

CAN PRICE PERCEPTIONS INFLUENCE CUSTOMER SATISFACTION?

PODEM AS PERCEPÇÕES DE PREÇO INFLUENCIAR A SATISFAÇÃO DO CONSUMIDOR?

P. Kyriazopoulos¹

Marketing Laboratory - Department of Business Administration - Institute of Piraeus

Ir. Samanta Rounti

Marketing Laboratory - Department of Business Administration - Institute of Piraeus

RESUMO

Várias organizações observam ligação evidente entre a satisfação do consumidor e as percepções sobre preço quando se avalia a mudanças de fornecedores de serviços. A razão é que os consumidores têm preferências e apreciações de custo diferentes, sendo que tais aspectos têm implicações importantes em como as empresas deveriam direcionar seus esforços de atendimento ao público. Esta pesquisa examinou uma amostra de 804 usuários de telefonia móvel na Grécia. A análise estatística incluiu análise fatorial, resultando em testes que atenderam ao limite de confiança de 95% e análise de clusters, que foi usada para agrupar variáveis e identificar diferenças entre as amostras. O resultado da análise estatística mostrou quatro fatores que influenciam a decisão do consumidor na mudança de prestador de serviço. Este artigo discute, a partir destas análises, estratégias que devem ser implementadas para tratar o comportamento de compra por clientes ainda não fidelizados. De acordo com os resultados da pesquisa os usuários de serviços encontram dificuldades em mudar de prestadores, considerando-se tal como uma ação onerosa, uma vez que sempre há algum tipo de custo fixo associado a mudanças deste tipo. Desta forma, para mudar de prestador de serviço, há inconveniências, que podem ser maiores, tomando por base o número de linhas / contas contratadas por uma empresa. Ambos os custos administrativos e de aprendizado associados com a mudança correspondem a provável criação de alguma inércia que dificulta a troca.

PALAVRAS-CHAVE

satisfação, percepções, qualidade de serviço.

ABSTRACT

Many organizations observe clear link between customer satisfaction and price perceptions associated with switching service providers. The reason is that customers have different preferences and cost heterogeneities. The above aspects have important implications how firms should target their customer service efforts. The present research examines a sample of 804 users of mobile phones in Greece. Statistical analysis includes factor analysis, while all the tests were defined in a 95% confidence level. Cluster analysis was used in order to group the variables and identify differences between the samples. The results of statistical analysis show four factors that influence the customer buying decision to change service provider. The Cluster analysis of the data identified three distinct groups of customers. This paper, however, argues that strategies must be implemented to overcome non-loyal purchasing behavior. According to the research findings users face difficulties changing providers; this is a costly action in the sense that there is often some kind of fixed cost associated with a change. Therefore in order to change service providers a nontrivial amount of inconvenience is required. This inconvenience is likely to be greater if the customer has a large number of accounts with the firm. Both the administrative costs as well as the learning costs associated with switching to a new service provider are likely to create some amount of inertia to not switch.

KEYWORDS

satisfaction, price perceptions, service quality.

¹ Researches of the Marketing Laboratory - Department of Business Administration - Graduate Technological Education Institute of Piraeus, Athens, Greece.

CAN PRICE PERCEPTIONS INFLUENCE CUSTOMER SATISFACTION?

1. INTRODUCTION

Companies acknowledge that their existence, development, and progress in order to survive on a constantly globalizing and very competitive market, are directly related to the flexible strategies that firms will implement in quickly adapting to the shifting needs of their customers.

While the customer relationship marketing may be a firm's important driver towards the satisfaction of its customers, switching barriers and price perceptions are also likely to influence retention.

Recent research of Gremler and Brown (1996) has shown that switching barriers and pricing perceptions may have interaction effects on customers' retention and if they are high, service firms may continue to retain customers even if they are not highly satisfied.

Additionally, Fornell (1992) argued that even if the level of satisfaction is low there still exists an element which can positively contribute to customer retention; this element is closely related to the fact that the customer may simply be disinterested to take his custom elsewhere.

The above factors are tested with the mobile telephony industry in Greece, since this industry is particularly suited to the aims of this research. On the one hand, the aim of the mobile companies focuses on cost reduction, while at the same time they seek to forge relationships with customers by creating a network covering a wide range of services. Customer-provider relationships in this sector are generally medium to long term which provides a suitable context in which to study the above factors. Therefore, mobile telephone companies' first priority is to strive for customer satisfaction if they are to hold their share in the market and operate successfully in highly competitive conditions. According to Zeithaml and al, (1996), customer service behavior and satisfaction of their needs make up an essential part of a successful organization while discontent may lead a customer to withdraw his/her custom from a particular service provider; practices should, therefore, be developed pricing senses that aim at keeping customers. This study will attempt to examine the factors which influence and contribute to their retention and also to gain an understanding that incorporates the main effects of satisfaction, switching barriers and price perceptions.

2. LITERATURE REVIEW

2.1 Positive and Negative Customer purchasing Intentions

Customers show positive intentions such as approving the firm, expressing preference, increasing purchasing volume, paying premiums willingly, saying positive things about the firm to others, making recommendations to others, and continuing purchasing when they are satisfied (Zeithaml *et al.*, 1996). Satisfied customers stay loyal longer with an organization, pay less attention to the competition, are less price sensitive, offer service ideas to the organization and require less cost for the organization to service them (Weinstein *et al.*, 1999d).

When dissatisfied, customers demonstrate negative intentions such as strenuousness to leave the organization, decreasing spending patterns, complaining to the seller, complaining to others outside of the firm, (Zeithaml *et al.*, 1996). Analyzing defection problems is essential. Strategies must be implemented to get over non-loyal purchasing behaviour (Webster, 1994).

2.2 Customer Satisfaction

According to Cronin (2000) satisfaction stems from the fact that the customer derives a feeling that the service provided is of real value. A lot of research has been carried out regarding the assessment of the relation of satisfaction to that of the behavior to the customer, Anderson and Sullivan (1993), Bansal and Taylor, (1999) and Cronin, (2000), in which it was shown that customer satisfaction was the key to retaining a customer. **Hypothesis:** The higher the level of satisfaction has direct impact in pricing perceptions.

2.3 Service Quality

Since replacing long standing customers with new ones it is costly for an organisation to operate smoothly, it is obvious that quality and efficient level of service should be the organization's first priority if it is to operate successfully and profitably Reinartz and Kumar, (2000).

A lot of studies have been conducted in order to correlate quality service with that of customers' behavior. According to Cronin (2000), a research which involved six industries showed that quality service was closely related to the customers' behaviour. Some experts, however, while in the main

share the views expressed by Reinartz and Kumar, (2000), they argue that all customers may not be profitable to an organisation after a long period of time. They based their argument on the supposition that a long standing customer may turn out to buy less over a long period of time, or become less loyal to an organization.

Hypothesis: Quality service has a direct impact on customer retention.

2.4 Price Perceptions

Following Bansal and Taylor (1999), we define perceived switching barriers as constraints that prevent switching action. Keaveney's (1995) examines switching barriers as a determinant of customer switching behaviour. Subsequently, Gremler and Brown (1996) develop a model that includes switching costs as an antecedent of customer loyalty. Also they define switching costs as investment of time, money and effort that, in customers' perception, made it difficult to switch. In our study switching barriers are used in order to investigate the case, in which a homogenous pricing policy by the mobile industry results to the customer's behaviour manipulation in the Greek market. Alternatively, the price perceptions of the consumer confine customers in the same service provider, manipulating thus their behaviour.

Hypothesis: Price Perceptions has a direct impact on customer's behaviour.

2.5 Switching barriers

According to Bansal and Taylor (1999), switching barriers are the factors which prevent a customer to change company. Kenveney (1995), was

one of the first to have studied the barriers of change in relation to the customer behaviour. Gremler and Brown (1996) define the costs of change by referring to time, money and the effort which the customer perceives in order to change firm.

Since then, Bansal and Taylor (1999) and Lee *et al.* (2001) among others have tested and confirmed the positive effect of switching barriers on customer retention. In the current study, we look switching barriers as the factitious constrains that defines a firm in order to inert the customers' behaviour to change service provider.

Hypothesis: The more a customer is becoming aware of switching barriers the more likely it is to be sensitive in pricing perceptions

3. RESEARCH METHODOLOGY

3.1 Construct measurement

For the accomplishment of the research objectives, the questionnaire developed by Cronin (2000), Ranaweera and Neely (2003), Gremler and Brown (1996) and Fornell (1992) was used. Modifications were made to the instruments taking into account the economic environment of Greece, including semantic changes, in order to suit the needs of this study. The questionnaire refers especially to the responders' experiences of the mobile industry.

The questionnaire consisted on a variety of questions, concerning different areas of interest. The items of the questionnaire were in the form of statements based on the 5-point Likert – type scale, anchored on 1=totally agree, through 5=totally disagree. The applied questionnaire referred to issues, which are considered essential for the recording of the opinions of respondents. The topics included are (Table 1):

TABLE 1
The topics

	Thematic area
Customer satisfaction	General customer satisfaction from the company Right choosing of the company from the customer
Price Perception	How fix cost charges, seem to the customer How sms charges seem to the customer How variable charges seem to the customer How logical the charges seem to the customer
Switching barriers	Technical difficulties to change firm Difficulty in changing one's number while changing firms Costs a lot to change firm Needs effort to change firm Not able to start a procedure of changing easily

Source: the authors

CAN PRICE PERCEPTIONS INFLUENCE CUSTOMER SATISFACTION?

3.2 Sample Frame

The study was made with the method of private interviews in the area of Greece, referring to young people aged 18-24 years old of the total population of the country, who according to the elements of the national statistic service come to 550000 people. The sample used was the 0.2% of the total population, meaning 1100 young people, whom from we had a 73% response rate (804 people). After excluding some questionnaires because of missing values, in our final analysis we used data coming from 707 people, of whom 73% were women. The research took place from September to November 2005.

4. RESULTS AND DISCUSSION

4.1 Descriptive statistics

Descriptive statistics refer to seven areas of interest, analyzing each one of them. The following (Table 2) shows the frequencies of our variables:

The results given above indicate that consumers, in a percentage of 66.8, show that they

are satisfied of their company, showing in this way their trust towards their operator. Opinions of the responders concerning price perceptions seem to be similar, the ones who agree versus to the ones who disagree. They consider the charges of the SMS as well as the fixed charges to be high enough, though an important percentage (28.9%) seems to be indifferent to the pricing policy of the mobile industries. The barriers, which the consumer has to overcome while trying to change firm, consist mainly on technical difficulties and much less on the cost of this procedure (70.8%).

The perceptions of the responders related to the total of the services provided by the mobile phone industry seems to be of no importance for them. This means that the communicative policy of the industry hasn't succeeded in giving them attractive messages. The majority, however, acknowledges the facility with which they can turn to the industry's services when needed, though they don't feel that their company can always take correction measures in case of a difficulties.

TABLE 2
Descriptive Statistics

Variables	Agree %	Neither agree nor disagree %	Disagree %
Customer Satisfaction			
Q13- general customer satisfaction from the company	66,8	26,7	6,6
Q14- company comes up to customer's expectations	53,6	37,4	9,1
Q15- right choosing of the company from the customer	58,1	33,0	9,0
Price Perception			
Q19- how fixed charges seem to the customer	21,1	52,1	26,8
Q20- how sms charges seem to the customer	27,8	36,3	35,8
Q21- how charges seem to the customer	28,9	45,6	25,5
Q22- how logical the charges seem to the customer	21,1	45,5	33,4
Switching barriers			
Q33- The possibility to change service provider next six months	28,3	32,8	38,8
Q31 - costs a lot to change firm	31,7	28,5	39,8
Q23- needs effort to change firm	35,2	28,3	36,5
Q32 - not able to start a procedure of changing easily	34,5	27,7	35,9
Service Quality Perception			
Q1- information for better use	61,7	25,5	12,7
Q2- the personnel is helpful	64,5	28,3	7,2
Q3- better correspondence in the future	51,8	41,1	7,2
Q4- trust for the future existence of the firm	73,0	21,2	5,1
Q5- capable personnel	56,3	36,9	6,7
Q6- polite personnel	75,2	18,5	6,2
Q7- correction measures to a probable problem	43,5	36,4	20,1
Q8- easy access	57,7	14,0	18,3
Q9- understanding of needs	43,6	44,5	11,9
Q10- Personal data security	52,0	36,1	11,8
Q11- coming up to one's expectations	51,6	34,3	14,1
Q12- economic offer packages	56,8	28,7	22,5

Source: the authors

5. Factor Analysis

The essential aim of factors analysis is to describe, as much as possible, the cross-correlation between a lot of variables in terms of few amenable, but non observable, random quantities that are named factors.

Was used the orthogonal factor model with

the Principal Component method. Was analyzed the correlation matrix and used the Varimax rotation method for better interpretation of the factors.

After running various models, we ended up to a model containing variables: Q1, Q5, Q6, Q13 – Q15, Q19 – Q22, Q31 – Q33. They are all of categorical – ordinal type and refer to customer satisfaction, service quality and price perceptions.

5.1 Factor Model's sufficiency

TABLE 3

Sufficiency of the model	Intuition	Remarks
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy.	The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic which indicates the proportion of variance in your variables which is common variance, i.e. which might be caused by underlying factors. High values (close to 1.0) generally indicate that a factor analysis may be useful with your data. If the value is less than .50, the results of the factor analysis probably won't be very useful.	KMO = 0.814 (very satisfactory)
Bartlett's test of sphericity	Bartlett's test of sphericity indicates whether your correlation matrix is an identity matrix, which would indicate that your variables are unrelated. The significance level gives the result of the test. Very small values (less than .05) indicate that there are probably significant relationships among your variables. A value higher than about .10 or so may indicate that your data are not suitable for factor analysis.	Significance = 0.000 which means that the variables are correlated and thus suitable for factor analysis to be held.
Anti-image matrices	The Anti-image matrices contain the negative partial covariance's and correlations. They can give an indication of correlations which aren't due to the common factors. Small values indicate that your variables are relatively free of unexplained correlations. Most or all values off the diagonal should be small (close to zero). Each value on the diagonal of the anti-image correlation matrix shows the Measure of Sampling Adequacy (MSA) for the respective item. Values less than .5 may indicate variables that do not seem to fit with the structure of the other variables. Consider dropping such variables from factor analysis.	Minimum MSA: 0.704 (Q32). Moreover, most of the off - diagonal elements of the matrix are near zero.
Reproduced Correlations Table	This table gives reproduced correlations (or covariance's) and residuals for the factor analysis solution. This shows the predicted pattern of relationships if your factor analysis solution is assumed to be correct. If the solution is a good one, the reproduced correlations (or covariances) will be close to the observed values. Residuals show the difference between the predicted and observed values. For a good factor analysis solution, most of these values will be small.	There are only 21 (26.0%) no redundant residuals with absolute values greater than 0.05. (quite satisfactory)
Communalities	Communalities indicate the amount of variance in each variable that is accounted for. Extraction communalities are estimates of the variance in each variable accounted for by the factors (or components) in the factor solution. Small values indicate variables that do not fit well with the factor solution, and should possibly be dropped from the analysis.	Estimates of the variance in each variable accounted for by the factors: Minimum: 0.500 (Q1) Maximum: 0.854 (Q32)

Source: the authors

CAN PRICE PERCEPTIONS INFLUENCE CUSTOMER SATISFACTION?

5.2. Orthogonal Factor Model

A way to determinate the number of factors that will be maintained in the model is the Scree Plot (Figure 1), which is given below:

The point in the horizontal axis beyond which the portrayed line tends to become parallel with the

horizontal axis corresponds to the number of factors that should be maintained by the factor model. The diagram shows that this point could be 4. In the factor solution that we propose we select point 4 which means that 4 factors will be maintained in the model.

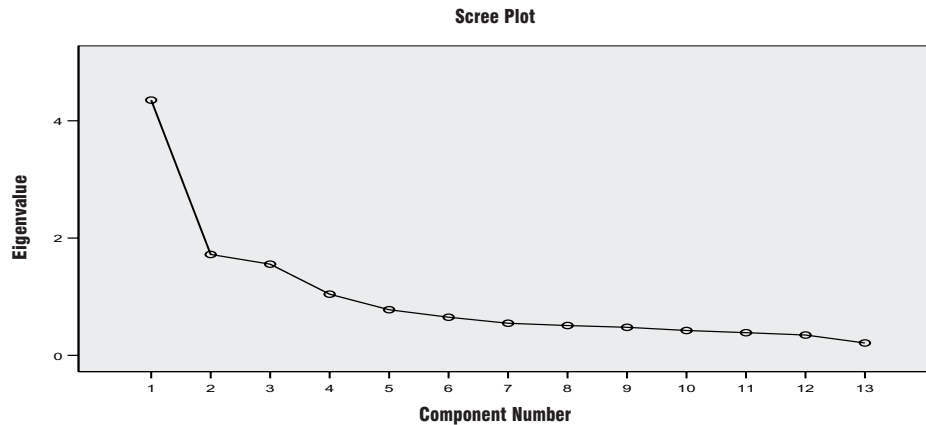


FIGURE 1: Screeplot Source: the authors

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 5 iterations.

The numbers within cells are the loadings of each variable in the corresponding factor (Table 4, 5).

TABLE 4
Rotated Component Matrix(a)

	Component			
	Switching costs	Barriers to change	Customer Satisfaction	Service Quality
Q1 information for better use	.026	-.055	.704	-.023
Q5 the personnel is capable	.076	.070	.198	.830
Q6 polite personnel	.042	.090	.154	.853
Q13 general customer satisfaction from the company	.157	.240	.741	.251
Q14 company comes up to customer's expectations	.175	.213	.711	.196
Q15 right choosing of the company from the customer	.186	.288	.692	.226
Q19 how fixed charges seem to the customer	.699	.029	.193	-.061
Q20 how sms charges seem to the customer	.726	.195	-.016	.024
Q21 how charges seem to the customer	.818	.092	.050	.109
Q22 how logical the charges seem to the customer	.764	.083	.253	.132
Q31 costs a lot to change firm	.124	.806	.131	.151
Q32- not able to start a procedure of changing easily	.122	.902	.152	.040
Q33The possibility let to change firm next 6 months	.111	.810	.140	.021

Source: the authors

TABLE 5
Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.410	18.536	18.536
2	2.376	18.276	36.812
3	2.257	17.360	54.172
4	1.628	12.524	66.697

Extraction Method: Principal Component Analysis.
Source: the authors

Factor 1:

This factor has eigenvalue 2.410 and interprets 18.536% of the total variance of all the variables.

Factor 2:

This factor has eigenvalue 2.376 and interprets 18.276% of the total variance of all the variables. Both factors 1 and 2 interpret 36.812% of the total variance of all the variables.

Factor 3:

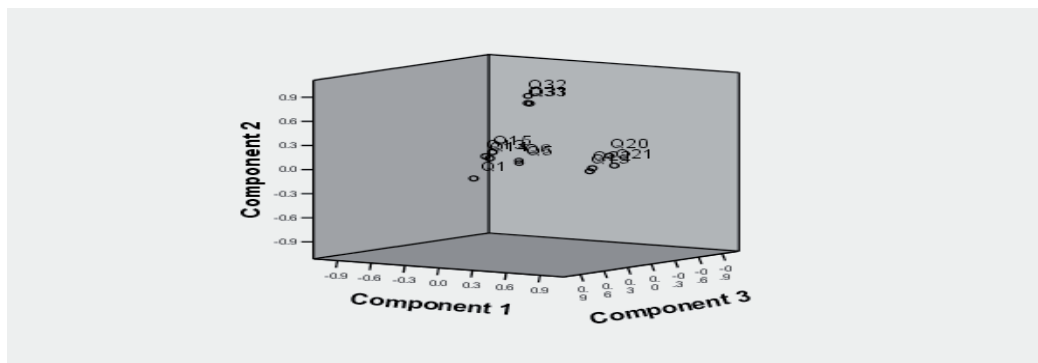
This factor has eigenvalue 2.257 and interprets 17.360% of the total variance of all the variables. Both factors 1, 2 and 3 interpret 54.172% of the total variance of all the variables.

Factor 4:

This factor has eigenvalue 1.628 and interprets 12.524% of the total variance of all the variables. Both factors 1, 2, 3 and 4 interpret 66.697% of the total variance of all the variables.

The following (graph 1) shows the distribution of the variables, used in factor analysis, in the 3D - space. In this graph it is noticed how clear is the distinction of the 4 factors. Up is factor 2 with variables Q31, Q32, Q33. In the right is factor 1 with variables, Q19 – Q22. In the left we have two distinct clouds of points: the left one, which is factor 3 with variables Q1 and Q13 – Q15 and the right one, which is factor 4 with variables Q5 and Q6. The clear distinction of the factors is a sign that the factor solution is good one.

Component Plot in Rotated Space



GRAPH 1: The distribution of the variables Source: the authors

6. CLUSTER ANALYSIS

Cluster Analysis is a method that aims to classify in groups the existing observations using information that exists in some variables.

A successful analysis will be supposed to lead to groups for which the observations that are contained are as much as homogeneous but observations of different groups differ as much as possible.

At this stage we will run a Hierarchical Clustering model to define the number of clusters that better groups our observations.

6.1 Hierarchical Clustering

This procedure attempts to identify relatively homogeneous groups of cases (or variables) based on selected characteristics, using an algorithm that starts with each case (or variable) in a separate cluster and combines clusters until only one is left. In Hierarchical Clustering the number of clusters it is not known in advance. They proceed hierarchically in a sense that they begin using each observation as a group and in each step they link in groups the observations that are found to be nearest. These algorithms are known as agglomerative.

The variables for clustering usage are Q1, Q5, Q6, Q13 – Q15, Q19 – Q22, Q31 – Q33 which are all categorical or ordinal type (Table 6):

CAN PRICE PERCEPTIONS INFLUENCE CUSTOMER SATISFACTION?

TABLE 6
Variables for clustering usage

Q1	information for better use
Q5	capable personnel
Q6	polite personnel
Q13	general customer satisfaction from the company
Q14	company comes up to customer's expectations
Q15	right choosing of the company from the customer
Q19	how fixed charges seem to the customer
Q20	how sms charges seem to the customer
Q21	how charges seem to the customer
Q22	how logical the charges seem to the customer
Q31	costs a lot to change firm
Q32	not able to start a procedure of changing easily
Q33	The possibility to change service provider next six months

Source: the authors

6.2 Number of Clusters

In order to examine how many clusters to keep the Agglomeration Schedule matrix is used. Clusters are formed by merging cases and cluster a step at a time, until all cases are joined in one big cluster. At each stage, one case or cluster is joined with another case or cluster. The Coefficients the distance between the two clusters (or cases) joined at each stage. The values depend on the proximity measure and linkage method used in the analysis. For a good cluster solution, we will see a sudden jump in the distance coefficient (or a sudden drop in the similarity coefficient). The stage before the sudden change indicates the optimal stopping point for merging clusters. Until stage 740 changes in the coefficient column are near unit. At stage 741 we have a change in clusters' distance from 39.372, at stage 740, to 59.524 and to 76.403 at final stage 742. Therefore, for our project, we should consider using a 3-cluster solution.

6.3 C. K – Means clustering

Hierarchical Clustering and K – Means clustering are usually complemented to each other. With Hierarchical Clustering substantially get all the solutions and hence are able to find the most optimal number of groups which then form using the K – means algorithm.

The method works repetitive. It uses the concept of the group centre (centroid) and classifies the observations proportionally to their distance from the centres of all the groups. The centroid is nothing but the mean value for each variable of all the observations that are contained in the group, that is

to say corresponds to the vector of the mean values. Distances are computed using simple Euclidean distance.

TABLE 7
Initial and final Cluster Centers

	Initial Cluster Centers		
	Cluster		
	1	2	3
Q1	2	2	5
Q5	1	4	5
Q6	1	2	5
Q13	1	4	5
Q14	1	4	5
Q15	1	4	5
Q19	2	4	5
Q20	1	5	1
Q21	2	5	1
Q22	2	5	5
Q31	1	4	1
Q32	1	5	1
Q33	1	5	1

Source: the authors

Table 7 shows the values for the initial cluster centres. The values in the table are the means for each variable within each initial cluster. By default, the program chooses cases which are dissimilar and uses the values of these cases to define the initial clusters.

The table shows the values for the final cluster centres. Values in the table are the means for each variable within each final cluster. The final clusters centres reflect the attributes of the prototypical case for each cluster. For instance, the prototypical first-cluster case is about 2 (in a Likert scale) set for variable Q5 and 2 set for variable Q33. The prototypi-

TABLE 8:
Values for the initial cluster

	Cluster		
	1	2	3
Q1	2	2	3
Q5	2	3	3
Q6	2	2	3
Q13	2	3	3
Q14	2	3	3
Q15	2	3	3
Q19	3	3	3
Q20	3	3	4
Q21	3	3	4
Q22	3	3	4
Q31	1	3	2
Q32	2	3	2
Q33	2	4	3

Source: the authors

cal second-cluster case is set 3 for Q5 and 4 for Q33.

See the magnitude of the change between the initial and the final cluster centres (Table 8,9):

(Table 10) contains the distance, in terms of Euclidean distance, between the cluster centres and show which variables are most important in our cluster solution.

TABLE 9
Distances between final Cluster centres

Cluster	1	2	3
1		3.274	3.293
2	3.274		2.380
3	3.293	2.380	

Source: the authors

TABLE 10
Euclidean distance

ANOVA

	Cluster		Mean Square	df	F	Sig.
	Mean Square	df				
Q1	38.779	2	.751	740	51.642	.000
Q5	24.390	2	.519	740	47.027	.000
Q6	32.971	2	.566	740	58.260	.000
Q13	55.602	2	.383	740	145.071	.000
Q14	44.804	2	.438	740	102.322	.000
Q15	68.302	2	.525	740	130.198	.000
Q19	28.243	2	.578	740	48.888	.000
Q20	62.140	2	.787	740	78.936	.000
Q21	57.097	2	.609	740	93.805	.000
Q22	64.950	2	.479	740	135.693	.000
Q31	199.814	2	.604	740	330.587	.000
Q32	233.784	2	.578	740	404.705	.000
Q33	186.563	2	.794	740	234.975	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Source: the authors

For each variable, the variance in that variable attributable to clusters and the error variance (the variance not attributable to clusters). The F ratio is the ratio of cluster variance to error variance. Large F ratios indicate variables that are useful for separating clusters. Small F ratios (near 1.0) indicate variables that are not very useful for identifying cluster membership. Here all F-ratios are large hence the variables that were used for classifying our observations have a distinctive property.

6.4 Inference

After having classified the observations it is intentional to make some inference about the qualitative characteristics of the three clusters.

The report (Table 11) presents the selected statistics for each level of the independent variables, which concern “price perception”. The statistics describe the distribution of the dependent variable for each cluster. Comparing the statistics across the groups reveals differences between the levels of the independent variable (cluster). For example, mean and median increase for variables Q19 – Q23, while for variables Q31 and Q32 they increase and then decrease, as we move from cluster 1 to cluster 3. This means that consumers that belong to cluster 1 have set low or moderate value (medians between 2 and 3) for variables Q19 – Q23 while they have set low value (medians between 1 and 2) for the variables Q31 and Q32. Consumers that belong to cluster 2 seem to have moderate valued price

CAN PRICE PERCEPTIONS INFLUENCE CUSTOMER SATISFACTION?

TABLE 11
Selected statistics for each level of the independent variables

		Report						
Cluster	Number os Case	Q19	Q20	Q21	Q22	Q23	Q31	Q32
1	Mean	2.71	2.55	2.74	2.55	2.38	1.44	1.66
	N	401	401	401	401	401	401	401
	Std. Deviation	.718	.865	.776	.658	1.047	.602	.683
	Median	3.00	2.00	3.00	3.00	2.00	1.00	2.00
	Range	4	4	4	3	10	4	3
2	Mean	2.97	3.23	3.15	2.99	2.40	3.12	3.48
	N	215	215	215	215	215	215	215
	Std. Deviation	.814	.896	.814	.717	.984	.886	.772
	Median	3.00	3.00	3.00	3.00	2.00	3.00	3.00
	Range	5	4	4	4	4	4	3
3	Mean	3.47	3.54	3.81	3.69	2.52	2.26	2.44
	N	127	127	127	127	127	127	127
	Std. Deviation	.795	.941	.732	.751	1.119	1.033	.948
	Median	3.00	4.00	4.00	4.00	2.00	2.00	2.00
	Range	4	4	4	4	4	4	4
Total	Mean	2.92	2.92	3.04	2.87	2.41	2.06	2.32
	N	743	743	743	743	743	743	743
	Std. Deviation	.808	.976	.872	.808	1.042	1.098	1.098
	Median	3.00	3.00	3.00	3.00	2.00	2.00	2.00
	Range	5	4	4	4	10	4	4

Source: the authors

perception (medians between 2 and 3). Firms that belong to cluster 3 have set low or moderate or high value (medians between 3 and 4) for variables Q19 – Q22 while they have set low value (medians at 2) for the variables Q23, Q31 and Q32.

An ANOVA compares the means for the different groups. The total variation is partitioned into two components. Between Groups represents variation of the group means around the overall mean. Within Groups represents variation of the individual scores around their group means. Small significance values (< .05) indicate group differences. In this case, the significance level for all of the variables used for clustering are equal to zero, indicating that the three clusters do differ.

Cluster 1 Customer satisfaction

Mobile users' perceptions of the first cluster group related to the quality service received from the service provider are considered satisfied. Customers believe that firm's personnel are helpful keeping them updated information for better use of service. Also they appear to be satisfied because firm coming up to their expectations thinking that their decision to choose the specific service provider was the right one.

User's aspects in terms of price perceptions in terms of charges appear to be low. On the other hand they agree that charges are fluctuated in logical levels. The process in order to change service

provider is not easy and requires switching cost and time consumed. The possibility to change firm in the near future is low.

The first group of clusters appears to be satisfied from purchasing packages, they support their choice to choose the specific firm and the intention to change service provider is a long-term action.

Cluster 2 Customer dissatisfaction, remain to the same service provider but their intention is to change firm.

The second group of users in terms of the received services and their perceptions for charges which are enforced by firm show that they are occurred in a middle situation as they neither agree nor disagree. Users are perceived in the same degree that firm is corresponded to their expectations. They state that would have changed service provider if it was an easy action and it didn't cost money, time and effort. There is a big possibility to change firm next six months.

Cluster 3 There is neither customer's satisfaction or dissatisfaction

The second group of users regarding their satisfaction from the received services quality shows that they are occurred in a middle situation as they neither agree nor disagree. Also users are perceived

in the same degree that firm is corresponded to their expectations. That middle situation refers to their decision to choose the particular firm. They characterize the charges are enforced by firm extremely high but believe that face difficulties of switching cost and barriers. The possibility to change firm in next months is a short-term action.

The third group of clusters appears to be neither dissatisfied nor satisfied but they don't decide to change service provider because they face barriers, and the possibility to change service provider is medium-term action.

7. DISCUSSION

The analysis emerged four factors that influence the customer buying decision. The switching costs are high enough and this situation creates a possible dissatisfaction to customers. Firms however raise technical barriers to customers in order to retain them in the same service provider. Also they define switching costs as investment of time, money and effort that, in customers' perception, made it difficult to change. The pricing policy by the mobile industry results to the customer's behaviour in the Greek market. Alternatively, the price perceptions of the consumer confine customers in the same service provider.

Mobile phone providers must implicate an immense communication policy in order to keep their customers satisfied. The communication policy is confirmed by forth factor and states that firms have imposed to their personnel follow particular communication sensitivity. As a result the capacity and polite of personnel may solve customers' complaints more efficiently.

As a result keeping customers is significantly less expensive than finding new ones.

Therefore the best way firm to retain customers is to keep them satisfied. Satisfying customers is the single best way to increase firm's profitability.

7.1 Implications

This paper attempts to build a more holistic framework of the factors that influence customers' pricing perception in order to remain in the same service provider. We incorporated satisfaction and the role of less studied drivers to hypothesize and offer evidence of interactions effects.

Firms that want to improve their service need to listen continually to three types of customers emerged from the present study.

The process of customer switch in service providers sometimes is influenced from the lifetime-customer satisfaction, lifetime—pricing perceptions relationship between customers and an organization. These perceptions are rather positive but there is a possibility that it may not be if the cost of servicing the customer becomes greater than the profit margin generated by that customer. Customers can have inactive periods where their buying decreases, so they are in effect not profitable. Sometimes short-term customers can be more profitable than long-term retained ones.

Organizations have a chance to learn from their customers. The more customers teach the company the more effective it becomes at providing exactly what they want and the more difficult it is for competitors to lure them away from the organization. Learning about customers is what this whole retention topic is about. The customers tell the organization what to do to keep them. The strategy is for the organization to learn how to listen and respond.

7.2 Future research

Since the sample was directed mostly to younger people, we should not try to make inferences about the Greek population. Nevertheless, it would be interesting to see the results of an organized research in order to cover all the population groups. In this way we could talk about the pricing behavior towards customer retention in Greece as a whole. ➤

Prof P Kyriazopoulos

69-71 Kalypsous St
17671 Kallithea
Athens Greece
e-mail: pkyriaz@gmail.com

Prof^a Irene Samanta-rounti

105-109 VOULGARI STR.
PIRAEUS-GREECE
18534
e-mail: isamanta@otenet.gr

Researches of the Marketing Laboratory - Department of Business Administration - Graduate Technological Education Institute of Piraeus, Athens, Greece.

8. References

- Anderson, E.W., Sullivan, M.W. (1993), "The antecedents and consequences of customer satisfaction for firms", **Marketing Science**, Vol. 12 No.2, pp.125-43.
- Bansal, H.S., Taylor, S.F. (1999), "The service provider switching model (SPSM): a model of consumer switching behaviour in the service industry", **Journal of Service Research**, Vol. 2 No.2, pp.200-18.
- Cronin, J.J., Brady, M.K., Hult, G.T.M. (2000), "Assessing the effects of quality, value, and customer satisfaction on consumer behavioural intentions in service environments", **Journal of Retailing**, Vol. 76 No.2, pp.193-218.
- Fornell, C. (1992), "A national customer satisfaction barometer: the Swedish experience", **Journal of Marketing**, Vol. 56 No.1, pp.6-21.
- Gremler, D.D., Brown, S.W. (1996), "Service loyalty: its nature, importance, and implications", in Edwardson, B., Brown, S.W., Johnston, R. (Eds), **Advancing Service Quality: A Global Perspective, International Service Quality Association**, pp.171-80.
- Grönroos, C. (1995), "Relationship marketing: the strategy continuum", **Journal of Marketing Management**, Vol. 13 No. 5, pp. 407-19.
- Keaveney, S.M. (1995), "Customer switching behaviour in service industries: an exploratory study", **Journal of Marketing**, Vol. 59 pp.71-82.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1994), "Reassessment of expectations as a comparison standard in measuring service quality: implications for further research", **Journal of Marketing**, Vol. 58 pp.111-24.
- Reinartz, Werner and V. Kumar (2000), "The Impact of Customer Relationship Characteristics on Profitable Lifetime Duration." **Journal of Marketing**, 67 (January)
- Rust, Roland T., Katherine N. Lemon and Valarie A. Zeithaml (2003), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy." **Forthcoming at Journal of Marketing**.
- Seetharaman, P.B., Chintagunta, P. (1998), "A model of inertia and variety-seeking with marketing variables", **International Journal of Research in Marketing**, Vol. 15 pp.1-17.
- Webster, C., Hung, L.-C. (1994), "Measuring service quality and promoting decentring", **The TQM Magazine**, Vol. 6 No.5, pp.50-55.
- White, L. and Yanamandram, V. (2004), "Why customers stay: reasons and consequences of inertia in financial services", **Managing Service Quality** Volume 14 Number 2/3 2004 pp. 183-194