

THE INFLUENCE OF IT AND E-COMMERCE ON THE EVOLUTION ON COURIER SERVICES SECTOR

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Abstract: The economic and financial crisis of the last years has been felt strongly in all the sectors of activity. The Romanian courier services market has experienced an important growth during 2000-2007. The last years were marked by significant changes within the sector, on the one hand due to the entrance on the Romanian market of some international companies (through acquisitions of indigenous companies), on the other hand due to the elimination of competitors which did not succeed in keeping their market shares and face an ever stronger competition. In order to maintain themselves on the market, the companies supplying courier services were forced to permanently increase the quality of the service offered through investments into informatical systems and performing IT equipment. Also, the development of the e-commerce has oriented courier companies towards this niche segment. Through regression analysis the present paper aims at testing the hypothesis which claims the existence of a relation between the IT sector and the courier services market.

JEL classification: M19, O14

Key words: services, courier, competition, IT sector, e-commerce

1. INTRODUCTION

Within the present economic context the study of a firm's external environment and of the interdependences between it and the company represent a problem of maximum importance of managers from private companies.

The global interdependence among economies, markets, governments has determinate the growth of the importance of analysing the impact of external environmental factors over companies strategies from the services sector¹.

The services provider receives direct determinants from the external environment in terms of economic influences and political instability, regulations, taxes, social issues, investors².

The tendency in the literature is to analyse the activity within a sector in connection to the influences of the environment, for the service sector the emergence of information technologies being a factor of growth and specialisation³.

In Romania the first courier company appeared in 1991, the market experiencing a slow rhythm of growth until the end of the 1990s. After 2000, with the economic development and the perspectives of entering the European and North-

¹ Nistorescu, T., Sitnikov, C, *Management Strategic*, Editura Sitech, Craiova, 2003, p.45

² Criveanu, I., *Economia Serviciilor*, Editura Sitech, Craiova, 2009, p.45

³ Dess, G., Lumpkin, G.T., Eisner, A.B, *Strategic Management, text and cases 3e*, McGraw-Hill Irwin, 2007, p.57

Atlantic structures, the market burst. Initially a niche service, courier services became an accessible service to wider categories of clients, both natural persons and legal persons. The wider accessibility of the courier service is due to the price-quality relation advantageous for clients who benefit at present of quality postal services in terms of safety, speed, fairness, transparency, ease.

The theme is of present interest having in view the very recent appearance of this type of service in Romania and the projects to liberalise this service at European Union level. The lack of researches in this field challenge us to share a valorous and original contribution to the literature through our studies.

The development of the IT sector has significant implications to the activity of courier companies since the introducing of a high technological level, the possibility to offer quality services necessary in order to satisfy the greater and more diversified needs of customers, as well as to specialise courier operators in delivering packages specific to on-line orders. In Romania, over 80% of the orders delivered by e-commerce companies is made through courier companies, which has led to the development of this niche segment and the increase in the struggle for a greater market share in this segment.

2. OBJECTIVES

Our studies have are founded on the theoretical research of the literature on services, of their management. On the theoretical basis we build empirical researches which strive to answer a series of questions and guide the process at the end of which one can confirm or infirm the theories and hypotheses launched.

The axes of the researches on the influences of the external environment of the courier services operators are prioritarily concentrated on determining the factors which influence their activity and, also, on the correlations existing between the external environment and the activity in this field.

The study presented in this paper aims at presenting the results of a research conducted within courier services sector which analyses the maner in which the evolutions of some factors like the development of IT sector and e-commerce influences the postal and courier services market as well as the fact that e-commerce represents a great opportunity for growth and development for courier companies on a more appealing niche sector. In other words, we will verify the existence of correlations among these variables, central elements of this study.

3. METHODOLOGY

The research questions must guide or theoretical and empirical approach and help us distinguish the essential elements of the research and to scientifically outline the best methods, techniques and research instruments. Thus, in order to quantify the objective of our research we subject the following hypothesis for validation:

Hypothesis 1: There is a correlation between the evolution of postal services market and the evolution of IT sector and e-commerce.

Hypothesis 2: There is a correlation between courier services market value and the number of employees from the private sector

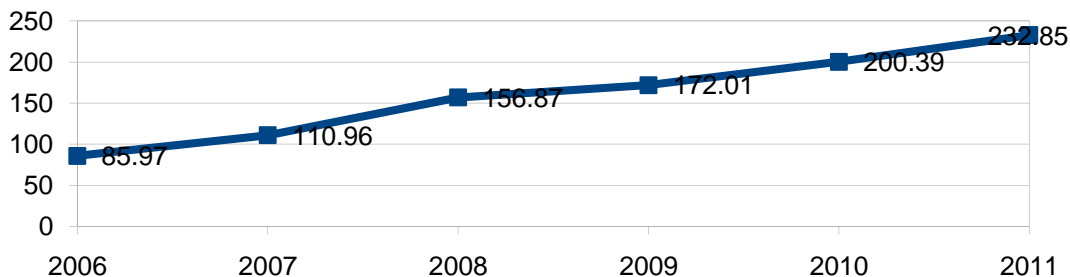
In order to validate it, two research question will guide the whole scientific approach:

Can we find a correlation between the evolution of e-commerce and the growth of the courier market?

In what extent does the growth of e-commerce influence the size of the courier market?

Dependent variable

We have selected a dependent variable which would highlight the evolution of postal and courier services market within the private sector. This variable is measured through the indicator *value of courier services market* during 2006-2011.



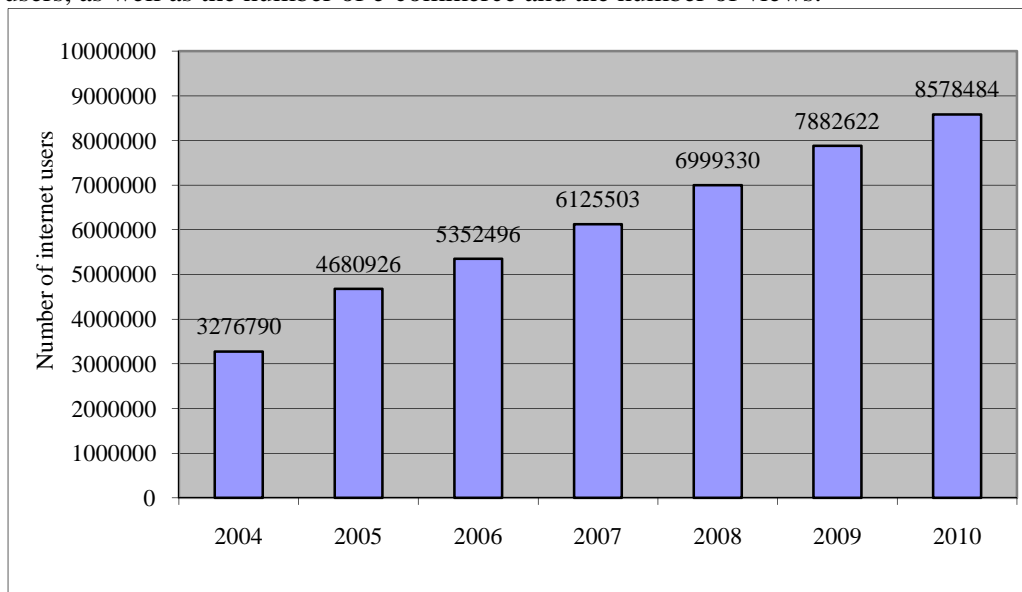
Source: Author's own analysis based on data gathered by the Ministry of Finance

Figure no.1 The evolution of the courier services market in Romania 2006-2011

One can notice that the courier services market has experienced an ascending evolution, although the economic crisis begun at the end of 2008 has been felt strongly within companies in this sector also. The most important companies in this sector have raised their turnover constantly, some with over 20%.

Independent variables

I selected as independent variables the growth of the IT sector and the development of the electronic commerce, measured through the number of internet users, as well as the number of e-commerce and the number of views.



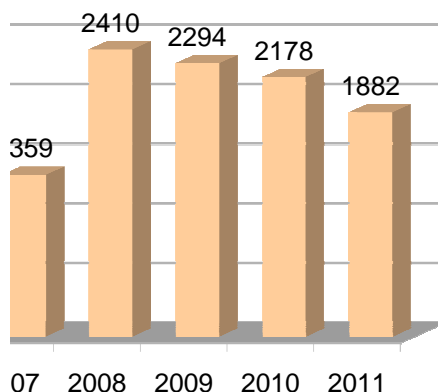
Source: Author's illustration, based on data gathered by the World DataBank,

<http://databank.worldbank.org/Data/Home.aspx>

Figure no.2 Number of internet users

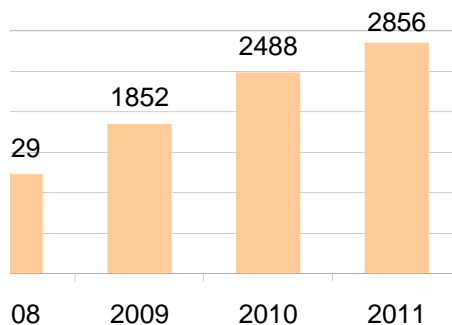
One can notice that in Romania the number of internet users has experienced an ascending evolution, reaching in 2010 at over 8,5 milion users.

Furthermore, the number of e-commerce stores has experienced an ascending period, until 2008, followed by a period of decline. According to trafic.ro in 2011 a number of 1882 e-commerce stores were accessed. However, the number of views of e-commerce stores increased constantly, which demonstrates that although some companies did not face the competition and the economic crisis of the last years, e-commerce has continued to develop, fact which has a great influence over courier services.



Source: Author's own analysis based on data gathered by trafic.ro
Figure no. 3 The evolution of the number of online stores 2004-2011

In figure 4 I will present the number of views of e-commerce stores calculated in milion views.

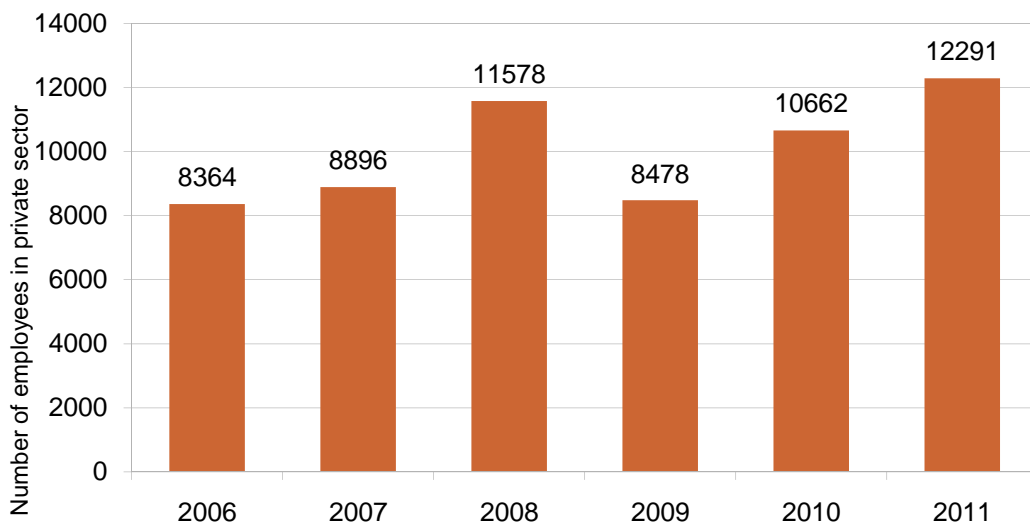


Source: Author's own analysis based on data gathered by trafic.ro
Figure no.4 The evolution of number of views of online stores 2006-2011

Hypothesis 1: There is a correlation between the number of views of e-commerce stores and the courier services market in Romania.

In order to answer the second question of my study – In what extent is the number of employees from postal and courier services sector influenced by external

factors such as courier services market value ? – I have analysed the situation of human resources within the private sector.



Source: Author’s own analysis based on data gathered by the ANCOM

Figure no.5 The evolution of the number of employees in private sector

Hypothesis 2: There is a correlation between courier services market value and the number of employees from the private sector.

4. ANALYSES

Regression analysis

In order to validate the previously launched variables I will further present the variables and indicators used. Thus, I will analyse the value of Pearson’s coefficient of correlation (r) for the relation between the dependent variable (*courier services market value*) and the independent variable (*number of views of online stores*)

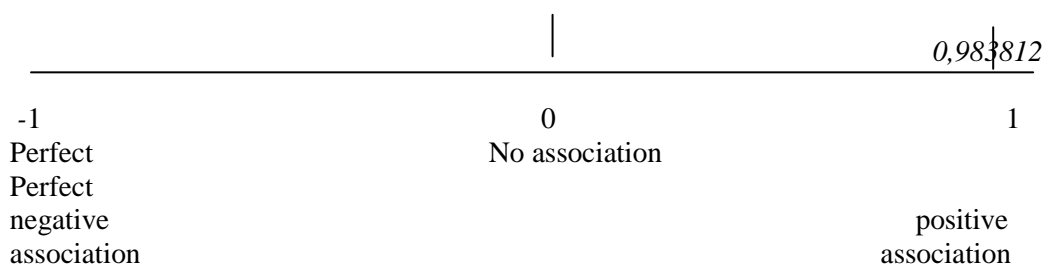


Figure no.6 Interval in which the correlation coefficient for the variables number of views of online stores and courier services market value varies

Multicollinearity analysis

Regression Statistics

Multiple R 0.983308
 R Square 0.966894
 Adjusted R Square 0.933788
 Standard Error 11.81226
 Observations 5

The changes in the value of the dependent variable are explained by the variances of the independent variables in a proportion of 97%, certifying that there is a relative strong association among the dependent and the two independent variables (number of online stores and number of views of online stores)

The value of Pearson's coefficient of correlation (r) for the relation between the dependent variable (*number of employees in private sector*) and the independent variable (*courier services market value*)

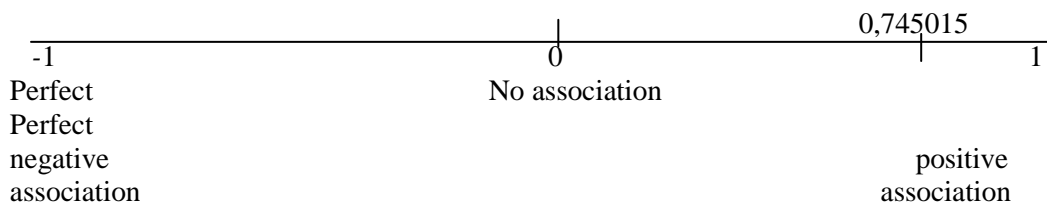


Figure no.7 Interval in which the correlation coefficient for the variables courier services market value and number of employees in private sector varies

5. CONCLUSIONS

The e-commerce sector became an extremely attractive niche for those companies that permanently try to obtain a higher market share from the delivery parcels from online sector. The operators of courier services are forced to offer quality services.

I have validated the hypotheses which claimed the existence of a strong correlation among these variables, central elements of this study. There are relations and influences of other factors as well, however I have identified the variables which I consider to be the most relevant for this study.

My research efforts were however hindered by the scarcity of the literature in this field, the fact that the courier sector did not benefit of comprehensive studies and detailed researches.

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