

APPROACHES TO ANALYZE THE QUALITY OF ROMANIAN TOURISM WEB SITES

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Abstract: *The decision to purchase the tourism product is influenced by the information provided to the tourist. The Internet information, which is the primary source, is used. The tourists choose the company based on the information provided. The main purpose of an online agency is to sell vacations. On the other hand any online agency must respond to user needs even if they are not always commercial (obtaining impressions of a destination, documentary on cheap destinations, etc.). The purpose of our work is to analyze travel web-sites, more exactly, whether the criteria used to analyze virtual stores are also adequate for the Romanian tourism product. Following the study, we concluded that the Romanian online tourism web-sites for the Romanian market have the features that we found listed on similar web-sites of France, England, Germany, etc. In conclusion, online Romanian tourism can be considered one of the factors of economic growth.*

Keywords: *tourism; tourism on-line; ITC in tourism; quality of a web site; testing the consistency; usability rules.*

JEL classification: L86, M15, M31

Introduction

"Tourism is one of the most important economic sectors in the European Union. Furthermore, tourism is the sector with the highest growth rate within the European economy. The European tourism industry will be marked by an important process of transformation, as more and more clients are interested in the attractive offers presented online. Tourists give up traditional services offered by airlines, travel agencies and tour operators to take advantage of the lower prices for packages available on the Internet". [web1]

"According to a recent estimate of the main players in the U.S. tourism market, within at the most 5 years, online companies will have the majority, practically, tourism becoming the largest industry on the Internet. A forecast justified by the extent that the Internet has got worldwide, in the recent years, in the tourism industry, not just overseas. The United States are the leader in online tourism, mainly because of the higher Internet access rates, estimated at 90% for 2013". [web1]

The information has become a commodity, an essential resource. Each information provider (hotel chains and associations, restaurants, car rental companies, travel agents, national tourist offices) should respond to this challenge: the provision and organization of information easily accessible and attractive, reliable and updated.

Online tourism has profits also in the crisis period. Among the ten trends noticed by ANAT regarding tourism in 2011: the importance of social media and online as a distribution channel has increased.[web2]

Related Work and Statistical study

Considerations relied on analysis performed in this work were:

1. As the tourism product does not actually exist at the time of sale. Usually, upon purchase, the product represents the information on the booking paper or computer. The tourist buys the right on the product. Upon the selling, the tourism product represents only the information about the offer. The product may not be tested before being purchased. Thus, the decision to purchase the tourism product is influenced by the information provided to the tourist. Furthermore, the Internet information, which is the primary source, is used. The tourists choose the company based on the information provided. The holder of qualitative and updated information has priority.
2. The pace at which the Internet has grown is amazing and it transforms completely the online reservation domain. At present, there are hundreds of online travel agencies where one may choose and the market is consolidating around major distribution channels, allowing them to charge high commissions and impose inflexible terms; although online travel agencies exercise great power, the digital revolution has made customers have the control ... as it should be - stated in an online publication by horeca.ro
3. "Online tourism has grown in the recent years, so, in February 2011, there were 446 million visitors registered to travel sites, worldwide. As a result of the increased interest in tourism portals, in 2010, the international tourism operators assigned average budgets between 60,000 and 80,000 USD for online promotion, according to a study made by Cornell University. Of the preferred methods for online promotion, we noticed Facebook, Twitter and YouTube. In the recent years, Romania has also agreed with the international trends in the field of online promotion in tourism". posted by G. Stefan on his blog [web 3]
4. "Top 10 is selling very well". This is achieved through the desire to send information, etc., by various criteria. It is well accepted that there is no standardized system to which we and also the operators in the industry may relate when talking about how a business should be or should be managed, so that everyone does as they see fit. Further, we concluded that each type of web-site has a different type of analysis [web4]
5. Technologies; everyone knows W3C or RGAA, but the user has different needs and requirements in accordance with the ergonomic, loading speed or SEO. As shown by the researchers conducted in 2010 and 2011, the searching of travel web-sites is on the 5th place among the interests of the Romanians.[web5]

Articles and papers regarding the quality, ergonomics or an audit of web site that we had as a starting point can be summarized:

- a. a series of articles like "barometer" referring to the online tourism in Western European countries, which retain the following titles: "Le 1er baromètre de la qualité web des sites touristiques" available at [web5], "A chaque type de sites Web, sa méthode spécifique d'évaluation" available at [web6]

- b. analysis related of sites banks, ministries, insurance companies in Romania available at www.tree.ro [web7]
- c. analysis conducted by researchers from roumanian universities [web9], tourism specialists in online comments on blogs [web3], [web10], etc.
- d. analyses performed on Romanian online shops to illustrate the degree of development of e-commerce, competition authors used several criteria available at web13.

The research method used in this study is the survey and the data collection tool is the questionnaire. The questionnaire was made combining various quality analysis criteria of the virtual entities, taken from [web7, web8, web11, web12,web13].

The purpose of the questionnaire is to analyze travel web-sites, more exactly, whether the criteria used to analyze virtual stores are also adequate for the Romanian tourism product. The questionnaire obtained had to be structured into six main chapters / sections. Chapter / Section 1 contains 11 criteria (note from C1 to C11) with the purpose to verify the theory according to which for three clicks, one may get the desired information. Chapter / Section 2 contains two sub-criteria with the purpose to verify the existence of the information on Legal & Trust. Chapter / Section 3 contains 27 criteria with the purpose to verify the existence of classical but complex architecture of the web-site (ergonomic organization of the information on the company policy, products and services). Chapter / Section 4, suggestively called easy Sign-up, verifies the existence of 4 classical elements for the achievement of this activity. Chapter / Section 5 measures the existence of 10 elements necessary / important / vital for the process of booking the tourism product in the virtual environment. In our opinion, these 10 elements should be present on all tourist web-sites. Chapter / Section 6 verifies the possibility of online booking and the use of electronic payment instruments. In this section, we wanted the evaluators to determine how well this tool is developed on the web-site by giving marks from 1 (very poor) to 5 (very good).

The questionnaire was filled in / reviewed by 16 people, aged between 20-30 years old, with average to good knowledge related to the use and development of software products. As this is the first phase of our research, we thought that it was important that the persons who made the evaluation to have high knowledge in order to achieve the quality coherence of this instrument (questionnaire) for the analysis of Romanian tourist web-sites. The tourist web-sites analyzed were found for several months in the top of the surveys conducted by various online publications.

Study hypothesis: The chapters of the questionnaire are a tool for the validation of the web-site quality, in terms of user perception and satisfaction. The Romanian tourist web-sites comply with the usability rules, criteria and principles available in the virtual space. [web5, web7,web8, web11,web12,web13]

Hypothesis 2. According to Nielsen's theory, web-sites allow one to obtain the information within three clicks.

Hypothesis 3. The web-sites include complete information on their legitimacy and confidence as legal entities.

Hypothesis 4. The web-sites have an ergonomic organization of information (in terms of quantity and quality).

Hypothesis 5. The web-sites present easy sign-up

Hypothesis 6. The web-sites present a complete procedure to acquire the tourism product

Hypothesis 7. The web-sites include electronic payment instruments.

The applied statistical analysis is that specific to dichotomous data that the evaluators used in order to specify the existence (value 1) or non-existence (value 0) of the criteria that make up the first 5 chapters of the questionnaire. The results of the analysis are presented below:

To test the second hypothesis of the study, we applied the test for measurement of the ratio rate (REA) which measures the probability of fulfillment / failure to fulfill the criterion. In this context, the analysis required the tracking of the users' responses who graded 1. The purpose of this analysis is to determine if there are inconsistent criteria. The result is drawn in Table 1.

Table 1. Achievement of the analyzed criteria

| Parameters-Criteria | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 |
|---------------------|--------------|-------------|------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|------------|
| P | 0.775 | 0.75 | 0.7 | 0.563 | 0.663 | 0.775 | 0.825 | 0.613 | 0.8 | 0.788 | 0.9 |

Source: : own calculations

The analysis results show that the 11 criteria as determined by evaluators are consistent and present in all the 5 web-sites evaluated. The criterion having the lowest consistency is c4 and the criterion c11 obtained the best score. So, it is required that the owners of the analyzed web-sites to improve the web-site as related to the criteria studied, paying more attention to the criteria having $p < 0.6$. Please note that the value of $p = 1$ means that all evaluators gave the maximum score to the said criterion.

The research hypothesis shows differences between the score obtained by the 5 companies studied regarding the Home Page criteria. To verify this hypothesis, we applied the Kruskal-Wallis test (Chi-Square = 13.479, p-value = 0.009) and we noticed differences between the scores obtained by each company.

Table 2. Statistically descriptive

| Web sites | Mean | Std. Deviation | 95%CI for mean | | Min | Max |
|-----------|------|----------------|----------------|------|-----|-----|
| Site1 | 9.06 | 1.389 | 8.32 | 9.80 | 6 | 11 |
| Site2 | 8.88 | 1.708 | 7.96 | 9.79 | 4 | 11 |
| Site3 | 6.38 | 2.849 | 4.86 | 7.89 | 1 | 11 |
| Site4 | 7.81 | 1.721 | 6.90 | 8.73 | 5 | 10 |
| Site5 | 8.63 | 2.029 | 7.54 | 9.71 | 5 | 11 |

Source: : own calculations

To determine which web-sites generate differences in terms of scores, we applied the Mann-Whitney test. According to the Mann-Whitney test, the score obtained by web-site 1 is not significantly different from web-site 2 (p-value = 0.838) and from web-site 5 (p-value = 0.696), but it is significantly different from the average score obtained by web-site 3 ($p = 0.004$) and the average score obtained by web-site 4 (p-value = 0.035). The study shows that the average score obtained by web-site 1 is greater than the average score obtained by web-site 5 and web-site 3. To determine

which of the five sites studied generate differences, in terms of scoring, we applied the Mann-Whitney test, whose result is: the score obtained by web-site2 is not significantly different from web-site5 (p-value=0.867), but it is significantly different both from the average score obtained by web-site3 ($p = 0.007$) and the mean score of web-site4 (p-value = 0.04). The study also shows that the average score obtained by web-site 2 is greater than the average score obtained by web-site 5 and web-site3. We applied the Mann-Whitney test to determine that the score obtained by web-site 3 is not significantly different from the one obtained by web-site 4 (p-value = 0.128), but it is significantly different from the score obtained by web-site5 ($p = 0.021$). The study shows that the average score obtained by web-site 2 is lower than the average score obtained by web-site5 and web-site 3. Next, we applied the Mann-Whitney test according to which the score obtained by web-site5 is not significantly different from web-site 4 (p-value = 0.184).

In the literature[Kuder 1937], [Cortina1993] [Feldt1989], [Webb Shavelson Haertel2006] there are several opinions regarding testing the internal consistency of dichotomous items. We have considered appropriate in the present study to use Kuder-Richardson (KR21, KR20) for them is analogous to Cronbach's α , except Cronbach's α is also used for non-dichotomous (continuous) measures[Kuder 1937].

The statistical analysis was continued by calculating the internal consistency coefficient of the dichotomous item called Kuder-Richardson (KR21), and the fidelity calculation is obtained through Kuder-Richardson coefficient (KR20). [Opariuc] The result of the Kuder-Richardson coefficient (KR20) is $r_{KR20} = 0.65$, so the degree of fidelity of the questionnaire items to measure the obtaining of information by three clicks is acceptable. The result of the Kuder-Richardson (KR21) coefficient is $r_{KR21} = 0.60$. So, *hypothesis 2* of the study is achieved. The web-sites allow the obtaining of information with three clicks, according to the Nielsen principle.

In this context, we applied the Cohen's kappa test to test the correlation between the evaluators and the result obtained is: between web-site 1 and web-site 2 Kappa = 0.253 with $p < 0.001$ fair agreement; web-site 1 and web-site 3, Kappa = 0.378 with $p < 0.001$, fair agreement; web-site 1 and web-site 4, Kappa = 0.430 with $p < 0.001$, fair agreement; web-site 1 and web-site 5 Kappa = 0.357 with $p < 0.001$, fair agreement; web-site 2 and web-site 3, Kappa = 0.364 with $p < 0.001$, fair agreement; web-site 2 and web-site 4 Kappa = 0.350 with $p < 0.001$, fair agreement; web-site 2 and web-site 5, Kappa = 0.320 with $p < 0.001$, fair agreement; web-site 3 and web-site 4, Kappa = 0.459 with $p < 0.001$, moderate agreement; web-site 3 and web-site 5, Kappa = 0.492 with $p < 0.001$, moderate agreement; web-site 4 and web-site 5, Kappa = 0.438 with $p < 0.001$, moderate agreement. We have made the interpretation of Kappa results according to his theory (Landis & Koch, 1977).

We continued the study by testing the existence of the legal dimension of the studied web-sites. The evaluators marked 1 if the site provides information on the collection and processing of personal data (information, defining goals, individual rights) and zero, thus, the result is:

| Web-sites | web-site 1 | web-site 2 | web-site 3 | web-site 4 | web-site 5 |
|-----------|------------|------------|------------|------------|------------|
| P | 1 | 0.5 | 0.875 | 0.8125 | 0.875 |

Following the study, we obtained the following hierarchy: web-site 1 on the first place, followed by web-site 3 and web-site 5, followed by web-site 4 and on the last position, web-site 2.

We have also made a test related to the confidence of the evaluators in the existence of the trademark of the company name / web domain and its reference on the web-site. The result is:

| Web-site name | Web-site 1 | Web-site 2 | Web-site 3 | Web-site 4 | Web-site 5 |
|---------------|------------|------------|------------|------------|------------|
| p | 1 | 0.625 | 0.688 | 0.688 | 0.813 |

The evaluators decided unanimously that the web-site 1 presents both the trademark with the name / domain and this is clearly stated on the site. In the case of web-site 2, 19% of the evaluators decided that the information on this subject is absent. In the case of web-site 3, respectively web-site 4, 31% of the evaluators decided that the information on this subject is absent. In the case of web-site 2, 38% of the evaluators decided that the information on this subject is absent. So, hypothesis 3 of the study is moderately fulfilled.

Hypothesis 4 of the study refers to a possible agreement between the grades of the evaluators regarding the presence / absence of the basic elements of the architecture of the studied web-sites. To test this hypothesis, we applied the test of PHI associations for all 5 sites. The results are: web-site 1 is poorly associated with web-site 2 PHI = 0.236, p-value = 0.000; web-site 1 is moderately associated with site 3 PHI = 0.414, p-value = 0.000; web-site 1 is poorly associated with web-site 4 PHI = 0.395, p-value = 0.000; web site 1 is poorly associated with web-site 5 PHI = 0.394, p-value = 0.000; web-site 2 is poorly associated with web-site 3 PHI = 0.326, p-value = 0.000; web-site 2 is poorly associated with web-site 4 PHI = 0.307, p-value = 0.000; web-site 2 is associated with web-site 5 PHI = 0.299, p-value = 0.000; web-site 3 is associated with web-site 4 PHI = 0.451, p-value = 0.000; web-site 3 is poorly associated with web-site 5 PHI = 0.479, p-value = 0.000; web-site 4 is poorly associated with web-site 5 PHI = 0.444, p-value = 0.000. We may conclude – generally, there is a good agreement regarding the organization of information on the 5 web-sites.

We continued the study by determining the agreement between the evaluators. In this context, we had to calculate the Cohen's kappa coefficient and the results obtained are: between web-site 1 and web-site 2 Kappa = 0.503 with $p < 0.001$, moderate agreement; web-site 1 and web-site 3 Kappa = 0.561 with $p < 0.001$, moderate agreement; web-site 1 and web-site 4 Kappa = 0.674 with $p < 0.001$, moderate agreement; web-site 1 and web-site 5 Kappa = 0.293 with $p < 0.001$, fair agreement ; web-site 2 and web-site 3 Kappa = 0.351 with $p < 0.001$, fair agreement; web-site 2 and web-site 4 Kappa = 0.503 with $p < 0.001$, moderate agreement; site 2, and site 5 Kappa = 0.264 with $p < 0.001$ so fair agreement; web-site 3 and web-site 4 Kappa = 0.451 with $p < 0.001$, moderate agreement; web-site 3 and web-site 5 Kappa = 0.227 with $p < 0.001$, fair agreement; web-site 4 and web-site 5 Kappa = 0.237 with $p < 0.001$, fair agreement. We have made the interpretation of the Kappa values according to his theory (Landis & Koch, 1977).

We have also calculated the coefficient of the internal consistency of the dichotomous items called Kuder-Richardson (KR21) coefficient and the fidelity of the evaluators according to Kuder-Richardson (KR20) coefficient. (Opariuc). The result of the Kuder-Richardson coefficient (KR20) is $r_{KR20} = 0.845$ so, the fidelity degree of the questionnaire items for the measurement of the internal architecture of the Romanian travel web-sites is very good. The result of the Kuder-Richardson coefficient (KR21) is $r_{KR21} = 0.72$ so, the internal consistency of the items measuring the architecture of the site is good. We may conclude that the 27 criteria for the testing of the ergonomic content of the web-site may also be used for other web-sites and the results are consistent with reality.

Hypothesis four of the study is fulfilled, in other words, there is an ergonomic organization of the information on the web-sites. We mention that these criteria for measuring the organization of the information have been validated for a study of web-sites in France [web5].

Hypothesis 5 of the study consists of an agreement between the marks of the evaluators regarding the presence / absence of the easy sign-up on the web-site. To test the association degree of the web-sites according to validation criteria, we calculated the PHI coefficient. The results are: web-site1 is moderately associated with web-site2 PHI = 0.524, p-value = 0.000; web-site1 is moderately associated with web-site 3 PHI = 0.570, p-value = 0.000; web-site 1 site is moderately associated with web-site 4 PHI = 0.674, p-value = 0.000; web-site1 is poorly associated with web-site 5 PHI = 0.313, p-value = 0.000; web-site3 site is poorly associated with web-site 3 PHI = 0.392, p-value = 0.000; web-site 2 is moderately associated with web-site 4 PHI = 0.524, p-value = 0.000; web-site 2 is poorly associated with web-site 5 PHI = 0.267, p-value = 0.000; web-site 3 is moderately associated with web-site 4 PHI = 0.459, p-value = 0.000; web-site 3 is poorly associated with web-site 5 PHI = 0.263, p-value = 0.000; web-site 4 is poorly associated with web-site 5 PHI = 0.244, p-value = 0.000. We may say that, generally, there is a good agreement regarding organization of the information on the 5 web-sites.

The study also includes the determination of the agreement degree between the evaluators. In this context, we had to calculate the Cohen's kappa coefficient and the result obtained is: between web-site 1 and web-site 2 Kappa = 0.502 with $p < 0.001$, moderate agreement; web-site 1 and web-site 3 Kappa = 0.571 with $p < 0.001$, moderate agreement; web-site 1 and web-site 4 Kappa = 0.684 with $p < 0.001$, moderate agreement; web-site 1 and web-site 5 Kappa = 0.294 with $p < 0.001$, fair agreement; web-site 2 and web-site 3 Kappa = 0.352 with $p < 0.001$, fair agreement; web-site 2 and web-site 4 Kappa = 0.503 with $p < 0.001$, moderate agreement; web-site 2, and web-site 5 Kappa = 0.274 with $p < 0.001$, fair agreement; web-site 3 and web-site 4 Kappa = 0.451 with $p < 0.001$, moderate agreement; web-site 3 and web-site 5 Kappa = 0.237 with $p < 0.001$, fair agreement; web-site 4 and web-site 5 Kappa = 0.238 with $p < 0.001$, fair agreement. We made the interpretation of the Kappa values according to his theory (Landis & Koch, 1977)

The analysis of chapter 4 of the questionnaire refers to the measurement of the sign-up within the 5 web-sites. The statistical analysis necessary to test hypothesis 4 consists of the calculation of the internal consistency coefficient of dichotomous items called Kuder-Richardson (KR21) and the calculation of fidelity is done by Kuder-Richardson coefficient (KR20). The result of Kuder-Richardson coefficient (KR20) is $r_{KR20} = 0.784$, so the degree of fidelity of the questionnaire items to

measure the sign-up on the Romanian travel web-sites is good. The result of Kuder-Richardson coefficient (KR21) is $r_{KR21} = 0.75$, so the internal consistency of the items measuring the architecture of web-site 1 is good. So, the four criteria designed to test the sign-up on web-sites representative for Romanian tourism may also be used for other sites and the results are consistent with reality. So, hypothesis 4 of the study is fulfilled, meaning that the studied web-sites have an easy sign-up. We mention that these criteria for measuring the organization of information on web-site 1 have been validated for a study of web-sites in France [web5].

Chapter 5 of the study is designed to measure the existence of the booking procedure. The hypothesis of the study is that there is an agreement between the grades given by the evaluators regarding the presence / absence of the basic elements of a web-site¹. To test this hypothesis we applied the PHI associations test, whose result is: web-site 1 is moderately associated with web-site 2 PHI = 0.597, p-value = 0.000; web-site 1 is moderately associated with web-site 3 PHI = 0.460, p-value = 0.000; web-site 1 is moderately associated with web-site 4 PHI = 0.434, p-value = 0.000; web-site 1 is moderately associated with web-site 5 PHI = 0.604, p-value = 0.000; web-site 2 is moderately associated with web-site 3 PHI = 0.401, p-value = 0.000; web-site 2 is moderately to well associated with web-site 4 PHI = 0.616, p-value = 0.000; web-site 2 is moderately to well associated with web-site 5 PHI = 0.730, p-value = 0.000; web-site 3 is moderately associated with web-site 4 PHI = 0.565, p-value = 0.000; web-site 3 is moderately associated with web-site 5 PHI = 0.442, p-value = 0.000; web-site 4 is moderately associated with web-site 5 PHI = 0.470, p-value = 0.000.

To test the agreement between the evaluators, we applied Cohen's kappa and the result obtained is between web-site 1 and web-site 2 Kappa = 0.596 with $p < 0.001$, moderate agreement; web-site 1 and web-site 3 Kappa = 0.423 with $p < 0.001$, moderate agreement; web-site 1 and web-site 4 Kappa = 0.418 with $p < 0.001$, moderate agreement; web-site 1 and web-site 5 Kappa = 0.601 with $p < 0.001$, moderate agreement; web-site 2 and web-site 3 Kappa = 0.376 with $p < 0.001$, fair agreement; web-site 2 and web-site 4 Kappa = 0.601 with $p < 0.001$, moderate agreement; web-site 2 and web-site 5 Kappa = 0.729 with $p < 0.001$, good agreement; web-site 3 and web-site 4 Kappa = 0.545 with $p < 0.001$, moderate agreement; web-site 3 and web-site 5 Kappa = 0.421 with $p < 0.001$, moderate agreement; web-site 4 and web-site 5 Kappa = 0.463 with $p < 0.001$, moderate agreement. We made the interpretation of the Kappa values according to his theory (Landis & Koch, 1977).

The statistical analysis continued with the calculation of the internal consistency coefficient of the dichotomous items called Kuder-Richardson (KR21) and the fidelity calculation is done through Kuder-Richardson coefficient (KR20). The result of the Kuder-Richardson coefficient (KR20) is $r_{KR20} = 0.95$ so, the degree of fidelity of the questionnaire items to measure the acquisition procedure of the tourism product on the Romanian travel web-sites¹ is very good. The result of the Kuder-Richardson coefficient (KR21) is $r_{KR21} = 0.90$ so, the internal consistency of the items measuring the booking procedure of the tourism product is very good. So, hypothesis 6, the web-sites present a complete procedure for the purchase of the tourism product, is fulfilled. We mention that these criteria for measuring the booking procedure of the

tourism product have been validated in the case of a study on web-sites in France [web5].

The last chapter is dedicated to the determination of the existence of electronic payment instruments on the 5 web-sites. To test hypothesis 7, we calculated the average value of the marks given by the evaluators for each web-site studied in terms of this dimension. The result is:

Table 3: Descriptive Statistics

| | Mean | Std. Deviation | Minimum | Maximum | Percentiles | | |
|-------|------|----------------|---------|---------|------------------|------------------------------|------------------|
| | | | | | 25 th | 50 th (Median) | 75 th |
| Site1 | 4.63 | 2.062 | 0 | 6 | 3.25 | 6.00 | 6.00 |
| Site2 | 4.00 | 2.221 | 0 | 6 | 2.25 | 5.00 | 6.00 |
| Site3 | 3.56 | 2.128 | 0 | 6 | 1.50 | 4.00 | 5.75 |
| Site4 | 4.00 | 2.268 | 0 | 6 | 2.00 | 5.00 | 6.00 |
| Site5 | 3.81 | 2.228 | 0 | 6 | 2.25 | 4.00 | 6.00 |

Source: : own calculations

We continued the study by applying the Kruskal Wallis test for the verification of the differences between the marks given by the evaluators for the web-sites. The result is shown in the table below .

Table 4: Kruskal Wallis Test

| | Web1 | Web2 | Web3 | Web4 | Web5 |
|-------------|--------|--------|--------|--------|--------|
| Chi-Square | 15.000 | 15.000 | 15.000 | 15.000 | 14.000 |
| Df | 15 | 15 | 15 | 15 | 14 |
| Asymp. Sig. | .451 | .451 | .451 | .451 | .450 |

Source: : own calculations

The analysis results show: according to the average value of the marks given by the evaluators, there are no significant differences between the average value of the marks give to the web-sites. However, the fact that the average value of the grades given by the evaluators is different from zero indicates that the instrument is present on each web-site, so hypothesis 7 is fulfilled. In this context, we mention that the implementation of online payment instruments was done with hard work and in time. Given this reality, their existence on the studied sites is a step forward in this area and time will allow their improvement.

The fact that all study hypotheses are met reveals that the general hypothesis of the study (chapters of the questionnaire is a tool for validating the quality of the web-site in terms of user perception and satisfaction) is fulfilled.

In conclusion

As a corollary: the study shows that the Romanian travel web-sites exist, and in addition, they comply with the rules, criteria and principles of usability available in the virtual space.

The results provided as a result of testing the questionnaire on five web-sites that were the pioneers of the Romanian tourism, on the 16 evaluators with average knowledge of IT allows us to continue applying it on other sites.

Following the study, we concluded that the Romanian online tourism web-sites for the Romanian market have the features that we found listed on similar web-sites of France, England, Germany, etc.

Now, at the beginning of the 21st century, the new technologies change the traditional situation. Any time, a new competitor may upset the value chain. Competition becomes "global", at the same time, global and local. Each tourism company may address equally the entire world, but adapting to local travel markets.

In addition, changes of the global social, economic and public policies force many institutions to begin to benefit from new technologies. We may say that the entire world is undergoing a fundamental change related to the way in which the "interaction" is made; a change led by the almost unanimous acceptance of Web 2.0 technologies, such as "wiki" sites, social networks and blogs.

In spite of cost and efficiency benefits arising from the use of the new technologies in service delivery, traditional attitudes of ownership of information and organization of companies are still barriers in the modernization process.

In the near future, the main activities will be not only B2B (business to business) and B2C (business to consumer), but also S2S (services to services): a virtual network of specialized companies that will provide value-added services. The result will be a complete customization for the consumer and the use of one to one marketing (individual tourist or travel company) and more general access to all tourist information in the world.

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