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Determining channel choice and usage intention in a B2C multi-channel environment: A study of Iranian small home appliances manufacturer, Parskhazar Company

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ABSTRACT

Customer channel choice is a critical subject in a multichannel management context. It is important for managers to understand why customers choose a particular shopping channel and how they decide which channel to use. The main goal of this research is investigating the role of channel characteristics as determinant factors of customer channel selection and usage intention in Parskhazar Company. Findings indicate that channel value has the most effect on channel usage intention. Although results refused a direct effect of Perceived channel price on channel price on customer channel choice and usage intention. In terms of managerial implications, since in our research a direct relationship between perceived channel price and channel usage intention was not proved, the price differentiation policy during their distribution channels can be used in this industry without any problem by charging extra cost in one special channel. Finally, results show that in developing online sales, which are one of the Parskhazar strategic goals, the online purchasing process should be facilitated for Parskhazar customers.

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Introduction

Tele:

Online shopping.

These days, dealing with customers across the multiple channels along with coping with the current competitive market environment is considered to be important subjects for continued enterprise growth (Venkatesan, Kumar, and Ravishanker 2007). In recent years, multi-channel shopping has gained huge growth (Neslin and Shankar, 2009) and will grow more rapidly in future. By channel, we mean an intermediate through which the company and the customer act with each other (Neslin, et al. 2006). Our emphasis in this study is basically on a customer-centric channel approach, rather than a supplier-centric one which is normally discussed in Supply Chain Management area.

In general, these channels can be categorized as: Internet, call centers, ATM, home shopping, catalogues, as well as a physical stores (Neslin, et al. 2006). But from this wide range of shopping channels, store is more common than the others .Vast popularity of Internet in distribution channels has encouraged large number of firms to use online shopping as an additional shopping channel (Wolk and Shkiera, 2009). Companies for number of reasons can select multiple channel strategy. They can choose this strategy in response to high competition in the market, reducing transaction costs, expanding market coverage, gaining legitimacy with key stakeholders, increasing customer loyalty and firm profitability (Wallace, Giese, and Johnson 2004).

The main purpose of this research is to explore the channel attributes as determinant factors of channel choice and usage intention in Parskhazar Company.

From the company's view point, understanding the reasons why the customers choose a particular shopping channel and the reason for switching between different channels in a multichannel retail operation is worthwhile in minimizing the probable pitfalls of the multi-channel retailing strategies and to maximize the synergies of multi-channel shopping strategies (Yu et al 2011).We have to pay enough attention to why, how, and when a particular customer use a specific channel for shopping or browsing. In order to address the buyers' specific needs and coverage their wide range of expectations, every company has to understand the behavior of their customers.

Literature Review

Multi-channel customer management:

To investigate the behavior of the customers in a multichannel is an important issue. Unlike the traditional researches in the distribution channels context that their focuses were on the firm and distributor, multi-channel customer management is a customer-centric marketing function (Neslin et al, 2006). Literature talked about the new generation of customers who want anything, anytime and in any place (Schoenbachler and Gordon, 2002). Nowadays, the old way and the traditional models to treat customers, consistently have failed (Schoenbachler and Gordon, 2002) and multi-channel system can meet the desire of the customers for what they want, how they want and when they want (Pookulangara et al.2011).

Because each type of channel has a special structure whose abilities to perform various services and providing customers' needs differentiate, therefore in recent years firms use a wide range of channels to treat their customers (Bucklin, et al. 1996,as cited in Wallace et al,2004).

Multi-channel shopping versus single-channel shopping

To proceed with our study goal- customer channel choice now it is the proper time to glance at the segmentation of multichannel shoppers versus single-channel shoppers. Based on the number of channels that a particular client uses for search and

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purchase of goods, researcher segmented customers into two main groups: the "multi-channel customer" and "single-channel customer" (Neslin and Shankar, 2009). Trends in customer behavior show that cross-shoppers who use multiple channels of a particular supplier in shopping process, form an important part of the firm's entire customers (Dholakia et al 2005). By summarizing the previous literature, Neslin and Shankar (2009), stated that customers have huge differences in intrinsic preferences for channels. For instance, those customers may use certain channel due to short-term convenience. Kushwaha and Shankar (2008, as cited in Neslin and Shankar, 2009) illustrated that customers differ on their channel usage. This reality can be the base of understanding of the multi-channel shoppers' attitude. Kumar and Venkatesan (2005) defined "multi-channel shoppers" as those customers who make their purchases in more than one shopping channel in an observed period of time. Neslin and Shankar (2009) revealed that the equity of multi-channel customers is higher than single channel shoppers. Multi-channel shoppers are more loyal than single-channel shoppers. This group of customers also is more profitable than single channel customers (Kumar and Venkatesan, 2005). Loyalty of this group of customers can be measured by share of wallet and the likelihood of the customers being more active in interaction with the firm. They are more loyal and more profitable, possibly because they are aware of options available to them and purchase products in the methods which are most convenient to them (Kumar and Venkatesan, 2005).

Customer channel choice

The proliferation of sales channels makes it necessary for companies to understand how customers think and decide which channels to use (Valentini et al 2011). One potential benefit of this understanding is that companies can adjust their channel strategies to enhance customer value through impressive multichannel customer management (Neslin et al 2006). Understanding the customer requirements includes respecting the customer channel preference which means if a customer prefers to buy trough one particular channel (e.g. store), he or she should not be forced to buy from another channel such as online channel (Schoenbachler and Gordon 2002). In the case of channel choice, Baker et al (2002) claimed that the selection process is influenced by: customer factors (e.g. demographics, motivation, shopping orientations, experience), product factors (e.g. complexity, diversification, and product category risk), supplier's factors (e.g. reputation, merchandise, service, and price level), channel factors (e.g. channel accessibility, efficiency, channel risk) and situational factors such as weather, moment of day, time pressure. Although the majority of academic studies in relation to the channel choice have mainly focused on the customer characteristics, channel characteristics and product category, but situational variable and customer's prior experience have been argued as determinants of customer channel choice in recent years. Another channel choice study has considered customers' price expectations, the product group, and convenience, as factors that may create a specific selection among shopping channels or stores (Thomas and Sullivan 2005).

By collecting Valentini et al (2011), Blattberg et al (2008) and Neslin et al (2006), studies six groups of factors that determine customer channel choice can be categorized as: Marketing efforts, Situational factors, Customer factors or individual differences, Customer previous experiences, Product category, Channel attributes

In addition to these mentioned elements, customer channel choice in the multi-channel setting is also driven by customer price expectations of a particular channel, customer perceptions of switching cost, channel efficiency concerns, risk aversion concept and geo-demographic attributes of the customers (Dholakia et al 2010). They also asserted that different customers have different preferences and evaluation for different shopping channels. As mentioned earlier, six major factors which can affect channel choice are marketing communications, situational factors, individual differences, customer previous experiences, product category and channel attributes. Since in the literature survey we found that different authors described these factors indifferently, therefore it seemed we should extend our research in order to find out whether channel attributes is the only factor that influence channel choice or other factors are influential.

Conceptual Framework

Many studies referred to the quality, price and value as determinates of shopping behavior on product or store choice (Chen And Dubinsky 2001; Teas and Agarwal 2000; Cronin et al 2000; Baker et al 2002; Montoya -Weiss et al 2003; Voss et al 1998).Based on the modification of a very authentic model in this regard Zeithmal (1988), and incorporating ideas of Baker et al (2002) and Montoya -Weiss et al (2003), a suitable model for channel selection criteria was developed by Yu et al (2011). This model has successfully presented these dimensions (quality, price and value) as determinants of customer channel choice and usage intention. Zeithaml's (1988) model focuses merely of product quality evaluation. But in customer channel choice context consumers engage to evaluate both service quality and merchandise quality (Baker et al 2002). In the Yu et al (2011) model, perceived channel quality which includes "quality of service" and " quality of merchandise " has been adapted from Baker et al (2002) model describing how the environment of stores and boutiques selection criteria influence store and intended customer usage (Yu et al 2011). The "hedonic values" as the first criteria in the case of perceived channel value, was adapted from the work of Mathwick et al (2001). The concept of "utilitarian values" was generated from Noble et al (2005). Finally "monetary price" and "non-monetary price" were selected from Baker et al. (2002).





The main goal of this research is to determine the customer channel choice in a multi-channel environment and to this end we must develop or apply a proper model to cover this objective. After a comprehensive review of literature we ultimately reached to this conclusion that we should apply Yu et al (2011) model for investigating the determinants of channel choice. The reasons are: (a) this model combines a broad range of channel attributes as the channel choice criteria such as channel quality, channel price and channel value. (b) It examines all relationships between the channel attributes and channel usage intention, relating it to both purchase and information search context simultaneously. (c)This model was developed to investigate the customer channel choice for purchasing products in a B2C environment which is exactly similar to our research context. In current study we did a small modification in Yu et al (2011) model. We could not find a meaningful and logical direct relationship between the perceived channel quality and channel usage intention. Likewise, we could not find a meaningful and logical relationship between the perceived channel price and perceived channel value, therefore we omitted related hypothesis in this regard. Figure 7 represents the modified Yu et al (2011) model which we chose as our conceptual model.

Data Analysis

Data collection

From almost 7000 emailed link, during first 9 days, a total of 838 surveys were returned, but after eliminating the unusable responses, 780 responses were coded and used for the preliminary data analysis so response rate included in the data analysis resulted in 11%.

Respondent Characteristics

A majority of respondents had some college education or higher (51%), and were married (74.7%). In the entire sample, 75.5% of respondents were men and 24.5% were women. Of the 98.2% reporting an age 20 and over, 57.8% were middle-aged (i.e., 30 - 50). The household incomes of respondents ranged from middle to high levels with 13.3% and most of respondents have particularly high annual income.

The results of exploratory factor analysis

With 40 items relating to the 8 constructs include Perceived Monetary Price (PMP), Perceived Non-Monetary Price (PNP), Perceived Service Quality (PSQ), Perceived Merchandise Quality (PMQ), Perceived Hedonic Value (PHV), Perceived Utilitarian Value (PUV), Information Search Usage (ISU) and Multichannel shopping (MUS); EFA was performed., it was found that a number of variables were poorly loaded. Those items double-loaded on the factors may create error covariance of misspecification parameters in CFA, and those variables should be eliminated. This may help to decrease standard errors as well as error covariance in this specific study. Consequently, a total of 8 items of customer channel usage intention was utilized for EFA. The Bartlett test of sphericity, which examine the significant of correlations indicates that the Chi-square was 9085.59 ($d_f = 780$) with a significance of p <.001. The measure of sampling adequacy (MSA), which analyzes a degree of inter correlations, results was 0.85. Basically, these examinations confirmed that since the initial analysis was not acceptable, further factor analysis was possible. After deleting the items in which had poor loadings, The Bartlett test of Sphericity indicates that the Chi-square was 3818.967 (d_f =153) with a significance of p <.001. Thus all of the factor loadings were over .60.

Descriptive analysis of measurement scales

The results of descriptive statistical analysis for the channel usage related items are presented in the following Table. This measurement scale consisted of 18 items reflecting the Perceived Channel Price (PCP), Perceived Channel Quality (PCQ), Perceived Channel Value (PCV) and Channel Usage Intention (CUI). Respondents were asked to provide answers on each item that was measured by a five point Likert scale ranging from 1 being Strongly Disagree to 5 being Strongly Agree. Based on the mean score of each item, respondents tended to strongly agree that make a special effort to choose very good quality products has more important than comparing product

quality across retailers to get the higher quality. At the same time and about perceived service quality items, receiving prompt service from employees has highest mean comparing those three items such as get helpful assistance, easily find/contact employees and have flexible delivery option. Accordingly, comparing prices of different retail channels and concerned about low prices and equally concerned about product quality in turn, have higher importance than perceived non-monetary price such as purchasing small home appliances products and feeling unpleasant with physical efforts and personal interactions. About the role of perceived channel value item, the results of descriptive analysis shows that, Perceived Utilitarian Value (PUV) items such as ordering products through the Internet and waiting and online shopping method has more impact than Perceived Hedonic Value (PHV) in which in turn have lower impact. They are include feeling the excitement feeling escape and make a sense of leisure. About channel usage intention concept, willing to compare brands or products has more important than willing to search for information. And at last, shop back and forth between several different channels has lowest impact on channel usage intention comparing with others.

Validity and reliability of Measurement Scales Reliability

As an initial examination of the reliability for the measurement scales for the eight constructs proposed in this study, the Cronbach's alpha coefficients were calculated in SPSS 21.0. All of the measurement scales for the constructs gain an acceptable level of a coefficient alpha above 0.70, indicating that the measurement scales are reliable and appropriate for further data analysis. As another measure of reliability, the Average Variance Extracted (AVE) measure was also calculated. This measure represents the total amount of variance in the indicators have been accounted. Instruction-level threshold value must build 0.50 (Hair et al, 1998) statistics. In this study, the variance extracted for all constructs satisfying values (0.654 to 0.861) than the recommended level of 0.50. Considering all above coefficients, the model has high construct validity. Using Composite reliability, the reliability of the items comprising each dimension could be calculated. In this manner, for each scale and based on the Reykov (rho) statistics, all of the reliability metrics assess. The decision about acceptance level in the method is similar to Alpha Cronbach. But accuracy and error coefficients in this method are almost improved. Reliability and validity of the results of all measurements are shown in the below tables. Table 3, describe the results of convergent validity and three indices of reliability tests. Accordingly, Table 4, also revealed the main results of discriminant validity.

Construct Validity

Construct validity deals with the adequacy of a scale as a measure of a specific variable. Construct validity is made of convergent and discriminant validity will be reported along with the results of confirmatory factor analysis, since CFA can produce empirical evidence of construct validity.

About discriminant validity, since all AVE indices were greater than certain square of correlations, so the discrimination validity in about exogenous and endogenous variables is acceptable.

In order to assess the overall Concurrent validity of the constructs, correlation analysis was performed on the eight key constructs of this study. The results shows that all correlations were significant at p < 0.01 level with the greatest correlation coefficient of 0.26 and the smallest of - 0.13. The results also

did not signal a possible multi collinearity problem among the constructs.



Figure 2: Results of SEM analysis for the entire sample Testing the hypothesized model

Structural Equation Modeling

This study adopted structural equation modeling in testing the hypotheses because SEM has been applied in testing hypotheses about relationships among observed latent variables. Particularly, SEM has been considered as a way of testing a specified theory about relationships between theoretical constructs (Jöreskog and Sorbom 1993). The primary objectives of this study were to develop a theoretical model of customer channel choice and to empirically test the interplay of relationships among the following constructs: 1) Perceived Channel Price (PCP), 2) Perceived Channel Quality (PCQ), 3) Perceived Channel Value (PCV), 4) Channel Usage Intention (CUI). In testing the proposed hypotheses for this study, an initial theoretical structural model was examined with one exogenous constructs and three endogenous constructs, as presented in following figure. A total of 18 observed indicators (4 for exogenous constructs and 15 for endogenous constructs) were used to measure these four research constructs. This study comprised three Gamma parameters to be estimated and one Beta parameters to be estimated. Each of parameters to be estimated represents one of the proposed research hypotheses in this study. Consequently, the initial structural equation model with one Gamma paths and three Beta paths was tested using the LISREL program for structural equation modeling (SEM). Unlike the analysis of the overall measurement model, the entire sample (N=780) was included to examine this initial theoretical structural model.

The review of the initial theoretical structural model revealed that the Chi-square value was 62.87 with 16 degrees of freedom (p < 0.001). The result of divide of the λ^2/d_f is equal to 3.92 (0<4.0) which is acceptable on large number of sample size. This result indicated that the theoretical model was acceptable as a well-fitting model to the data. This indicated that the proposed model was estimated carefully. However, given the known sensitivity of the Chi-square test to the sample size (Bollen and Long, 1993; Byrne, 1998), other goodness-of-fit indices have been suggested to help model evaluation (Bentler, 1990; Jöreskog and Sörbom, 1993). Because the sample size for this study was 780 cases, the use of the Chi-square value provides little guidance in determining the extent to which the proposed model fits the data (Byrne, 1998). Review of goodness-of-fit statistics revealed that the initial theoretical model fit the data somewhat well (GFI = 0.96, AGFI = 0.91, CFI =0.80, RMSEA = 0.086, PGFI = 0.43, and PNFI = 0.43).

Fitness indices and structural coefficient for the base model is presented in following table.

The hypotheses were tested through analyzing the t-values at a significance level of 0.05. Of the twelve proposed hypotheses, one was not supported by the data, whereas only one hypothesis was not supported.

Total indirect effect assessment

In order to better understand the total influence of the exogenous factor on the endogenous factors, both direct and indirect effects were investigated. Indirect effects represent the influence of the exogenous factors on an endogenous factor as mediated by one or more intervening factors; they are derived by Preacher and Hayes methodology(Preacher and Hayes, 2008). Below table shows the total effects (direct and indirect effects) of the predictors of customer channel usage intentions.

Based on the above table, perceived channel quality appeared to have a strongest impact on customer channel usage intentions (0.26). The effect of perceived service quality on purchase intentions can be explained as one of the items refers to the aspect of reliability/fulfillment (i.e. keeping promises), which plays a dominant role (Parasuraman and Grewal 2000; Parasuraman et al. 2005; Wolfinbarger and Gilly 2003). Accordingly total effect of PCP on CUI is equals to 0.23. Although the results of the SEM shows insignificant direct effect of PCP on CUI, but based on Preacher and Hayes method, consider significant indirect effect of PCP as an independent variable.

Discussion

The research question discussed about the main factor which influences Parskhazar's customers channel usage intention in both searching and purchasing processes. Our findings demonstrate that perceived channel value has the most effect on channel usage intention and is the best predictor element in this regard. Perceived channel price and perceived channel quality have shown an indirect effect on customer channel selection in our study. In other words we have not been able to find a direct effect of these factors on the channel usage intention but indirectly they influence on customer channel choice and usage intention, through the perceived channel value. This means the perceived channel value plays a mediating role in this regards. In terms of channel attributes the most important predictor has been perceived non-monetary price followed by hedonic and utilitarian values. Perceived service quality, perceived monetary price and perceived merchandise quality are important predictor, respectively.

The results of the present study show that although perceived channel price indirectly influences customer channel through perceived channel quality and perceived channel value, the direct influence of channel price on customer channel choice and usage intention has been rejected.

This result confirmed the Yu (2011) findings and did not support other studies that indicate perceived channel price as the leading factor of choice among the channels in multichannel context such as: Motoya-Wiess et al (2003) and Thomas and Sullivan (2005).The findings of our study showed that Parskhazar's customers channel choice and channel usage intention are mainly determined by the perceived channel quality-price-value with an emphasis on the shopping channel attributes. Thus, Parskhazar's managers can manage their customer channel choice and usage intention by improving channel attributes based on Parskhazar's multi-channel distribution strategies.

variables	PSQ	PMQ	PMP	PNP	PHV	PUV	ISU	MUS
PSQ1	.888							
PSQ2	.870							
PSQ3	.826							
PSQ4	.803							
PHV1		.890						
PHV2		.876						
PHV3		.835						
ISU1			.892					
ISU2			.866					
PUV1				.852				
PUV2				.763				
PMQ1					.857			
PMQ2					.783			
PNP1						.818		
PNP2						.795		
PMP1							.912	
PMP2							.631	
MUS								.914

Table 1: The final results of EFA analysis

Table 2: Means, standard deviations, and mean differences

variables	m	ean	Std Deviation t student	Sig. Moon Difference	95% Confidence Interval of the Difference			
variables	Statistic	Std. Error	Std. Deviation	t-student	(2-tailed)	Mean Difference	Lower	Upper
PMQ1	4.82	0.02	0.43	223.36	0.00	4.82	4.78	4.86
PMQ2	4.80	0.02	0.43	222.92	0.00	4.80	4.76	4.84
PSQ1	3.98	0.05	0.95	83.59	0.00	3.98	3.89	4.07
PSQ2	3.89	0.05	0.97	80.10	0.00	3.89	3.79	3.98
PSQ3	3.80	0.05	1.00	76.07	0.00	3.80	3.70	3.89
PSQ4	3.64	0.05	1.04	69.97	0.00	3.64	3.53	3.74
PMP1	4.30	0.05	1.07	80.81	0.00	4.30	4.20	4.41
PMP2	4.70	0.03	0.64	146.88	0.00	4.70	4.64	4.77
PNP1	3.92	0.06	1.23	63.73	0.00	3.92	3.80	4.04
PNP2	3.00	0.07	1.44	41.63	0.00	3.00	2.85	3.14
PHV1	3.04	0.07	1.31	46.38	0.00	3.04	2.91	3.16
PHV2	2.70	0.06	1.26	42.85	0.00	2.70	2.57	2.82
PHV3	2.45	0.07	1.36	36.19	0.00	2.45	2.32	2.59
PUV4	4.30	0.05	0.96	89.80	0.00	4.30	4.21	4.40
PUV5	3.83	0.06	1.15	66.56	0.00	3.83	3.72	3.94
ISU1	4.67	0.03	0.62	150.37	0.00	4.67	4.61	4.73
ISU2	4.68	0.03	0.62	150.62	0.00	4.68	4.61	4.74
MUS	3.82	0.06	1.21	63.28	0.00	3.82	3.70	3.94

Table 3: The Results of validity and reliability tests

	Construct and Indicators	Convergent Validity	AVE ¹	Composite Reliability (rho)	Alj Cront	pha bach's
PMP1	I am very concerned about low prices, but I am equally concerned about product quality.	.665	0.44	0.91	0.77	
PMP2	I compare prices of different retail channels to be sure I get the best value for my money	.777	0.63	0.81	0.77	0.80
PNP1	Purchasing small home appliances like Parskhazar products takes a lot of time and effort (e.g. long-distance travel)	.767	0.49	0.95	0.91	0.80
PNP2	I often feel unpleasant with physical efforts and personal interactions with sales personnel while store shopping.	.717	0.70	0.85	0.81	
PSQ1	I receive prompt service from employees.	.745	0.72			
PSQ2	I can get helpful assistance when I have problems.	.806	0.83			
PSQ3	I can easily find/contact employees who are willing to help.	.718	0.84	0.89	0.87	
PSQ4	I can have flexible delivery option (e.g. hold, store pick-up).	.757	0.79		0.77	0.77
PMQ1	I make a special effort to choose very good quality products.	.772	0.46	0.76	0.71	
PMQ2	I often compare product quality across retailers to get the higher quality.	.709	0.74	0.70	0.71	
PHV1	During cross-shopping, I feel the excitement of the hunt	.664	0.75			
PHV2	Cross-shopping truly feels like an escape.	.717	0.90	0.81	0.83	
PHV3	Cross-shopping of small home appliances is a way I like to spend my leisure time.	.654	0.73	0.01	0.05	0.80
PUV1	I do not mind ordering products through the Internet and waiting for the product to arrive	.729	0.49	0.75	0.72	0.00
PUV2	In online shopping method, if firms offered another way to pay, other than using a credit card number, I would feel better and safer.	.726	0.80	0.75	0.72	
ISU1	I am willing to search for information through stores and the Internet before deciding to buy a product.	.820	0.77			
ISU2	I am willing to compare brands or products through stores and the Internet before deciding which one I buy	.721	0.69	0.798		0.81
MUS	I shop back and forth between several different channels before choosing where I do most of my small home appliances shopping.	.861	0.26			

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Correlation	Square of correlation	AVE
0.10	0.01	0.55
0.23	0.05	0.61
0.22	0.04	0.61
0.25	0.06	0.62
0.26	0.06	0.63
0.28	0.07	0.64
	Correlation 0.10 0.23 0.22 0.25 0.26 0.28	Correlation Square of correlation 0.10 0.01 0.23 0.05 0.22 0.04 0.25 0.06 0.26 0.06 0.28 0.07

Table 4: The results of discriminant validity

Table	5:	Overal	model	fit
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Goodness-of-Fit Statistics	
Absolute Fit Measures	
Chi-square (λ^2) of estimate model	62.87 (p=0.00)
Degrees of Freedom	16
λ^2/d_f	3.92
Goodness-of-fit index (GFI)	0.96
Root mean square residual (RMR)	0.050
Standardized RMR	0.058
Root mean square error of approximation (RMSEA)	0.086
Incremental Fit Measures	
Adjusted goodness-of-fit index (AGFI)	0.91
Non-normed fit index (NNFI)	0.93
Normed fit index (NFI)	0.92
Parsimonious Fit Measures	
Parsimony goodness-of-fit index(PGFI)	0.43
Parsimony normed fit index (PNFI)	0.43
Comparative fit index (CFI)	0.80
Incremental fit index (IFI)	0.95

Table 6: Results of Hypothesis testing

	Unstandardized structural	Standardized structural	t -	Hypothesis
Hypothesis	coefficient	coefficient	value	testing
Perceived channel quality			J	0
H1a. The greater the perception of the channel merchandise quality, the	0.12	0.26	2.22	gunnantad
greater will be the perception of Parskhazar's channel quality.	0.15	0.50	2.22	supported
H1b. The greater the perception of channel service quality, the greater	0.34	0.41	3 70	supported
will be the perception of Parskhazar's channel quality.	0.34	0.41	5.70	supported
H1c. The greater the perception of the channel quality, the greater will	0.88	0.86	2.93	supported
be the perception of Parskhazar's channel value	0.00	0.00	2.95	supported
Perceived channel price	r			
H2a.The greater the perception of channel monetary price, the greater	0.29	0.42	4.65	supported
will be the perception of Parskhazar's channel price		0112		supported
H2b.The greater the perception of channel non-monetary price, the	0.48	0.43	4.68	supported
greater will be the perception of Parskhazar's channel price.				~~~~~
H2c. The greater the perception of channel price, the greater will be the	0.58	0.59	3.08	supported
perception of Parskhazar's channel quality				11
H2d.The greater the perception of channel price, the smaller will be the	0.32	0.31	1.30	Not supported
perception of Parskhazar's channel usage intention				
Perceived channel value	l .		·	
H3a. The greater the perception of channel hedonic values, the greater	0.43	0.39	4.23	supported
will be the perception of Parskhazar's channel value				
H3b. The greater the perception of channel utilitarian values, the	0.40	0.45	4.14	supported
greater will be the perception of Parskhazar's channel value			ļ	11
H3c. The greater the perception of channel value, the greater will be the	0.80	0.80	2.85	supported
perception of Parskhazar's channel usage intention				11
Customer channel usage intention				
H4a. The greater the information search through multi-channel, the	0.16	0.30	3.83	supported
greater will be the perception of Parskhazar's channel usage intention				
H4b. The greater the multichannel shopping across channel, the greater	0.63	0.53	5.12	supported
will be the perception of Parskhazar's channel usage intention			1	

PCP to Mediators (a paths)								
variables	coefficient	standard error	t - value	p- value				
PCQ	0.08	0.03	3.02	0.00				
PCV	0.25	0.04	6.28	0.00				
Effects of	Effects of Mediators on CUI							
PCQ	0.26	0.05	5.39	0.00				
PCV	0.18	0.03	5.73	0.00				
Effect of P	Effect of PCP on CUI							
PCP	0.17	0.03	5.08	0.00				
Total Effect of PCP on CUI								
PCP	0.23	0.03	6.80	0.00				

Conclusion and managerial implication

The main goal of the present study was to determine factors that influence the customer channel choice and usage intention in the small home appliances context. We used Yu et al (2011) model with a little modification as our research conceptual model. Data which collected from a web based survey of Parskhazar's customers provided empirical support for the proposed model. The results indicated that perceived channel price and perceived channel quality have major effects on the perceived channel value, which in turn affects channel usage intention in terms of multichannel shopping and searching for information. In addition, the findings support the considerable influence of the perceived channel price on the perceived channel quality. Another interesting finding of this study is the strong effect of perceived channel value on the customer channel choice and usage intention.

Several managerial implications can be obtained from current research findings. We will mention some practical implications hereafter. Since in our research a direct relationship between perceived channel price and channel usage intention was not proved, therefore Parskhazar can use price differentiation policy during their distribution channels without any problem. Parskhazar's manager can charge extra price to compensate a part of its delivery costs and solve some probable problems with their resellers. The second one is related to channel usage topic, the subject of multi-channel shopping is the determinant factor for Parskhazar's customers. In other words most of Parskhazar's customers consider distribution solely as a mean for purchasing goods, rather than a tool for searching of information. Thus, for developing online sales, which it is one of the Parskhazar strategic goals, the online purchasing process should be facilitated for Parskhazar customers.

Limitations and Future Research

Finally, we believe these findings have increased our understanding about the customer channel choice subject in Iranian small home appliances market; however there are some limitations to our study which provides opportunities for future research. We will mention some of these limitations and future research opportunities. As we mentioned earlier, in the case of channel choice, in addition to channel attributes, the selection process is influenced by the variety of factors like firm's marketing activities, product characteristics, customer individual differences and customer previous experiences (Neslin et al 2006; Valentini et al 2011). In this study we have only focused on channel attributes and did not examine any other possible predictors of the channel choice and usage intention. Thus, more extensive research is needed to investigate the effects of other determinant factors of customer channel choice. In future research, researcher can achieve a deeper knowledge about the impact of channel attributes on customer channel choice by using this mentioned factors (such as demographic differences,

product type and customers previous experience) as moderator variables.

Second, In this study we investigated customer channel choice and usage intention for all groups of Iranian customers. Thus, another probable opportunity and suggested field for future research is exploring these subjects in specific age groups or regions in Iran or other countries. While the results of different consumer profile groups in other ages, in urban areas, or in other countries may be different to the present study, comparing differences or similarities may provide better understanding and deeper knowledge in this criteria.

Third According to the above, we examined this model in small home appliances industry, Yu et al (2011) tested this model in apparel field and Montya-Wise et al (2003) examined the same model in financial context. These three studies had more or less the same findings especially in terms of influence of perceived channel value on the customer usage intention. But these studies suggested some different results too. For example, there were different points of views about the direct effect of perceived channel price on customer channel selection. Thus, based on these differences, future research in different industries and products can deepen current findings in this regard.

References

Baker, J. Parasuraman, A. Grewal, D. and Voss, G.B. (2002), "The Influence of Multiple Store Environment Cues on Perceived Merchandise Value and Patronage Intentions," *Journal of Marketing*, 66 (4), 120–41

Bentler, P.M. (1990), "Comparative Fit Indexes in Structural Models," *Psychological Bulletin*, 107(2), 238-246

Bollen, K. (1989), "Structural Equations with Latent Variables," *John Wiley and Sons publication*

Byrne, B.M. (1998), "Structural Equation Modeling with Lisrel, Prelis and Simples: Basic Concepts, Applications and Programming" New Jersey: Lawrence Erlbaum.

Chen, Z.and Dubinsky, A.J. (2003), "A Conceptual Model of Perceived Customer Value in E-Commerce: A Preliminary Investigation," *Psychology & Marketing*, 20(4), 323-347.

Cronin, J.J. Brady,M.K. and Hult,G.T.M(2000), "Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments," Journal of Retailing, 76(2), 193–218.

Dholakia, U.M. Kahn, B.E. Reeves, R. Reindfleisch, A. Stewart, D. and Taylor, E. (2010), "Consumer Behavior in A Multichannel, Multimedia Retailing Environment," *Journal of Interactive Marketing*, 24(2) 86–95.

Dholakia, R.R.Zhao, M. and Dholakia, N. (2005), "Multichannel Retailing: A Case Study of Early Experiences," *Journal of Interactive Marketing*, 19 (2), 63-74.

Hair, E. (1998) "Multivariate Data Analysis, "New Jersey: Prentice Hall.

Jöreskog, K.Gand Sörbom, D. (1993), "Lisrel 8: Structural Equation Modeling with the Simples Command Language" *Chicago: Scientific Software International Inc.*

Kim, H.W.Xu, Y. Gupta, S. (2012) "Which Is More Important In Internet Shopping, Perceived Price Or Trust?" *Electronic Commerce Research and Applications* 11(3), 241–252.

Kumar, V. and Venkatesan, R. (2005), "Who Are the Multichannel Shoppers and How Do They Perform? Correlates of Multichannel Shopping Behavior", *Journal of Interactive Marketing*, 19 (2) 44-62.

Neslin, S.A. and Shankar, V. (2009), "Key Issues In Multichannel Customer Management: Current Knowledge and Future Directions," *Journal of Interactive Marketing*, 23 (1), 70.

Neslin, S.A. Grewal, D. Leghorn, R. Shankar, V. Teerling, M.L. and Thomas, J.S. Verhoef, P.C. (2006), "Challenges and Opportunities In Multichannel Customer Management," *Journal of Service Research*, 9(2) 95–112.

Noble,S.M. Griffith, D.A. and Weinberger, M.G. (2005), "Consumer Derived Utilitarian Value and Channel Utilization In A Multichannel Retail Context," *Journal of Business Research*, 58(12), 1643–1651

Parasuraman, A.and Grewal, D. (2000) "The Impact of Technology on the Quality–Value–Loyalty Chain: A Research Agenda" *Journal of Academic of Marketing Science*,28(1), 168–174.

Pookulangara, S.Hawley, J.and Xiao, G.(2011), "Explaining Consumers Channel-Switching Behavior Using the Theory of Planned Behavior," *Journal of Retailing and Consumer Services*, 18(4), 311–321

Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*40 (3), 879-891

Segars, A. H.and Grover, V. (1996), "Designing Company Wide Information Systems: Risk Factors and Coping Strategies," *Long Range Planning*, 29(3), 381-392. Schoenbachler, D. and Gordon, G.L. (2002), "Multi-Channel Shopping: Understanding What Drives Channel Choice," *Journal of Consumer Marketing*, 19(1), 42–53

Sullivan, U.Y. and ThomasJ.S. (2004), "Customer Migration: An Empirical Investigation across Multiple Channels," *Working Paper, University of Illinois at Urbana-Champaign.*

Teas, R.K., and Agarwal, S. (2000), "The Effects of Extrinsic Product Cues on Consumers' Perceptions of Quality" *Academy of Marketing Science Journal*, 9(4), 278-290.

Thomas, J.S. and Sullivan, U. (2005), "Managing Marketing Communications with Multichannel Customers," *Journal of Marketing*, 69 (10), 239–51.

Valentini, S. Montaguti, E.and Neslin, S.A. (2011), "Decision Process Evolution in Customer Channel Choice", *Journal of Marketing* 75 (11), 72–86

Verhoef, P.C. Neslin, S.A.and Vroomen, B. (2007), "Multichannel Customer Management: Understanding the Research-Shopper Phenomenon," *International Journal of Research in Marketing*, 24(2), 129–148.

Voss, G.B. Parasuraman, A. and Grewal, D. (1998), "The Roles of Price, Performance, and Expectations in Determining Satisfaction in Service Exchanges," *Journal of Marketing*, 63 (10) 46-61

Wallace, D.W., Giese, J.L. Johnson, J.L, (2004). "Customer Retailer Loyalty in the Context of Multiple Channel Strategies," *Journal of Retailing*, 80(4), 249–263.

Wolk, A. and Skiera, B. (2009), "Antecedents and Consequences of Internet Channel Performance," *Journal of Retailing and Consumer Services*," 16(3),163–173.

Yu, U.J. Nihme L.S. and Russel D.W. (2011), "Exploring Perceived Channel Price, Quality, and Value as Antecedents of Channel Choice and Usage in Multichannel Shopping,". *Journal of Marketing Channel*, 18(2), 79-102.

Zeithaml, V.A. (1988), "Consumer Perceptions of Price, Quality and Value: A Means- End Model and Synthesis of Evidence". *Journal of Marketing*, 52 (6) 2-22.