last year which included (cell phone, tablet, clothes, and shoes). 1 said he only buy clothes whenever he goes for shopping and buys it when it only when needed.

Next, moderator asked regarding the online shopping in the past year? 1 participant bought Mobile Sony Xperia; another was heavy online purchaser who had bought in total 5 items in last year from online shopping (shirt, mobile, laptop cover online). 1 said he has done a lot of online shopping in America but only once in Pakistan i.e. of branded shoes (Nike). One of the participants was pro brick & mortar shopper, said his credit card might get misused. Upon asking about cash on delivery, the respondent said that he did know about this facility but still would

prefer offline because in that he could feel the product. He further added that he could compare easily among the alternatives, so offline is better regardless of the category of product. One of the respondent disagreed with him and said if it's a technology oriented product than it is better to go for online because it's difficult to trust the Saddar[3] mobile market shop, whereas for clothes offline gives the feel of the product.

When the moderator asked the respondents about the factors that will make them buy online, one of the respondents said that friend's recommendation is of much important. Another respondent mentioned there is no uniformity, even the website's like eBay and Amazon sometimes give bad services so some friend's might have had the bad experience on same site. 2 respondents were of the view that if they buy it directly from company's website like Dell or Apple then it would be credible. A Participant mentioned that cash on delivery was the key element in Pakistani market without which he would not even consider online shopping.

Price was another important factor and according to the respondent, the price that homeshopping.pk offered was the cheapest. When the moderator further intrigued the respondents on what would their decision be if the same prices were offered online and offline. 2 respondents said they would prefer online because of convenience. 3 respondents said that they would prefer brick and mortar. They added that only with large discounts and strong return policy, they would consider online shopping.

When the moderator asked what the worst thing about online shopping, the all respondents uniformly agreed that they can't feel and see the product. One of the respondent mentioned that availability issues as sometimes there is a stock out.

[3] Wholesale electronics market in Karachi

When the moderator posed the question, which attributes are most important when you make a purchase either online or offline, 2 said prices and the reliability. 1 responded that he was willing to pay premium for the quality and reliability of the source. Another said he wants value for money. Last one said convenience in the most important factor.

When the respondents were asked to compare brick and mortar with online, on average according to the participants, brick and mortar was high on experience whereas online was high on convenience and comparison between the products.

When asked about different categories that participants would consider for online shopping- all unanimously agreed that they would go for standardized products specifically electronics like cell phones, laptops, tablets. But one of the respondent said he would go for clothes because it's a cheaper item and he wouldn't want to risk a lot of his money. According to our in depth analysis, reliability, cash on delivery and warranty were the most important factors which could motivate a non-buyer to buy from online stores.

Findings from survey questionnaires

Perceptual/Brand Mapping Results

Figure 2 illustrates the perceptual/brand map of electronic products among online shoppers in Pakistan.

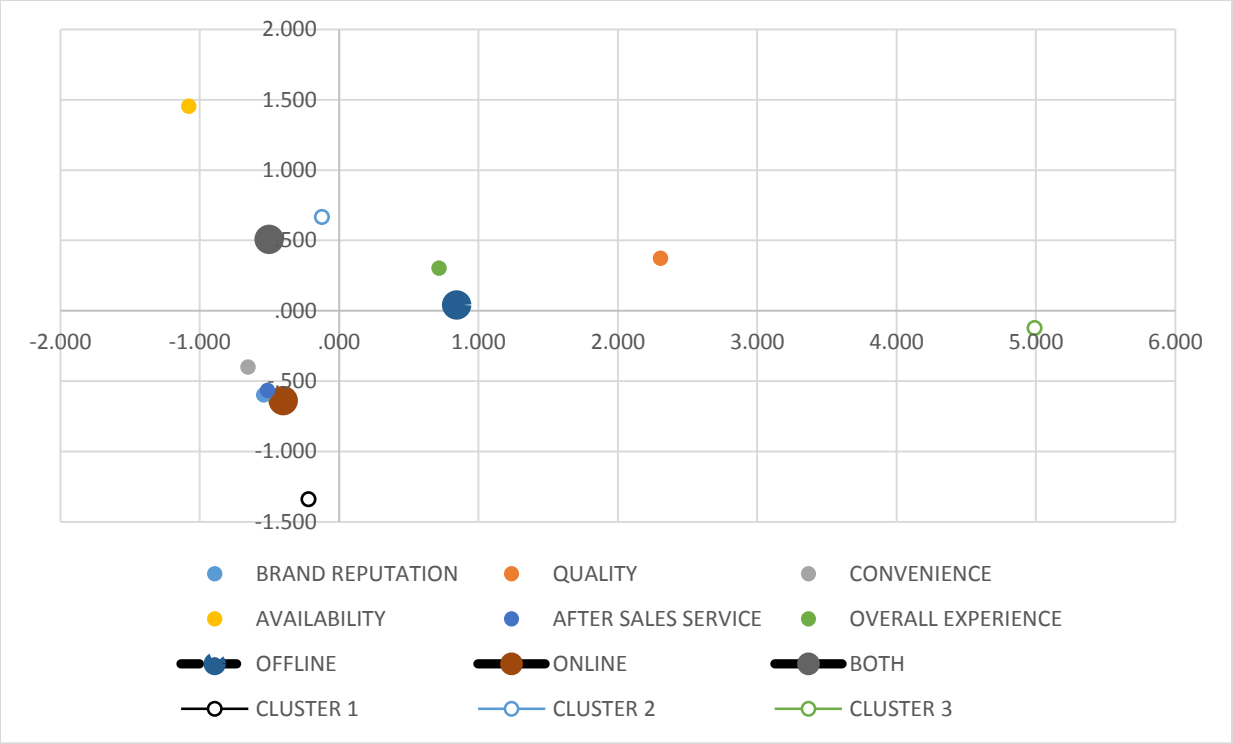


Figure 2

For the online shopping experience, when it comes to electronic products (such as Cell phones, Tablets, Laptops, TV, etc.) shopped through online sites, the typical experience was found coinciding with the following attributes: 1) convenience of shopping, 2) reputation of the store and 3) after sale service. These attributes can serve as the prime motivators for a switching behavior towards online shopping of electronic products. This finding is compatible to our insights drawn through qualitative research, as online shopping was found convenient as it delivered products at home and the product selection process was made highly convenient through digital interface, online stores were comparatively few and reliable as opposed to a plethora of similar stores in brick and mortar markets, and there was a significant amount of doubt about the after sales services through the conventional stores as opposed to online ones.

In terms of the shopping for electronic products through brick and mortar stores it was found that the following attributes sufficiently described the experience: 1) overall shopping experience and 2) quality. It seems that brick and mortar stores still define the traditional delight of shopping which is often enhanced as the shopper is accompanied by friends/or family and often coupled with food consumption. This type of shopping can easily turn into a fun filled outing experience plus the provision of testing products at hand can be a firm boost.

Online shopping being a relatively new platform still lacks trust in the eyes of shoppers in terms of the quality of products. Another reason for this could be the relatively expensive nature of electronic products which demands higher emphasis on quality and testing before the purchase decision is made.

Figure 3 illustrates the perceptual/brand map of clothing products for online shoppers.

Figure 3

The online shopping experience for clothing based products was found related to the following attributes: 1) price, 2) convenience and 3) company reputation. Since online shopping is a newer medium, the trust deficit has to be sufficed with a procedure hooked to company reputation/brand and since the knowledge of online market is limited, the shopping is probably confined to searching within certain brand portfolios.

Clothing product selection is often based on the best design available and hence selecting from a physical outlet can be an exhaustive procedure whereas digital interface and search tools can ease the process. Price is found as an additional attribute relevant to online shopping in comparison to electronic products as clothing purchases are relatively greater in number and volume and as opposed to electronic products the portfolio of products within a single brand can have plenty of options and price ranges which renders price as an important attribute.

The offline shopping experience was found compatible to the following attributes: 1) overall shopping experience, 2) warranty/ return and 3) variety. Clothing products often involve a great emphasis on testing prior to purchase which is not seen as a necessity rather fun activity. In addition to testing, clothing shopping experience can gain immense significance when it is coincided with shopping for special occasions which can be enhanced through peer/family opinions. Clothes can sometimes be needed to be returned, which is easier done through brick and mortar stores than online ones and even if online stores declare such return policies, consumers might hesitate in doing so as it not only overburdens the company but also is a lengthy and uncertain process.

As clothing brick and mortar stores are often found in clusters/ markets variety is amply provided as opposed to online sources where the markets are still in their nascent stages of development. An important psychological barrier involved in this could be that even with sites including a variety of products/brands, they are still perceived as a super store rather a whole market of products.

Segments based on perceptual/brand maps

Convenience Seeker: This segment of our consumers were found to have relatively simpler and selective decision criteria designed to optimize their shopping experience in terms of convenience. This type of consumer is making decision based on convenience, company reputation and after sales services. All these attributes seems to be easing the three stages of shopping, first the company reputation makes the store selection simpler, then the convenient execution of purchase (probably getting products delivered to home/office) can direct shopping procedure and then a reliable after sales service ensures that any product issues are dealt promptly and effectively.

Shopping Enthusiast: These types of consumers were found prioritizing shopping experience and quality over all other attributes. This hints towards the high involvement of this type of consumer as he/she is looking for the best source in terms of providing high quality. In addition to this, the experience of shopping is important as the consumer relishes the shopping as a pivotal component of his/her lifestyle. Another key ingredient in shopping attributes could be variety for this segment. As expressed earlier, shopping is a valued experience for them which do

get more exciting with more variety available (which probably increases the overall time of shopping as well and with it the fun in it).

Value Maximizer: These kinds of consumers are trying to make an optimal purchase decision based on price, convenience and company reputation. They might prefer online shopping as opposed to brick and mortar since they do look for convenience, yet they are doing for significant reasons (of may be time shortage is one) but they do appear to maximizing on price and company reputation as well which suggests that they belong to less affluent financial backgrounds as opposed to 'convenience seekers'.

Figure 4 illustrates segments based on their demographic profiles;

Segments	Demographics	Psychographics	Buying Behavior
Affluent Teenager	1300cc + Car Joint Family (wife, children, parents and unmarried siblings) 15 – 20 Student Matriculation / O-levels	Image Conscious	Offline 20.0% Online 80.0%
Middle Class Graduate	1000cc to 1300cc Car Joint Family (wife, children, parents and unmarried siblings) 21 – 25 Student Graduate	Bargain Hunter	Offline 57.1% Online 42.9%

Figure 4

Segments based on Demographics

Using our respondents' demographic data, we found two main segments, one being an "Affluent Teenager" and another being "Middle Class Graduate". The Affluent teenagers belong to SEC-A+ and currently enrolled in a High school degree program. They are image conscious

and looking at their behavior patterns, they are more probable to buy products online because of high convenience or because buying from online sources is important for them to project an image of being up-to-date on latest shopping trends. On the other hand, the Middle Class graduate belongs to SEC-A, and is currently enrolled in a graduate degree program. He is more inclined towards looking for best deals/offers. Belonging to a relatively mature age, this segment is still more skeptic towards online shopping and probably still believes in the value optimizing potential of brick & mortar store.

Switching Behavior Analysis

Figure 6 illustrates the switching behavior analysis;

<table>
<tr><td></td><td></td><td>Lost

24.25%</td><td>Reject

14.3%</td><td>Resisters

6.05%</td><td>Indifferent

16.25%</td><td>Intend to try

10.6%</td><td>Vulnerable

21.45%</td><td>Loyal

7.15%</td></tr>
<tr><td colspan="9">Formula</td></tr>
<tr><td>Online purchaser</td><td rowspan="2">(Add%)/ 200%</td><td>Definitely would not</td><td>Probably would not</td><td></td><td>Might or Might not</td><td></td><td>Probably would</td><td>Definitely would</td></tr>
<tr><td>Offline purchaser</td><td>Definitely would not</td><td></td><td>Probably would not</td><td>Might or Might not</td><td>Probably would</td><td></td><td></td></tr>
</table>

Brick & Mortar ⟷ Online

The analysis for switching behavior suggests that 7.15% of the overall sample is loyal to online shopping, having bought from online and being completely satisfied from it. While 21.4% seems vulnerable to switch to brick & mortar stores being less satisfied from online shopping experience.

10.6% of our sample had been buying products from brick & mortar but suggest that they do intend to try products online as well. Contrary to that, 6.05% of our sample are found resisting to switch to online shopping having been buying products from brick & mortar till now.

14.3% of our sample was found rejecting the online shopping being largely discontent from online shopping experience. 24.25% of our sample has shown strictly negative evaluations for online shopping either after having tried it or not even willing to try it ever.

Background Working and Statistics

Perceptual/Brand Maps

We have chosen electronic and clothing products to draw brand maps. The reason for selecting clothing and electronics is that our qualitative research had indicated that most of the online shopping was done for clothing and electronic products. Secondly, based on our qualitative research we could estimate that most of the perceptual differences could be aptly explained represented through these two categories of products.

In order to draw the brand maps (for clothing and electronic products), we first used ‘step-wise discriminant analysis with dependent categorical variable of ‘current usage’ data and independent variables of ‘attribute importance’. We used step-wise discriminant analysis to find

the attributes that were significant for both clothing and electronics functions. As a result, we had the coordinate scores for grouping variables as well as attributes.

To find out different segments and plot them on these graphs, we used factor scores of all respondents and performed cluster analysis. The resultant cluster centers served as 'ideal vectors' for the different segments.

Output stats for clothing brand map

Wilks' Lambda

Step	Number of Variables	Lambda	df1	df2	df3	Exact F			
						Statistic	df1	df2	Sig.
1	1	.769	1	2	90	13.505	2	90.000	.000
2	2	.666	2	2	90	10.027	4	178.000	.000
3	3	.621	3	2	90	7.889	6	176.000	.000
4	4	.582	4	2	90	6.752	8	174.000	.000
5	5	.538	5	2	90	6.255	10	172.000	.000
6	6	.475	6	2	90	6.394	12	170.000	.000
7	7	.449	7	2	90	5.910	14	168.000	.000
8	8	.428	8	2	90	5.477	16	166.000	.000
9	9	.411	9	2	90	5.095	18	164.000	.000

Standardized Canonical Discriminant

Function Coefficients

	Function	
	1	2
Q39(clothing products-att imp/price)	-.637	.524

Q40(clothing products-att imp/brand reputation)	-.630	-.403
Q41(clothing products-att imp/warranty)	.929	-.132
Q43(clothing products-att imp/convenience)	-.323	.032
Q44(clothing products-att imp/availability)	.096	-1.213
Q45(clothing products-att imp/variety)	.536	1.440
Q46(clothing products-att imp/after sales service)	-.302	.846
Q47(clothing products-att imp/offers&discounts)	.291	-.842
Q48(clothing products-att imp/overall shopping experience)	.802	.029

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.061[a]	85.5	85.5	.718
2	.179[a]	14.5	100.0	.390

a. First 2 canonical discriminant functions were used in the analysis.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.411	76.398	18	.000
2	.848	14.187	8	.077

Functions at Group Centroids

Q5 (CLOTHING)	Function	
	1	2
1	.385	.539
2	-1.506	-.140
3	.921	-.433

Unstandardized canonical discriminant functions evaluated at group means

Classification Results

		Q5 (CLOTHING)	Predicted Group Membership			Total
			1	2	3	
Original	Count	1	19	5	9	33
		2	4	24	0	28
		3	8	2	22	32
	%	1	57.6	15.2	27.3	100.0
		2	14.3	85.7	.0	100.0
		3	25.0	6.3	68.8	100.0
Cross-validated[b]	Count	1	16	6	11	33
		2	4	24	0	28
		3	12	2	18	32
	%	1	48.5	18.2	33.3	100.0
		2	14.3	85.7	.0	100.0
		3	37.5	6.3	56.3	100.0

a. 69.9% of original grouped cases correctly classified.

b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

c.62.4% of cross-validated grouped cases correctly classified.

Final Cluster Centers

	Cluster		
	1	2	3
Discriminant Scores from Function 1 for Analysis 1	-1.65809	1.19463	.59815
Discriminant Scores from Function 2 for Analysis 1	-.12896	-1.17606	.84798

Number of Cases in

each

Cluster

Cluster	1	31.000
	2	24.000
	3	38.000
Valid		93.000
Missing		.000

Looking at Wilk's Lamda table, the significance level at the end suggests that all the variables are significant. Variance explained using the Eigenvalues table for function 1 is 85.5% and by function 2 is 14.5%. The significance level at the end of Wilk's Lamda table suggests that both the functions are significant. Standardized Canonical Discriminant Function indicates the factor loadings we used as x and y values for all the significant variables defined by the model. These values were plotted on the P-Map to identify the ideal vectors. Functions at group centroids gives out the loadings for usage data used in the discriminant analysis which were placed on the P Map b using the x and y values of group centroids. Classification results show that 62.4% of the cases can be predicted using the model. Numbers of cases are 31 in cluster 1, 24 in cluster 2 and 38 in cluster 3. Results of the cluster analysis we did on the two functions we came up with are shown in the centroid table. These center values of x and y for each cluster was used to plot the clusters on the P-Map.

Output stats for electronics brand map

Wilks' Lambda

Step	Number of Variables	Lambda	df1	df2	df3	Exact F			
						Statistic	df1	df2	Sig.
1	1	.874	1	2	97	7.019	2	97.000	.001
2	2	.702	2	2	97	9.297	4	192.000	.000
3	3	.668	3	2	97	7.071	6	190.000	.000
4	4	.632	4	2	97	6.063	8	188.000	.000
5	5	.611	5	2	97	5.197	10	186.000	.000
6	6	.587	6	2	97	4.681	12	184.000	.000

Number of Cases in each Cluster

Cluster	1	32.000
	2	65.000
	3	3.000
Valid		100.000
Missing		23.000

Classification Results[a,c]

		Q8 (ELECTRONICS)	Predicted Group Membership			Total
			OFFLINE	ONLINE	BOTH	
Original	Count	OFFLINE	17	3	15	35
		ONLINE	0	18	12	30
		BOTH	0	5	30	35
	%	OFFLINE	48.6	8.6	42.9	100.0
		ONLINE	.0	60.0	40.0	100.0
		BOTH	.0	14.3	85.7	100.0
Cross-validated[b]	Count	OFFLINE	15	4	16	35
		ONLINE	0	18	12	30
		BOTH	0	5	30	35
	%	OFFLINE	42.9	11.4	45.7	100.0
		ONLINE	.0	60.0	40.0	100.0
		BOTH	.0	14.3	85.7	100.0

a. 65.0% of original grouped cases correctly classified.

b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

c. 63.0% of cross-validated grouped cases correctly classified.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.587	50.349	12	.000
2	.820	18.765	5	.002

Functions at Group Centroids

Q8 (ELECTRONICS)	Function	
	1	2
OFFLINE	.844	.041
ONLINE	-.400	-.639
BOTH	-.501	.507

Unstandardized canonical discriminant functions evaluated at group means

Final Cluster Centers

	Cluster		
	1	2	3
Discriminant Scores from Function 1 for Analysis 1	-.21939	-.12236	4.99142
Discriminant Scores from Function 2 for Analysis 1	-1.33954	.66518	-.12379

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.397[a]	64.4	64.4	.533
2	.220[a]	35.6	100.0	.424

a. First 2 canonical discriminant functions were used in the analysis.

Looking at Wilk's Lamda table, the significance level at the end suggests that all the variables are significant. Variance explained using the Eigenvalues table for function 1 is 64.4% and by function 2 is 35.6%. Looking at Wilk's Lamda, the significance level at the end suggest that both the functions are significant. Standardized Canonical Discriminant Function indicates the factor loadings we used as x and y values for all the significant variables defined by the model. These values were plotted on the P-Map to identify the ideal vectors. Functions at group centroids gives out the loadings for usage data used in the discriminant analysis which were placed on the P Map b using the x and y values of group centroids.

Classification results show that 63% of the cases can be predicted using the model. Results of the cluster analysis we did on the two functions we came up with are shown in the centroid table. These center values of x and y for each cluster were used to plot the clusters on the P-Map.

Numbers of cases are 32 in cluster 1, 65 in cluster 2 and 3 in cluster 3.

Demographics profiles

SEC Clusters:

Final Cluster Centers

	Cluster	
	1	2
Q78(vehicle owned)	4	3
Q79(family info)	2	2
Q80(age)	1	2
Q82(employment status)	3	2
Q85(level of education)	1	3

Number of Cases in each Cluster

Cluster	1	5.000
	2	28.000
Valid		33.000
Missing		28.000

CROSS TAB SEC CLUSTERS WITH USAGE DATA:

Cluster Number of Case * Q5 (CLOTHING) Crosstabulation

			Q5 (CLOTHING)		Total
			1	2	
Cluster Number of Case	1	% within Cluster Number of Case	20.0%	80.0%	100.0%
		% within Q5 (CLOTHING)	5.9%	25.0%	15.2%
		% of Total	3.0%	12.1%	15.2%
	2	% within Cluster Number of Case	57.1%	42.9%	100.0%
		% within Q5 (CLOTHING)	94.1%	75.0%	84.8%
		% of Total	48.5%	36.4%	84.8%
Total		% within Cluster Number of Case	51.5%	48.5%	100.0%
		% within Q5 (CLOTHING)	100.0%	100.0%	100.0%
		% of Total	51.5%	48.5%	100.0%

SEC CLUSTERS DISCRIMINANT ANALYSIS WITH PSYCHOGRAPHICS:

Group Statistics

Cluster Number of Case		Mean	Std. Deviation	Valid N (listwise)	
				Unweighted	Weighted
1	Q73(no time due to hectic schedule)	4.20	.447	5	5.000
	Q74(image conscious)	4.40	1.342	5	5.000
	Q75(switch brands on price)	2.40	.894	5	5.000
	Q76(best value seeker)	4.40	1.342	5	5.000
2	Q73(no time due to hectic schedule)	3.64	1.471	28	28.000
	Q74(image conscious)	3.07	1.676	28	28.000
	Q75(switch brands on price)	4.14	1.113	28	28.000
	Q76(best value seeker)	4.21	1.134	28	28.000
Total	Q73(no time due to hectic schedule)	3.73	1.376	33	33.000
	Q74(image conscious)	3.27	1.682	33	33.000
	Q75(switch brands on price)	3.88	1.244	33	33.000
	Q76(best value seeker)	4.24	1.146	33	33.000

Classification Results[a,c]

		Cluster Number of Case	Predicted Group Membership		Total
			1	2	
Original	Count	1	5	0	5
		2	3	25	28
		Ungrouped cases	10	18	28
	%	1	100.0	.0	100.0
		2	10.7	89.3	100.0
		Ungrouped cases	35.7	64.3	100.0
Cross-validated[b]	Count	1	4	1	5
		2	4	24	28
	%	1	80.0	20.0	100.0
		2	14.3	85.7	100.0

a. 90.9% of original grouped cases correctly classified.

b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

c. 84.8% of cross-validated grouped cases correctly classified.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.552	17.236	4	.002

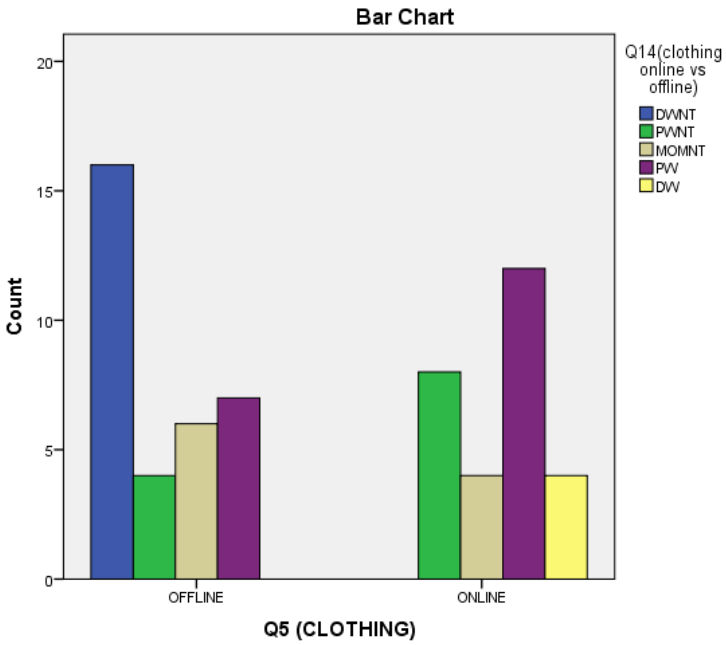
To find out the dominant demographic profiles of our sample, we used cluster analysis with the demographic variables. A number of iterations were done to find out the significantly different set of segments based on demographic profiles. In order to better understand the life style and attitudes of these segments, we ran 'discriminant analysis' for these clusters with independent variables as 'psychographics'. Using groups means we could further expand the description for initially found demographics based clusters with lifestyle information.

Further to analyze the usage behavior of these segments, we cross tabulated these clusters with current usage data. Again, the above analysis was repeated until two significantly different segments in terms of demographics, lifestyles and behavior could be identified. For this analysis we only used clothing data as the initial brand maps and our qualitative research indicated significant differences of perceptions related to online and brick and mortar stores for clothing products. Secondly, since we were using demographics as segmenting variables, theoretically we could expect a similar set of lifestyles and behavior.

Switching behavior

Q5 (CLOTHING) * Q14(clothing online vs offline) Crosstabulation

			Q14(clothing online vs offline)					Total
			DWNT	PWNT	MOMNT	PW	DW	
Q5 (CLOTHING)	OFFLINE	Count	16	4	6	7	0	33
		% within Q5 (CLOTHING)	48.5%	12.1%	18.2%	21.2%	0.0%	100.0%
		% within Q14(clothing online vs offline)	100.0%	33.3%	60.0%	36.8%	0.0%	54.1%
		% of Total	26.2%	6.6%	9.8%	11.5%	0.0%	54.1%
	ONLINE	Count	0	8	4	12	4	28
		% within Q5 (CLOTHING)	0.0%	28.6%	14.3%	42.9%	14.3%	100.0%
		% within Q14(clothing online vs offline)	0.0%	66.7%	40.0%	63.2%	100.0%	45.9%
		% of Total	0.0%	13.1%	6.6%	19.7%	6.6%	45.9%
Total		Count	16	12	10	19	4	61
		% within Q5 (CLOTHING)	26.2%	19.7%	16.4%	31.1%	6.6%	100.0%
		% within Q14(clothing online vs offline)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	26.2%	19.7%	16.4%	31.1%	6.6%	100.0%



To determine the switching behavior among our sample, we cross tabulated 'current usage' variable with 'disposition variable'. The disposition question was regarding the intention to buy products from online as opposed to brick and mortar stores and correlating it with the current usage could tell us about the inclination of brick and mortar purchasers to switch to online and vice versa.

Discussion

The following was analyzed from the perceptual maps drawn using quantitative tools. When it came to electronic products (such as cellular phones, tablets, laptops and televisions) shopped through online sites, the typical experience was found coinciding with the following attributes: 1) convenience of shopping, 2) the reputation of the store, 3) after sales service. In terms of the shopping for electronic products through brick and mortar stores it was found that the following attributes sufficiently described the experience: 1) overall shopping experience 2)

quality of purchase. For clothing based products (such as clothes, shoes, and clothing accessories) the online shopping experience was found related to the following attributes: 1) price 2) convenience 3) company reputation. The offline shopping experience was found compatible to the following attributes: 1) overall shopping experience, 2) warranty/ return, 3) variety.

The segments were divided into two categories, namely affluent teenagers, middle class graduates. The demographics of the affluent teen was that he/she was a student, aged 15 to 20 years, and had 1300cc+ car at his/her home. On the perceptual map, this segment gave weightage to attributes like exclusivity and brand image. This segment preferred shopping for electronics online, but for clothing preferred brick & mortar. The Middle class graduate was mostly working while studying part-time, was aged 21-25 and had car of 1000cc to 1300cc at his/ her home. This segment was primarily a bargain hunter because of its relatively lesser disposable income. This segment also preferred purchasing online as opposed to brick & mortar because online stores were able to give the best possible price. For clothing, this segment preferred brick & mortar for the better price.

As per our analysis, the experience expected from both the medium is different. For purchasing a commodity offline, the customer would rate the overall shopping experience higher as opposed to convenience. Now we had to establish that what type of goods would be preferred online as opposed to through brick & mortar, and vice-versa.

Appendix

Questionnaire

Note: Online means consumers who prefer to buy goods on the internet. Offline means consumers prefer to buy goods at brick and mortar store.

Q1. How often do you use the internet every day?

- Less than 1 hour
- 1 -2 hours
- 2-3 hours
- 3-4 hours
- More than 4 hours

Q2. How many times have you shopped the following during last year?

	Online	Offline	Have Not Shopped
Beauty care (cosmetics, jewelry, shavers etc.)			
Books and magazines			
Gifts, games and toys			
Clothing and clothing accessories (includes			

footwear)			
Computer Products			
Cell phones and tablets			
Electronics and home appliances (including camera and watch)			
Replicas (1st copy)			
Others			

Q3. How often do you use Internet for information prior to a purchase?

	Very Often	Often	Sometimes	Rarely	Never
Beauty care (cosmetics, jewelry, shavers etc.)					
Books and magazines					
Gifts, games and toys					
Clothing and clothing accessories (includes footwear)					
Computer Products					
Cell phones and tablets					
Electronics and home appliances (including camera and watch)					
Replicas (1st copy)					

Others					

Q4. How important are the following attributes in your decision to purchase goods? (1 being less important, 5 being more important)

	1	2	3	4	5
Price	◉	○	○	○	○
Reputation of the company	◉	○	○	○	○
Guarantees and Warranties	○	○	○	○	○
Product quality	○	○	○	◉	○
Convenience	○	○	○	○	○
Availability of new products					
Variety	○	○	○	○	○
After sales service and technical support	○	○	○	○	○
Offers and discounts	◉	○	○	○	○
Overall Shopping Experience	◉	○	○	○	○

Q5. Your willingness to buy the following online as opposed to offline

	Offline				Online
	1	2	3	4	5
Beauty care (cosmetics, jewelry, shavers etc.)					
Books and magazines					
Gifts, games and toys					
Clothing and clothing accessories (includes footwear)					
Computer Products					
Cell phones and tablets					
Electronics and home appliances (including camera and watch)					
Replicas (1st copy)					
Others					

Q6. Rate the following statements on the scale of 1 to 5 as they describe the two shopping experiences (1 being strongly disagree and 5 being strongly agree):

Statement	Offline	Online
Great variety of products is available		
Prices are reasonable		
Convenient		

Highly reliable product quality		
Provides a fun filled shopping experience		
Gives good after-sale service and technical Support		
Good offers and deals are available		
New Products are easily available		
Provide guarantee and Warranty of Product		

Q8. Which of these statements best describe your feeling/opinion about online shopping for the following categories? Overlap with Qs 5

Categories	Only buy from online	Would consider buying online	Would like to try shopping online	Would shop online if I had to	Would never consider buying online
Beauty care (cosmetics, jewelry, shavers etc.)					
Books and magazines					
Gifts, games and toys					
Clothing and clothing accessories (includes footwear)					
Computer Products					
Cell phones and tablets					
Electronics and home appliances					

(including camera and watch)					
Replicas (1st copy)					
Others					
Beauty care (cosmetics, jewelry, shavers etc.)					

9. Below is the list of statements that may or may not be used to describe you in general. Using the scale below please indicate how you would respond to these statements:

	Strongly Disagree	Disagree	Neither	Disagree	Strongly Agree
I try to stay current on latest technological products	○	○	○	○	○
I read reviews of products before I make a purchase	○	○	○	○	○
Shopping is a fun experience with friends and family	○	○	○	○	○
Opinions of friends and family matter for my purchases	○	○	○	○	○
I don't spend much time shopping due to hectic schedule	○	○	○	○	○
I have to have latest products in my friends circle to maintain my image	○	○	○	○	○

I will switch brands based on prices					
I am constantly looking for best value for moneys					
I look for replica products for highly expensive brands					

10. Does anyone in your home own the following (tick as many as apply, and state the quantity):

- Motorcycle ___
- Up to 1000cc car ___
- 1300cc or 1300cc+ car ___
-
-

11. Family Information

- Nuclear Family (wife and children)
- Joint Family (wife, children, parents and unmarried siblings)
- Extended Family (multiple families and parents)

12. Personal Information

AGE:

- 15 – 20
- 21 - 25
- 26-30
- 31 and Above

12. Gender:

- Male
- Female

13. Occupation:

Which of the following describes your employment status?

- Full - Time
- Part - Time

- Retired
- Student
- Homemaker
- Unemployed

14. Are you:

- Single, separated, divorced, widowed
- Married, living as married

15. Which of the following best represents the last level of education that you completed:

- Matriculation / O-levels
- F.Sc./ A-levels (college)
- Graduate
- Post Graduate