ASSESSMENT OF TOURIST SATISFACTION INDEX: EVIDENCE FROM ARMENIA

Abstract. The paper summarizes the arguments and counterarguments within the scientific discussion on the issue of tourist satisfaction evaluation. Satisfaction is the fulfillment of human needs. The distinction between tourist expectations and perceived performance shows the level of satisfaction or dissatisfaction. If expectations exceed perceived performance, this means that the customer is satisfied. Satisfaction leads to loyalty and revisits. Hence, it is crucial to evaluate the satisfaction level of tourists and find out gaps. Systematization literary sources and approaches for solving the problem indicate that many countries have their indexes to measure customer satisfaction. The main purpose of the research is to measure tourist satisfaction in Armenia. Investigation of the topic in the paper is carried out in the following logical sequence: the main literature was observed, the index and model of tourist satisfaction evaluation were elaborated for Armenia, and a survey was conducted among 385 incoming tourists during 2018. Methodological tools of the research methods were sociological survey, IPA analysis, CSAT, NPS methods. As a result of the calculations, the main issues of service quality were detected. The main results were analyzed using Importance-performance matrix. Also Customer satisfaction score and Net promoter score were calculated. The paper presents the results of an empirical analysis that shows the main gaps in the quality of tourism services. Based on the analysis some suggestions were done towards improving the performance of main services which failed to satisfy tourists. The research empirically confirms and theoretically proves the necessity of doing the following steps: reducing airfare costs, increasing direct flights, improving tourism infrastructures, road quality, public transport, taxi services, the level of tourism services, increasing the competence level of touristic staff and their English language awareness, insuring environmental protection, increasing marketing performance of tourism sector in order to provide more information about Armenia abroad, etc. The findings have practical significance and the results of the research can be useful for the public and private sector of tourism industry.

Keywords: Customer satisfaction score, tourist, survey, satisfaction, Net promoter score, model

Introduction. The Republic of Armenia is an old country with a rich history and culture, ancient traditions. Recently, the number of incoming tourists has increased. In 2018 1651782 tourists came to Armenia, the growth was 10.5% compared to last year (Social-Economic Situation of the RA in January-December, 2018). Tourists mainly come from Russia, Georgia, Iran, USA, Ukraine, Germany, France, Philippines, etc. This year the number of incoming tourists from China, India, Singapore, New Zealand has increased.

Many types of tourism may be developed in Armenia based on existing resources, such as: historical-cultural, religious, gastronomic, health-medical, adventure, agri- and eco-, scientific and educational, etc.

The growing number of tourists requires a high level of services in order to satisfy the needs of tourists. Satisfied tourists will come back again or advise others to visit. At the same time, not satisfied tourists are potential detractors. Hence, it is of high importance to measure tourists' satisfaction, in order to find out the gaps between their satisfaction and expectations. This will allow taking steps towards improving the performance of services.

For this purpose, the article aims at evaluating tourists satisfaction with Armenia, for which tourist satisfaction evaluation indexes and models were explored, a questionnaire was developed, a survey was conducted among incoming tourists in Armenia, the model and index for satisfaction evaluation were elaborated and the main calculations were done. Based on the survey results Importance-performance
analysis was done and as a result, some suggestions were done towards increasing the level of tourism services.

**Literature Review.** Here is introduced some aspects of tourist satisfaction and models of evaluation available in literature.

According to Oliver (1997), satisfaction may be described as a function of disconfirmation, which in turn is a function of both expectations and performance. The disconfirmation paradigm here encircles four constructs: expectations, performance, disconfirmation and satisfaction (Caruana et al., 2000).

Satisfaction as a disparity between the observed and the desired (Poisz and Grumbkow, 1988).

According to Kotler (2003) satisfaction is a person’s feelings of pleasure or disappointment which result from comparing a product’s perceived performance in relation to the expectations.

According to Wang and Yang (2004) customer satisfaction is evaluation after consumption that disappoinst, meets or exceeds expectations and is based on the overall experience.

Expectations are an individual’s beliefs about how a product is likely to perform in the future (Oliver and Winer, 1987).

Current research showed that besides the traditional classification categories based on service attributes and the type of providers, human factor is a new important category of elements that influences satisfaction (Maunier and Camelis, 2013).

Besides, tourists’ satisfaction is statistically related to the extent of destination image modification (Lee et al., 2013).

The Swedish Customer Satisfaction Barometer (SCSB) was established in 1989 and was the first national customer satisfaction index for domestically purchased and consumed products and services (Fornell, 1992). It included approximately 130 companies from 32 of Sweden’s largest industries. SCSB contains two primary antecedents of satisfaction: perceptions of a customer’s performance experience with a product or service, and customer expectations regarding that performance. According to this model the increased satisfaction will decrease customer complaints and increase customer loyalty (Johnson et al., 2001).

The American Customer Satisfaction Index (ACSI) was introduced in 1994 including 200 companies from 34 industries (Fornell et al., 1996). This model shows the connections between perceived value, quality and satisfaction. When perceived value and perceived quality increase, customer satisfaction also grows. The main differences between the SCSB and the ACSI models are the addition of a perceived quality component (Fornell et al., 1996).

The Norwegian Customer Satisfaction Barometer (Andreassen and Lervik, 1999; Andreassen and Lindstad, 1998) was introduced in 1996 reporting results of 42 companies in 12 different industries (both business-to-consumer and business-to-business). NCSB is different from the ACSI model, as it uses SERVQUAL to measure service quality, focuses on the introduction of corporate reputation and replaces customer complaints with complaint handling (Yang et al., 2000).

European Customer Satisfaction Index was introduced in 2000 and was used across four industries and 11 countries in the European Union (Eklof, 2000). ECSI contains the traditional latent variables: perceived quality, expectations, perceived value, satisfaction index, loyalty and two optional latent variables: image and complaints (Bayol et al., 2000).

**Methodology and research methods.** The aim of the study was to evaluate tourist satisfaction in Armenia. For that purpose, a survey was conducted among 385 tourists in different touristic destinations in Armenia during 2018. The sociological sample size was defined using http://www.raosoft.com/samplesize.html website, the population size was the number of incoming tourists in 2017, which is 1494779 tourists, the confidence level was set 95% The tourists were asked to fill in the questionnaire consisting of 60 questions, 39 of which were specific questions, which they rated according to their level of perception (Very dissatisfied-1, Dissatisfied-2, Somewhat satisfied-3, Satisfied-4, Very satisfied-5).
4, Very satisfied-5), expectations (Very low-1, Low-2, Medium-3, High-4, Very high-5) and importance for them (Not important at all-1, Not important-2, Of medium importance-3, Important-4, Very important-5). Based on the analysis an Armenian Tourist Satisfaction Model (ATSM) was processed.

According to our model the following factors impact on tourist satisfaction: destination image, hotel facilities, restaurants, attractions, retail shops, transportation, marketing, as well as nature, historical and cultural resources, safety level and activities in the destination. The last four factors, as well as tourist satisfaction and tourist complaints, influence tourist loyalty.

Our survey included questions regarding the main factors in the model about the airport, transportation, service and price level in hotels and restaurants, leisure facilities, touristic destinations, retail shops, banking, financial, mobile network and other services, nature, safety level, etc. All these areas covered the selected 60 questions which allowed evaluating the level of services of the main factors. The existing models do not allow evaluating tourist satisfaction from all aspects, and we processed a new index specifically for Armenia, in order not to use different indexes separately. The model above already shows the main areas which were used for evaluation.

The calculations were done using the following formula.

\[ ATSI_i = \sum_{j=1}^k l_{ij} (P_{ij} - E_{ij}), \] (1)
G. Tovmasyan. Assessment of Tourist Satisfaction Index: Evidence from Armenia

ATSI, is the Armenian tourist satisfaction index of $i$ tourist, $k$ is the number of factors, $P_{ij}$ is the perception of $j$ factor by $i$ tourist, $E_{ij}$ is the expectations of $i$ tourist from the factor $j$, $I_{ij}$ is the importance level of $j$ factor for $i$ tourist.

Results. Among the survey participants were people mostly 21-35 and 36-50 years old. About 70% of participants had a monthly income of over 400,000 AMD (841 dollars and more, 671 euros and more), about 84% had higher education. Mostly tourists from Russia, the United States, UAE, the Philippines, Georgia, and Poland were among the respondents. About 65% of the respondents organized their trip independently, about 73% visited Armenia for the first time, 60% visited with the purpose of historical and cultural tourism, 57% visited for one week, about 66% were staying at hotel facilities, and around 94% expressed a desire to visit Armenia again (table 1).

<table>
<thead>
<tr>
<th>Table 1. Some data about survey participants</th>
<th>The number of survey participants</th>
<th>The percentage of survey participants in the total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 20 years old</td>
<td>15</td>
<td>3.9</td>
</tr>
<tr>
<td>21-35 years old</td>
<td>180</td>
<td>46.75</td>
</tr>
<tr>
<td>36-50 years old</td>
<td>135</td>
<td>35.06</td>
</tr>
<tr>
<td>51-66 years old</td>
<td>47</td>
<td>12.21</td>
</tr>
<tr>
<td>67 years old and elder</td>
<td>8</td>
<td>2.08</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>209</td>
<td>54.29</td>
</tr>
<tr>
<td>Female</td>
<td>176</td>
<td>45.71</td>
</tr>
<tr>
<td>Income level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 100,000 AMD (up to 210 US dollar, 170 Euro)</td>
<td>21</td>
<td>5.45</td>
</tr>
<tr>
<td>100,001-200,000 AMD (211-420 US dollar, 171-335 Euro)</td>
<td>33</td>
<td>8.57</td>
</tr>
<tr>
<td>200,001-300,000 AMD (421-630 US dollar, 336-500 Euro)</td>
<td>25</td>
<td>6.49</td>
</tr>
<tr>
<td>300,001-400,000 AMD (631-840 US dollar, 501-670 Euro)</td>
<td>35</td>
<td>9.09</td>
</tr>
<tr>
<td>400,001 AMD and more (841 US dollar and more, 671 Euro and more)</td>
<td>271</td>
<td>70.39</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>18</td>
<td>4.68</td>
</tr>
<tr>
<td>Student</td>
<td>27</td>
<td>7.01</td>
</tr>
<tr>
<td>State officer</td>
<td>25</td>
<td>6.49</td>
</tr>
<tr>
<td>Service sector</td>
<td>114</td>
<td>29.61</td>
</tr>
<tr>
<td>Production sector</td>
<td>34</td>
<td>8.83</td>
</tr>
<tr>
<td>Trade sphere</td>
<td>34</td>
<td>8.83</td>
</tr>
<tr>
<td>Other</td>
<td>133</td>
<td>34.55</td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td>30</td>
<td>7.79</td>
</tr>
<tr>
<td>Georgia</td>
<td>18</td>
<td>4.68</td>
</tr>
<tr>
<td>USA</td>
<td>35</td>
<td>9.09</td>
</tr>
<tr>
<td>UAE</td>
<td>61</td>
<td>15.84</td>
</tr>
<tr>
<td>Philippines</td>
<td>50</td>
<td>12.99</td>
</tr>
<tr>
<td>India</td>
<td>12</td>
<td>3.12</td>
</tr>
<tr>
<td>Poland</td>
<td>18</td>
<td>4.68</td>
</tr>
<tr>
<td>Spain</td>
<td>16</td>
<td>4.16</td>
</tr>
<tr>
<td>Italy</td>
<td>8</td>
<td>2.08</td>
</tr>
</tbody>
</table>
Continued Table 1

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lebanon</td>
<td>9</td>
<td>2.34</td>
</tr>
<tr>
<td>Greece</td>
<td>9</td>
<td>2.34</td>
</tr>
<tr>
<td>Other countries (Argentina, Australia, Austria, Bahrain, Belarus, Belgium, Brazil, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Germany, Hungary, Iran, Iraq, Israel, Japan, Jordan, Kuwait, Lithuania, Macedonia, Mexico, Nederland, New, Zealand, Oman, Pakistan, Palestine, Portugal, Qatar, Romania, Saudi Arabia, Slovakia, South Africa, Sweden, Switzerland, Tajikistan, Thailand, Turkey, Ukraine, United Kingdom)</td>
<td>119</td>
<td>30.89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>323</td>
</tr>
<tr>
<td>Technical education</td>
<td>30</td>
</tr>
<tr>
<td>Secondary</td>
<td>22</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How have you heard about Armenia?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>from tour agencies</td>
<td>55</td>
</tr>
<tr>
<td>internet ads</td>
<td>50</td>
</tr>
<tr>
<td>from my friend</td>
<td>105</td>
</tr>
<tr>
<td>I have a friend, relative who lives here</td>
<td>39</td>
</tr>
<tr>
<td>I am Armenian</td>
<td>36</td>
</tr>
<tr>
<td>other</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How have you organized your travel to Armenia?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>myself</td>
<td>251</td>
</tr>
<tr>
<td>by tour agencies</td>
<td>91</td>
</tr>
<tr>
<td>other</td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>You visit Armenia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>for the first time</td>
<td>281</td>
</tr>
<tr>
<td>for the second time</td>
<td>27</td>
</tr>
<tr>
<td>for the third time</td>
<td>11</td>
</tr>
<tr>
<td>for the fourth time and more</td>
<td>66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What was the purpose of your visit? (the respondents could mention more than one option)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>to visit friends and relatives</td>
<td>78</td>
</tr>
<tr>
<td>business tourism</td>
<td>68</td>
</tr>
<tr>
<td>spa-resort tourism</td>
<td>26</td>
</tr>
<tr>
<td>medical tourism</td>
<td>4</td>
</tr>
<tr>
<td>religious tourism</td>
<td>28</td>
</tr>
<tr>
<td>historical-cultural tourism</td>
<td>231</td>
</tr>
<tr>
<td>sports and extreme tourism</td>
<td>22</td>
</tr>
<tr>
<td>ecotourism</td>
<td>30</td>
</tr>
<tr>
<td>agritourism</td>
<td>10</td>
</tr>
<tr>
<td>other (educational, gastronomic, rest and leisure, exchange programs, marriage vacation, etc.)</td>
<td>80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How long will you stay in Armenia?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Till 7 days</td>
<td>220</td>
</tr>
<tr>
<td>8-15 days</td>
<td>95</td>
</tr>
<tr>
<td>16-30 days</td>
<td>40</td>
</tr>
<tr>
<td>31 days and more</td>
<td>30</td>
</tr>
</tbody>
</table>
Assessment of Tourist Satisfaction Index: Evidence from Armenia

Marketing and Management of Innovations, 2019, Issue 3

http://mmi.fem.sumdu.edu.ua/en

Continued Table 1

<table>
<thead>
<tr>
<th>Where will you stay?</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In hotel facilities</td>
<td>255</td>
<td>66,23</td>
<td></td>
</tr>
<tr>
<td>I have rented an apartment/a house</td>
<td>90</td>
<td>23,38</td>
<td></td>
</tr>
<tr>
<td>at my relative’s house</td>
<td>18</td>
<td>4,68</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td>22</td>
<td>5,71</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How much money did you spend in Armenia?</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 500 dollars</td>
<td>40</td>
<td>10,39</td>
<td></td>
</tr>
<tr>
<td>501-1000 dollars</td>
<td>40</td>
<td>10,39</td>
<td></td>
</tr>
<tr>
<td>1001-1500 dollars</td>
<td>20</td>
<td>5,19</td>
<td></td>
</tr>
<tr>
<td>1501 dollars and more</td>
<td>36</td>
<td>9,35</td>
<td></td>
</tr>
<tr>
<td>Have not mentioned</td>
<td>249</td>
<td>64,68</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you consider the amount you spent during your stay justified?</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
<tr>
<td>I do not know</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Would you like to return to Armenia?</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>360</td>
<td>93,51</td>
<td></td>
</tr>
<tr>
<td>no</td>
<td>2</td>
<td>0,52</td>
<td></td>
</tr>
<tr>
<td>I do not know</td>
<td>23</td>
<td>5,97</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by the author based on the survey results.

Tourists visited a number of churches, museums, participated in festivals, especially in the wine festival. They mostly mentioned the following destinations: Gyumri, Haghpat, Sanahin, Odzun, Akhtala, Vanadzor, Alaverdi, Aparan, Amberd, Sagmosavanik, Yerevan (Cascade, Tsitsernakaberd, Mother Armenia Memorial, Matenadaran, Yerevan museums, Yerablur, Republic Square), Zvartnots, Mount Azhdahak, Dillijan, Yenokavan, Parz Lake, Sardarapat, Artashat, Khnor Virap, Abovyan, Yeghvard, Tatev, Karahunj, Kapan, Garni, Geghard, Jermuk, Noravank, Areni, lake Sevan, Aghveran, Tsaghkadzor, Aragats, Meghri, Goris, Khndzoresk, Sisian, Zorats Stones, Artsakh, Stepanakert, Shushi, etc. Tourists liked all the places.

The majority of tourists (about 80%) were satisfied with the trip and did not have any complaints. The most mentioned positive and negative comments by tourists were the following in Table 2.

Customer Satisfaction Score (CSAT) was calculated by asking the tourists to evaluate their overall satisfaction level with their stay in Armenia from 1 (very dissatisfied) to 10 (very satisfied).

\[
\text{CSAT} = \frac{\text{Sum of all Scores} \times 10}{\text{Number of respondents}} = 91
\]

The CSAT score shows that 91% were satisfied with their trip.

Net Promoter Score (NPS) was also calculated which is another metric of customer experience, often thought of as the loyalty metric, by asking "How likely is that you will recommend your friends to visit Armenia?". The range of responses were 1-10 (1-6 were detractors, 7-8 were passives and 9-10 were promoters).

\[
\text{NPS} = (\text{Promoters} - \text{Detractors}) \times 100\% \div \text{Total respondents} = 80\% 
\]

So 80% of visitors will recommend others to visit Armenia.
Table 2. Tourist comments about Armenia

<table>
<thead>
<tr>
<th>Positive comments</th>
<th>Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>nice and friendly people</td>
<td>unpleasant hotels, not a high level of service,</td>
</tr>
<tr>
<td>tasty cuisine</td>
<td>taxi drivers fool tourists</td>
</tr>
<tr>
<td>there is no over-tourism and that is good</td>
<td>road conditions are very bad, terrible traffic</td>
</tr>
<tr>
<td>reasonable prices of food</td>
<td>Armenia has no direct flights with many countries and the airfare is too expensive</td>
</tr>
<tr>
<td>interesting festivals</td>
<td>not many people speak English</td>
</tr>
<tr>
<td>unique monasteries</td>
<td>a lot of trash everywhere</td>
</tr>
<tr>
<td>beautiful nature</td>
<td>smoking in public areas</td>
</tr>
<tr>
<td>interesting tour programs</td>
<td>streets should be lighter at night</td>
</tr>
<tr>
<td>beautiful country</td>
<td>few WIFI spots in public areas</td>
</tr>
<tr>
<td>unique Armenian culture and history</td>
<td>impossible to use public transport as the routes are mentioned in Armenian</td>
</tr>
<tr>
<td>traditional Armenian values of life, love and family</td>
<td>Armenia is not presented as a touristic destination abroad, marketing performance is not effective</td>
</tr>
<tr>
<td>safe and secure country</td>
<td>Lack of maps, touristic guides in the airport</td>
</tr>
</tbody>
</table>

Source: Compiled by the author based on the survey results.

Tourists evaluated 39 questions regarding quality of different services according to their satisfaction, expectations and the importance of these factors for themselves. Below are the estimates for each factor (table 3).

Table 3. Evaluations of some services by tourists

<table>
<thead>
<tr>
<th>Question</th>
<th>Your satisfaction level</th>
<th>The level of your expectations</th>
<th>Importance of the factor for you (S-E)</th>
<th>Weighted index (S-E)*I</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General conditions of the airport and the service there</td>
<td>3.88</td>
<td>3.74</td>
<td>4.05</td>
<td>0.14</td>
</tr>
<tr>
<td>2. Air ticket prices</td>
<td>3.49</td>
<td>3.64</td>
<td>4.25</td>
<td>-0.16</td>
</tr>
<tr>
<td>3. Taxi fare in Armenia</td>
<td>3.80</td>
<td>3.60</td>
<td>4.05</td>
<td>0.20</td>
</tr>
<tr>
<td>4. The level of taxi services</td>
<td>3.50</td>
<td>3.61</td>
<td>4.12</td>
<td>-0.11</td>
</tr>
<tr>
<td>5. General conditions of the hotel facility</td>
<td>3.98</td>
<td>3.87</td>
<td>4.29</td>
<td>0.11</td>
</tr>
<tr>
<td>6. The level of service in the hotel facility</td>
<td>3.91</td>
<td>3.89</td>
<td>4.28</td>
<td>0.02</td>
</tr>
<tr>
<td>7. The correlation of price-service quality of the hotel facility</td>
<td>3.94</td>
<td>3.89</td>
<td>4.32</td>
<td>0.05</td>
</tr>
<tr>
<td>8. The level of prices in the hotel facility</td>
<td>3.84</td>
<td>3.81</td>
<td>4.24</td>
<td>0.03</td>
</tr>
<tr>
<td>9. The level of competence of the staff of the hotel facility</td>
<td>3.94</td>
<td>3.91</td>
<td>4.31</td>
<td>0.04</td>
</tr>
<tr>
<td>10. The level of willingness of the staff to help the customer in the hotel facility</td>
<td>4.06</td>
<td>4.02</td>
<td>4.36</td>
<td>0.05</td>
</tr>
<tr>
<td>11. The quality of food in the hotel facility</td>
<td>3.69</td>
<td>3.85</td>
<td>4.12</td>
<td>-0.16</td>
</tr>
<tr>
<td>12. The existence of leisure activities in the hotel facility</td>
<td>3.23</td>
<td>3.53</td>
<td>3.80</td>
<td>-0.30</td>
</tr>
<tr>
<td>13. The existence of Wi-Fi and the quality of Internet connection in the hotel facility</td>
<td>3.89</td>
<td>3.87</td>
<td>4.37</td>
<td>0.02</td>
</tr>
<tr>
<td>14. The level of services in cafes and restaurants</td>
<td>4.08</td>
<td>4.01</td>
<td>4.35</td>
<td>0.07</td>
</tr>
<tr>
<td>15. The quality of food in cafes and restaurants</td>
<td>4.15</td>
<td>4.09</td>
<td>4.40</td>
<td>0.06</td>
</tr>
<tr>
<td>16. The level of prices in cafes and restaurants</td>
<td>4.24</td>
<td>4.01</td>
<td>4.32</td>
<td>0.23</td>
</tr>
</tbody>
</table>
Continued Table 3

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. The existence of WI-Fi and the quality of Internet connection in restaurants</td>
<td>3.89</td>
<td>3.87</td>
<td>4.16</td>
<td>0.02</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>18. General conditions of city transport</td>
<td>3.27</td>
<td>3.56</td>
<td>4.05</td>
<td>-0.29</td>
<td>-1.18</td>
<td></td>
</tr>
<tr>
<td>19. The existence of guiding signs in the streets</td>
<td>3.58</td>
<td>3.73</td>
<td>4.20</td>
<td>-0.14</td>
<td>-0.60</td>
<td></td>
</tr>
<tr>
<td>20. Picturesque nature</td>
<td>4.22</td>
<td>4.21</td>
<td>4.43</td>
<td>0.01</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>21. General conditions and cleanliness of tourism destinations</td>
<td>4.05</td>
<td>4.00</td>
<td>4.38</td>
<td>0.05</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>22. The existence of touristic information in tourism destinations</td>
<td>3.79</td>
<td>3.90</td>
<td>4.30</td>
<td>-0.10</td>
<td>-0.45</td>
<td></td>
</tr>
<tr>
<td>23. The existence of public toilets in tourist sites and their conditions</td>
<td>3.30</td>
<td>3.74</td>
<td>4.38</td>
<td>-0.43</td>
<td>-1.90</td>
<td></td>
</tr>
<tr>
<td>24. The hospitality of Armenians and attention to tourists</td>
<td>4.21</td>
<td>4.21</td>
<td>4.42</td>
<td>-0.01</td>
<td>-0.02</td>
<td></td>
</tr>
<tr>
<td>25. The existence of tourism programs organized by tour companies</td>
<td>3.52</td>
<td>3.74</td>
<td>3.99</td>
<td>-0.22</td>
<td>-0.87</td>
<td></td>
</tr>
<tr>
<td>26. The availability of tourism programs organized by tour companies</td>
<td>3.49</td>
<td>3.70</td>
<td>3.98</td>
<td>-0.21</td>
<td>-0.83</td>
<td></td>
</tr>
<tr>
<td>27. The efficiency of tourism programs organized by tour companies</td>
<td>3.48</td>
<td>3.68</td>
<td>4.01</td>
<td>-0.20</td>
<td>-0.82</td>
<td></td>
</tr>
<tr>
<td>28. Ensuring access to the necessary information to tourists in the country</td>
<td>3.74</td>
<td>3.89</td>
<td>4.18</td>
<td>-0.14</td>
<td>-0.60</td>
<td></td>
</tr>
<tr>
<td>29. The quality of mobile network in Armenia</td>
<td>3.85</td>
<td>3.90</td>
<td>4.19</td>
<td>-0.05</td>
<td>-0.20</td>
<td></td>
</tr>
<tr>
<td>30. The speed of Internet connection in Armenia</td>
<td>3.96</td>
<td>3.89</td>
<td>4.26</td>
<td>0.06</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>31. The degree of cleanliness of the environment in Armenia</td>
<td>3.86</td>
<td>3.96</td>
<td>4.42</td>
<td>-0.10</td>
<td>-0.44</td>
<td></td>
</tr>
<tr>
<td>32. The level of goods’ prices in the shops</td>
<td>3.94</td>
<td>3.90</td>
<td>4.19</td>
<td>0.04</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>33. The level of quality of goods in the shops</td>
<td>3.90</td>
<td>3.89</td>
<td>4.25</td>
<td>0.01</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>34. Availability and access to banking, financial services for tourists</td>
<td>3.77</td>
<td>3.81</td>
<td>4.27</td>
<td>-0.04</td>
<td>-0.16</td>
<td></td>
</tr>
<tr>
<td>35. The level of your personal safety and security during your stay in Armenia</td>
<td>4.25</td>
<td>4.16</td>
<td>4.52</td>
<td>0.09</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>36. The peculiarities of Armenian cuisine</td>
<td>4.23</td>
<td>4.15</td>
<td>4.29</td>
<td>0.08</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>37. The prices of Armenian cuisine</td>
<td>4.10</td>
<td>4.02</td>
<td>4.22</td>
<td>0.09</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>38. The possibility of spending leisure time in Armenia</td>
<td>4.17</td>
<td>3.99</td>
<td>4.35</td>
<td>0.17</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>39. The time you spend in Armenia</td>
<td>4.34</td>
<td>4.17</td>
<td>4.50</td>
<td>0.16</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.86</strong></td>
<td><strong>3.88</strong></td>
<td><strong>4.25</strong></td>
<td><strong>-0.02</strong></td>
<td><strong>-0.08</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by the author based on the survey results.

(S-E) column shows the difference between the satisfaction and expectations of participants. It is obvious, that the main problems are related to the price of air tickets, taxi services, catering services and leisure at the hotel facilities, general conditions of public transport, road signs, availability of tourist information in destinations, availability and conditions of public toilets, the hospitality of Armenians and the attention paid to tourists, availability of tourism programs organized by tourism companies, their accessibility and productivity, access to the necessary information, quality of mobile network, environmental cleanliness, access to financial services. On the basis of complaints of some tourists available in their questionnaires, it may be assumed that the low assessment of the «hospitality level and attitudes of the Armenians towards tourists» is largely due to the rough attitude of service personnel, airport staff, as the friendly and hospitable population was mentioned as an advantage.
The main results of the quality of services were analyzed through the Importance-Performance Analysis (IPA) (Martilla and James, 1977). IPA allows determining the gap between the quality of service provided and its importance for the customer, on the basis of which it is possible to find out which factors have a competitive position and lead to customer satisfaction and take appropriate steps to increase the level of performance.

The first column has a high level of performance and importance and shows the competitive advantage. The second column has high importance, but low level of performance, so actions are needed to satisfy customers. The third column has low importance and low performance. The fourth column has low importance and high performance, meaning that the item works well but has a low degree of importance for the customer.

39 elements of quality of services were analyzed by IPA matrix, using the SPSS program. (x) and (y) axes crossing point was determined taking into account the quality indicators media based on which the four cells are defined (figure 1).

![IPA matrix for 39 elements of the quality of services from the questionnaire](image)

**Figure 2.** IPA matrix for 39 elements of the quality of services from the questionnaire
Source: processed by the author using SPSS software

The elements that are in the first quadrant have a high degree of performance and importance, so they need to maintain their quality. At the same time, steps should be taken to improve the quality of items in the second quadrant to satisfy customers. These elements include the availability of tourist information in destinations, the presence and conditions of public toilets in the tourist areas, the level of environmental cleanliness in the Republic of Armenia.

**Conclusions.** The assessment of the satisfaction of tourists is very important, and based on its results tourist destinations should improve their services, management, and marketing policies. As the survey showed that the main issues were related to the price of air tickets, taxi services, catering
services and leisure at the hotel facilities, general conditions of public transport, road signs, availability of tourist information in destinations, availability and conditions of public toilets, the hospitality of Armenians and the attention paid to availability of tourism programs organized by tourism companies, their accessibility and productivity, access to the necessary information, quality of mobile network, environmental cleanliness, access to financial services, so steps must be undertaken to these directions. Particularly, steps should be undertaken to develop transport infrastructures, increase the number of direct flights to many destinations, and decrease the price of air-tickets, involve low-cost air companies, improve taxi services and public transport by making it available for tourists. The most important step is to improve price and quality indicators of tourism services and to raise the level of services in restaurants and hotel facilities, which will increase the satisfaction of tourists. Service staff has a great influence on the level of services, so steps must be undertaken to improve the human capital of the sector. Educational organizations and private sector firms should collaborate in preparing specialists of the sphere. Education system should meet the requirements of the labor market, the staff of tourism industry should be polite, hospitable and professional, with the knowledge of foreign languages. It is also very important to develop effective tourism products and penetrate into new markets, to diversify tourism programs by tourism companies. As we have problems with environmental cleanliness, so it is of high importance to increase the level of conservation of the environment and natural resources, to invest ecolabels in hotels, to raise the ecological education and consciousness level of population towards making tourism more sustainable. As Armenia have all the opportunities to develop tourism based on existing assets, so it is very crucial to improve the marketing performance of the sector, present the main touristic assets of Armenia (historical-cultural, religious, agro- and eco-, adventure, urban, gastronomic, etc.) and available tour packages abroad for increasing the number of touristic flows from abroad.

**Funding:** This research received no external funding.

**References**


G. Tovmasyan. Assessment of Tourist Satisfaction Index: Evidence from Armenia


Гаяна Товмасян, Ph.D., Вірменський державний економічний університет, професор, Академія державного управління Республіки Вірменія (Вірменія).
Оцінка індексу задоволеності туристів: досвід Вірменії
У статті узагальнено аргументи та контраргументи в межах наукової дискусії з питання оцінювання ступеня задоволеності споживача в сфері туризму. Визначено, що ступінь задоволеності споживача в сфері туризму залежить від рівня наданих йому послуг та отриманих результатів. Наголошено, що перевищення отриманих результатів споживачів в сфері туризму від їх очікувань сприяє підвищенню рівня лояльності та бази постійних клієнтів туристичних послуг. Основною метою проведеного дослідження є визначення рівня задоволеності споживачів в сфері туризму Вірменії. Відповідно до поставленої мети в роботі на основі панельних даних, сформованих за соціологічним опитуванням 385 туристів Вірменії протягом 2018 року, використано такі методи дослідження як: інтерпретативний феноменологічний аналіз (IPA), визначення рівня короткострокової (CSAT) та довгострокової (NPS) лояльності клієнтів, матриця важливості-результативності. В роботі розроблено індекс та модель оцінки ступеня задоволеності споживачів в сфері туризму Вірменії. Теоретично обґрунтовано та емпірично підтверджені необхідність впровадження з метою підвищення ступеня задоволеності споживачів в сфері туризму Вірменії наступних заходів: зниження витрат на авіапереліт; збільшення кількості прямих рейсів; поліпшення інфраструктури туризму, якості доріг, автомобільного транспорту, послуг таксі та рівня туристичних послуг; підвищення рівня компетентності туристичного персоналу та рівня англійської мови; забезпечення захисту навколишнього природного середовища; підвищення маркетингових показників туристичного сектору з метою надання більш докладної інформації про Вірменію за кордоном, тощо. Результати дослідження мають практичне значення і можуть бути прийняті до впровадження державним та приватним секторами у туристичній галузі.

Ключові терміни: туризм, модель, безпека, задоволення, феноменологічний аналіз, рівень короткострокової лояльності клієнтів, рівень довгострокової лояльності клієнтів

Manuscript received: 12.06.2019.
© The author(s) 2019. This article is published with open access at Sumy State University.