CUSTOMER BEHAVIOUR
AND STUDENT SATISFACTION

Ioan Constantin ENACHE[1]

Abstract: *Having to overcome new challenges, the higher education institutions need to understand their customer behaviour. The students' satisfaction is becoming an important objective for universities and society as the role of the tertiary level institution is being questioned. The aim of this paper is to provide a concrete marketing approach to the student satisfaction problem. The literature review section aims to present resources that deliver relevant and updated information about the marketing perspectives on student satisfaction. A short survey is developed in order to provide insights on student behaviour and student satisfaction.*

Key words: *customer behaviour, student satisfaction, educational marketing.*

1. Introduction

In September 2010 European Trade Union Confederation (ETUC) released the report: "Young people facing a dead end? More and better jobs in Europe!". The report is showing that, even if the higher education is attracting more and more students, a university degree is no longer a guarantee for a job [14].

In January 2011 The Romanian Agency for Quality Assurance in Higher Education released "The Quality Barometer 2010 – Status of Quality in Romanian Higher Education". The barometer presents important gaps between the academic staff, students' and employers' perceptions about university role [18].

In April 2011 Forbes published "The Higher Education Bubble". The article was trying to draw attention to the new market situation [17]. The higher education services are becoming overrated. Not only the business sector is paying attention to

the situation, also the IT industry is considering this threat [10].

According to Eurostat data, when it comes to primary and secondary levels of education (ISCED97) the number of pupils enrolled are declining. Comparing 2009 to 2000 the decline was by 10% for primary education, by 3% for lower secondary education and by 11% for the upper secondary one. In Romania the enrolments for primary and lower secondary decreased by 28% and, respectively, by 32%. The enrolments for upper secondary increased by 6%. The strongest increases were in the tertiary sector: EU27 by 22%, Romania 143%. Each ISCED97 level is presented in Figure 1, for EU27, and Figure 2, for Romania.

The enrolments decline for primary and secondary level will change the tertiary level. The universities will be forced to fight for fewer and fewer candidates for a long period of time.

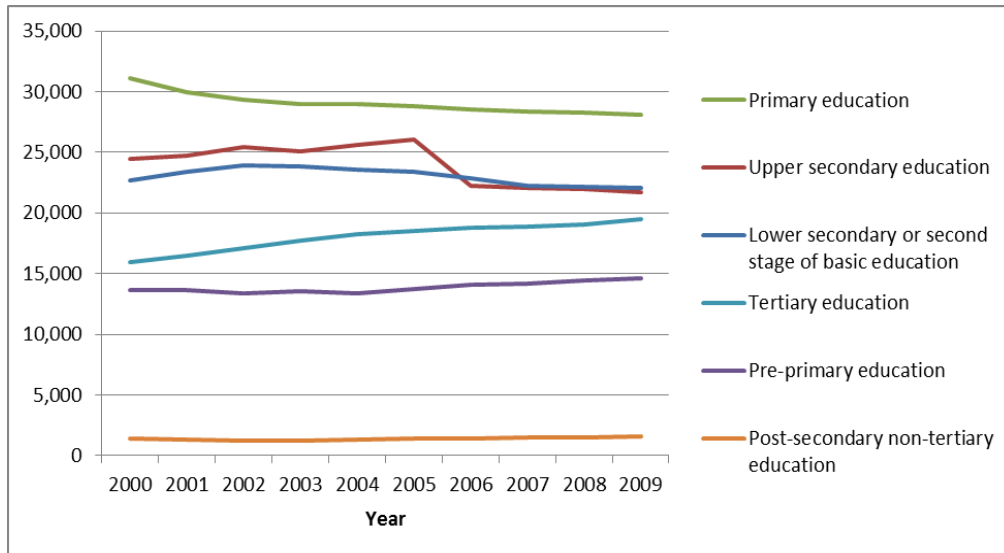[1] Department of Doctoral School in Marketing, *Transilvania* University of Braşov.

Fig. 1. *EU27 enrolments for ISCED97 levels from 2000 until 2009 (thousands)*
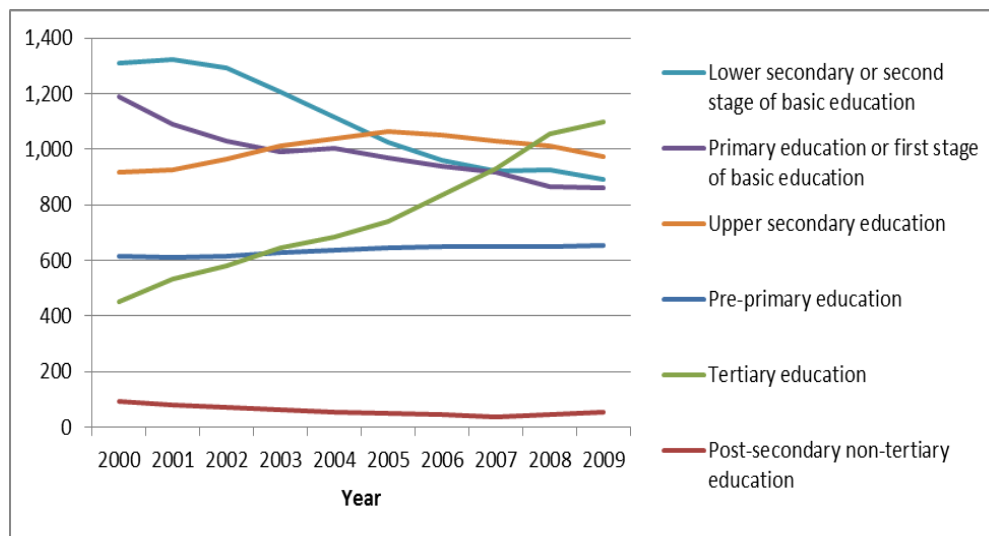*Source: Eurostat*

Fig. 2. *Romanian enrolments for ISCED97 levels from 2000 until 2009 (thousands)*
Source: Eurostat

Given only the four examples mentioned before it becomes obvious that, more than ever, the higher education system is facing strong challenges. The market situation and the social environment are putting a lot of pressure on the universities to deliver satisfactory and relevant services. In this context, analysing the customer behaviour and understanding the factors behind the student satisfaction could give a university a competitive advantage. The educational marketing can provide insights and models able to perform such an analysis.

2. Objectives

This paper is aiming to deliver a new framework to understand and apply the customer behaviour analysis in higher education institutions. By providing a literature review with a short analysis of the marketing models that imply customer behaviour and an example on how to understand the relation between the marketing tools and student satisfaction, this paper intends to present the implications of customer behaviour in educational environment.

3. Literature review

Customer behaviour and customer satisfaction are discussed in any important marketing book. Now it is common sense that customer satisfaction is one of the main goals of any successful company. But the social marketing, with its branches, is taking the concept to other organizations as well, including universities [9].

One of the first discussions about customer behaviour in higher education is aimed to comprehend who the real customers are and who the other partners involved in this kind of service delivery are. The traditional way was to consider the student as the product of the university. But the educational marketing started to comprehend who the actual customers of the universities are [6], [7]. As the student became more and more important, new studies were trying to understand what the student behaviour is like, what the student demands are and how can a university achieve student satisfaction. Customer compatibility management was proposed as a solution to increase the student satisfaction [15]. The analysis of the factors that influence the students' satisfaction can provide relevant information about how students are thinking and what the most important areas to consider are, when it comes to student satisfaction [13]. Also the behavioral

drivers [2] and the students' performance are being considered [12]. Other studies are considering good student segmentation as the best way to achieve student satisfaction [1]. New tools like "The Student Satisfaction Approach" [19] and SERVQUAL questionnaire [9] are developed in order to gather relevant data. The relation between student satisfaction and dropout is also questioned [16].

The goal of many student satisfaction papers is to create a model for the student behaviour. If the model is not using mathematical concepts it is a conceptual model. These kind of models are often used in customer behaviour research [11]. Regarding student satisfaction conceptual models different researchers proposed models able to assess student learning outcomes and satisfaction [5] or able to identify variable determinants of students perceived quality [4]. The mathematical models are also present in the marketing field. In relation with student behaviour and student satisfaction geo-demographic models [8] or ecological models [3] were developed.

The customer behaviour can be divided into five stages: need arousal, information search, evaluation (perception and preference), purchase and post-purchase. For each of these stages specific models can be used to understand the student behaviour. The need arousal stage can be modelled by using stochastic models of purchase incidence or discrete binary choice models. The information search stage can be modelled with individual awareness models, consideration models or information integration models. The perception part of the evaluation stage can use perceptual mapping. The preference part of the same stage can take advantage of attitude models, non-compensatory or compensatory models. For the purchase stage models like multinomial discrete choice models and markov models were

developed. The post-purchase stage can be modelled by using variety seeking models, satisfaction models or communications and network models [11].

4. Research objectives and methodology

In order to better understand the mechanisms behind student satisfaction in relation with the faculty and university, several questions were developed and added to a survey campaign performed among students from the Faculty of Economics and Administration, University of Pardubice, the Czech Republic. Among other objectives, the survey was aimed to quantify the attitude of the students in relation with the university and faculty, the attitude in relation with several components of the educational service and the relations between these components and the overall satisfaction.

From a total of 1857 students enrolled in the Faculty of Economics and Administration, 120 students were selected and 101 answered the questionnaire. From the three study programs offered by the Faculty (Economic Policy and Administration, System Engineering and Informatics, Economics and management) the Economic Policy and Administration and Economics and management programmes were selected.

All the data was analysed using SPSS 17 and during this analysis the descriptive statistics was performed for all the questions. In addition specific tests were completed in order to reach the survey goals.

5. Results

Regarding the student satisfaction towards the Faculty and the University the students considered that, on a five point scale, the university rating (3.49) is better than the faculty rating (3.23). Considering the skew ness and kurtosis of the faculty rating it can be assumed that it follows a normal distribution. The paired sample t-test indicated a statistical significant difference between the two ratings.

Next step was to evaluate the student satisfaction in relation with six different characteristics of the program they are following: learning conditions, educational programmes, professors' capabilities, leisure opportunities, tuition fee and other fees. By applying an ordered logistic regression on these ratings, as independent variables, and on faculty rating, as dependent variable, it was possible to check the connections between the characteristics and the student satisfaction. The regression proved to be statically significant. Using the estimators of the ordered logistic regression presented in Table 1, it was possible to rank the importance of the characteristics.

The ranking provided by the regression were (from first rank to last rank): professor capabilities, tuition fee, learning conditions, educational programs, other fees and leisure opportunities.

Finally, the students were asked to rank the same characteristics. In their opinion the most important characteristic was educational programs. This characteristic was followed by: professor capabilities, learning conditions, tuition fee, leisure opportunities and other fees. Only the learning conditions kept the same place. The educational programs revealed the biggest difference between rankings. Using a Wilcoxon T test it was possible to determine that the differences between the rankings of the regression and the students' rankings are not statistically significant.

Estimates, significance and confidence interval for the six considered factors   Table 1

Parameter Estimates

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Faculty_rating = 1.00]	.307	1.795	.029	1	.864	-3.210	3.825
	[Faculty_rating = 2.00]	3.003	1.565	3.684	1	.055	-.064	6.071
	[Faculty_rating = 3.00]	6.024	1.673	12.963	1	.000	2.744	9.303
	[Faculty_rating = 4.00]	8.960	1.813	24.421	1	.000	5.407	12.514
Location	Score_learning_conditions	.284	.251	1.280	1	.258	-.208	.777
	Score_educational_programs	.196	.272	.520	1	.471	-.337	.730
	Score_professor_capabilities	.475	.276	2.969	1	.085	-.065	1.015
	Score_leisure_opportunities	.057	.202	.078	1	.779	-.340	.454
	Score_tuition_fee	.437	.206	4.483	1	.034	.032	.841
	Score_other_fee	.096	.247	.150	1	.698	-.389	.581

5. Conclusions

It has been shown that the interest in student behaviour and student satisfaction has strong origins in real market situations. More and more papers started to question the role of the student in the higher education environment. From that point new tools aimed to understand the student and the way he is thinking were developed. Next step was to create models able to explain student's decisions. The student satisfaction became more important and marketing started to apply its techniques to this new market environment.

The survey presented in this paper was able to measure the student satisfaction and to relate this characteristic to other characteristics of the study program. Based on student answers the study showed discrepancies between what students think is important and what a model predicts. More than just another point of view on student satisfaction, the survey was able to prove that student satisfaction is a difficult subject and additional research should provide further understanding of this topic.

References

1. Arambewela, R.: *An empirical model of international student satisfaction.* In: Asia Pacific Journal of Marketing and Logistics, 21 (2009), No. 4, pp. 555-569.
2. Bacila, M. et al.: *The importance of behavioural drivers in highly complex decisions – choosing higher education programs.* In: Proceedings of the 5th International Conference on Business Excellence, 1 (2010), pp. 30-33.
3. Benjamin, M., Hollings, A.: *Student satisfaction: Test of an ecological model.* In: Journal of College Student Development, 38 (1997) No. 3, pp. 213-228.

4. Douglas, J., McClelland, R.: *The development of a conceptual model of student satisfaction with their experience in higher education.* In: Quality Assurance in Education 16 (2008) No.1, pp. 19-35.

5. Duque, L., Weeks, J.: *Towards a model and methodology for assessing student learning outcomes and satisfaction.* In: Quality assurance in education, 18 (2010) No. 2, pp. 84-105.

6. Eagle, L., Brennan, R.: *Are students customers? TQM and marketing perspectives.* In: Quality Assurance in Education, 15, (2007) no. 1, pp. 44-60.

7. Finney, T., Finney, R.: *Are students their universities' customers? An exploratory study.* In: Education + Training 52 (2010) No. 4, pp. 276-291.

8. Goenner, C., Pauls, K.: *A predictive model of inquiry to enrolment.* In: Research in Higher education, 47 (2006) No. 8, pp. 935-956.

9. Kotler, Ph., Fox, K.: *Strategic marketing for educational institutions.* New-Jersey, Prentice-Hall, 1995, p. 31.

10. Lacy, S.: *Peter Thiel: We're in a Bubble and It's Not the Internet. It's Higher Education.* Techcrunch.com, 2011. Available at: http://techcrunch. com/2011/04/10/ peter-thiel-were-in-a-bubble-and-its-not-the-internet-its-higher-education/.

11. Lilien, G. et al.: *Marketing models.* New Jersey, Prentice Hall, 1992, p. 19.

12. Pelau, C.: *The relation between the performance and satisfaction of students in universities.* In: Proceedings of the 5th International Conference on Business Excellence, 2 (2010), pp. 72-75.

13. Pop, M. et al.: *The impact of educational experience on students' satisfaction in the Romanian higher education system.* In: International Journal of Business Research, 2008.

14. Robberecht, M. (coord): *Young people facing a dead end? More and better jobs in Europe!* Study conducted for the European Trade Union Confederation's conference, 2010.

15. Rowley, J.: *Customer compatibility management: an alternative perspective on student-to-student support in higher education.* In: The International Journal of Educational Management, 10 (1996) No. 4, pp. 15-20.

16. Suhre, M. et al: *Impact of Degree Program Satisfaction on the Persistence of College Students.* In: Higher Education, 54 (2007), No. 2, pp. 207-226.

17. Vedder, R.: *The Higher education bubble.* forbes.com, 2011. Available at http://blogs.forbes.com/ccap/2011/04/0 5/the-higher-education-bubble/.

18. Vlasceanu, L., Hancean, M., et al: *Quality Barometer – 2010 The State of Quality in Romanian Higher Education.* Available at: http://www.aracis.ro/fileadmin/ARACI S/Publicatii_Aracis/Publicatii_ARACI S/Romana/barometru-final.pdf.

19. Williams, J.: *Student Satisfaction: a British model of effective use of student feedback in quality assurance and enhancement.* In: 14th International Conference on Assessment and Quality in Higher Education, 2002.