DELPHI METHOD IN AN ESTIMATION
OF TOURIST PLACES

Tadeusz Siwek

Abstract: This paper repeats results of the research of Delphi method organized by Jonathan Tourtelot at the end of the year 2006. Delphi method is one of the best scientific method for measuring of unmeasurable phenomena. The topic of the research was estimation of general conditions for tourism every places of UNESCO World Heritage List. This evaluation required weighing such subtle issues as aesthetics and cultural integrity as well as balancing good points against bad ones.

Keywords: Delphi method, World Heritage List, panel of experts

Measuring of unmeasurable phenomena

Individual opinions are not valid from scientific point of view. Many gathered and properly analyzed individual opinions consists rational information. Such collective wisdom was described well by James Surowiecki, Polis-rooted American financial journalist in his book The Wisdom of Crowds (Surowiecki 2004). He argued that in some circumstances, large groups exhibit more intelligence than smaller, more elite groups, and that collective intelligence formed business, economies, societies and nations. Aggregation of information in large groups, resulting in decisions that are often better than could have been made by any single member of the group. The title of this excellent book is an allusion to historical Charles Mackay's book *Extraordinary Popular Delusions and the Madness of Crowds* (1841).

Exploring of the opinion of crowd is not easy nor cheap. Some reduced method of gathering dispersed information among population looks more promised. One of them is Delphi method which relies on a panel of experts. The number of experts can be lower than number of respondents from unstructured groups or individuals. Using the Delphi method the experts answer questionnaires in one, but more often in two or more rounds. The answers are gathered by co-ordinator of the research, and later generalized for exploring the most relevant opinions. The co-ordinator of the Delphi method is responsible for selecting of basic panel of experts. He sends out questionnaires and instructions. Later he collects answers and he analyzes them. His crucial task is to find common and controversial opinions of panelists for formulating of consensus. If consensus is not reached, the process continues by next rounds through thesis and antithesis, to gradually work towards synthesis, and building consensus. The panelists are encouraged to revise their earlier answers in light of the replies of other members of their panel. During this process the range of the answers should decrease and the group of experts will converge towards the one answer. This answer is recognized as valid one for the aim of the research. Finally, the process is stopped after a pre-defined stop criterion, e.g. number of rounds or achievement of consensus. The results are reached from the mean or median scores of the final round.

The name Delphi derives from the Oracle of Delphi in the Ancient Greece. The name is not very correct from scientific point of view, because it implies something occult and outside science, but this name is so widely used in science for a long time, that it is not to doubt about it. The Delphi method was used first time during World War II in USA when general Henry Arnold ordered the report on the future technological capabilities that might be used by the military (Dalkey 1968). Different approaches were tried, but the shortcomings of traditional forecasting methods including popular quantitative models or trend extrapolation, in areas where precise scientific laws have not been established yet, quickly became apparent. To combat these shortcomings, the Delphi method was developed by Project RAND during the 1950s by Olaf Helmer, Norman Dalkey, and Nicholas Rescher (Rescher 1998). It has been used ever since, together with various modifications and reformulations, such as the Delphi procedure. Experts were asked to give their opinion on the probability, frequency and intensity of possible enemy attacks. Other experts could anonymously give feedback. This process was repeated several times until a consensus emerged.

The Delphi method was adopted firstly to science and technology forecasting of technology dealing with industrial robots, intelligent internet and transport systems. Later the Delphi method was applied in other areas, especially those related to public policy issues, such as economic trends, health and education. It was also applied successfully and with high accuracy in business forecasting than traditional unstructured forecast method. The Delphi method has also been used as a tool to

know exactly unmeasurable values (Kotler 1970) as tourist attractivity of regions and places.

Application of this method

Exploring of many men and women is fruitful for evaluation of tourist places (Weaver, Weber and McCleary 2007). One of such research was organized at 2006 by National Geographic Center for Sustainable Destinations and National Geographic Traveler with George Washington University. The topic of this Destination Scorecard survey were all tourist places of the UNESCO World Heritage List. The places situated on the List became leading tourist destinations according to most of guides (Di Giovine 2008).

UNESCO World Heritage List includes now 890 most valuable sites which are considered also as the most interesting tourist places. 689 of them are cultural, 175 natural and 25 of them are mixed. World Heritage List includes only 830 sites at 2006 (*World's Heritage Sites: A Complete Guide to 878 UNESCO World Heritage Sites*, 2009).

A Delphi panel of 419 experts in sustainable tourism and destination stewardship rated 94 World Heritage destinations. Not all panelists agreed with publication of their names. But 345 of them (82,3%) agreed. There were experts from all over the world, but the most of them were from the most developed countries of Europe and Northern America, but developing countries were also represented. They were tourist experts, ecologists, economists, teachers, journalists, archeologists, cultural anthropologists and geographers. The role of geography in this panel was not marginal. Geographers formed 8,1% of all panelists. 14% of geographers were from Poland (1,1% of all panelists) including author of this text, which is a Pole but he lives in the Czech Republic.

The panelists ought to evaluate places of UNESCO World Heritage list according their general conditions for tourism. This evaluation required weighing such subtle issues as aesthetics and cultural integrity as well as balancing good points against bad ones (Tourtellot 2006).

The panelists did not ought to evaluate unknown places, only these ones, which were familiar to them. Familiarity was measured by personal visiting in the last five years. There were six evaluating criteria:
1) environmental and ecological quality;
2) social and cultural integrity;
3) condition of historic buildings and archaeological sites;
4) aestehetic appeal;
5) quality of tourism management;
6) overall outlook for the future.

Experts firstly aided points of view on each destination. After reading one another remarks they submitted their final stewardship scores. The resulting Stewardship Index rating is an average of informed judgments about each place as a whole. The experts reflected both measurable factors and intangibles of style, aesthetics, and culture.

The scores changed theoretically on a 1 to 100 scale:
0–25:   Catastrophic: all criteria very negative, outlook grim;
26–45: In serious trouble;
46–65: In moderate trouble: all criteria medium-negative or a mix of negatives and positives;
66–85: Minor difficulties;
86–95: Authentic, unspoiled, and likely to remain so;
96–100: Enhanced.

The anonymous panelists' comments were enclosed. Evaluation did not reach extreme levels. No destination rated 90 or more, and it means that no destination was classified as enhanced. On the other hands, no site rated below 30, and it means that no one was classified as catastrophic. The best rated site was West Fjords in Norway. The other well estimated touristic places are below (Tourtellot 2006).

1.   West Fjords in Norway (87)
2.–3.   Alhambra Palace in Granada in Spain (81)
          Church Vézelay in France (81)
4.   National Park Te Wahipounamu in the New Zealand (80)
5.–6.   Medieval town of Cordoba in Spain (79)
          Historic city of Guanajuato in Mexico (79)
7.–8.   City of Bath in the United Kingdom (78)
          Medieval town of Evora in Portugal (78)
9.–12.   Historic city of Salzburg in Austria (77)
          Verasailles Palace in France (77)
          Medieval city of Siena in Italy (77)
          Old Quebeck in Canada (77)
13.–15. Historic centre of Bruges in Belgium (76)
          Banks of the Seine in Paris in France (76)
          Jungfrau-Aletsch-Bietschhorn region in the Alps in Switzerland (76)
16.–19. Avignon Papal Palace in France (75)
          Loire Valley in France (75)
          Town of Assisi in Italy (75)
          Rock of Uluru in Australia (75)

The first 19 sites evaluated best according their general conditions are from 14 countries of 4 continents. The most of them are in Europe (16), but two of them are in Australia and Oceania. The last site from the first group is site in America. No place from Asia was evaluated as the best. The best Asian site – ancient Kyoto in Japan was classified on 20th–21st position. As for states, the best position occupied France: 5 places of UNESCO list among the best group. More than one representative had also Spain and Italy – besides France the world tourist powers.

Interesting is also to look at the worse destination. In spite of the none places estimated as catastrophic only three of them were classified as site with serious trouble. There were: Kathmandu (Nepal), Portobelo-San Lorenzo (Panama) and Galapagos Islands (Ecuador). The next sites were only in moderate trouble. They were all described with more details by co-ordinator of the research, Jonathan Tourtellot (2006). The worst 18 destinations among UNESCO World Heritage List were as follows:

1.   Kathmandu Valley in Nepal (39)
2.   Spanish forts in Portobelo-San Lorenzo in Panama (41)
3.   Galapagos Islands in Ecuador (44)
4.–5.   Potala Palace in Lhasa in Tibet (China) (46)
         Lagoon city Venice in Italy (46)
6.   Barrier reef in Belize (47)
7.–8.   Rock-hewn churches in Lalibela in Ethiopia (48)
         Ruins of Angkor in Cambodia (48)
9.–10.   Pyramids in Giza in Egypt (50)
         Ha Long Bay in Vietnam (50)
11.–13. Lijang and Three Parallel Rivers in China (52)
         Nazca lines in Peru (52)
         Colonial city of Santo Domingo in Dominican Republic (52)
14.–16. Acropolis in Athens in Greece (53)
         Islamic Cairo District in Egypt (53)
         Maya city in Chichen Itzá in Mexico (53)
17.–18. Old city of Jerusalem in Izrael (54)
         Incas ruins in Cuzco and Machu Pichu in Peru (54)

The geographers' eye can see that there are different continents and states. The worst places are not concentrated to one continent as the best ones. American sites were represented in this group the most often: 7 times. But the second continent, Asia was represented by 6 places. Only three African and two European places of World Heritage were classified as the worst group. The worse states were: Peru, Egypt and China – all three appeared in this set two times.

Conclusion

In conclusion we have to answer two questions: It is this Delphi method valid for measuring unmeasurable status of different places at different continents? And what about ranking appeared of this measuring?

The answer of the first question could be positive. The high number of panelists and their geographical and professional diversification guarantees validity of their judgment. It is possible to analyse deeper of the structure of panelists and their experience (for example according the number of places visiting by them in the last five years). For example author of this text visited 8 places of the 19 best places and also 8 of the worse places. But generally we can believe the results based on their description.

And answer to the second question? Condition of sites listed in the UNESCO World Heritage List from tourist point of view depends on the level of tourist services and general economic level of the state in which any places are situated. Therefore it is not surprise, that our research has confirmed, that the best continent is Europe and the best states are the most developed countries in tourism: Europe with France, Spain and Italy. The worst continents have been America and Asia but the worst states are not so easy classified. It seems to be Peru and China, and also Egypt, but the number of examples are too small for valid generalization.

The research like that is possible only due to internet, because all panelists have took part in this research thanks to connection to the world net.

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Tadeusz Siwek
Ostravská Univerzita v Ostravě
Katedra Sociální Geografie a Regionálního Rozvoje
Chittussiho 10, 710 00 Ostrava – Slezská Ostrava
e-mail: tadeusz.siwek@osu.cz