



Which Aspects are able to Influence the Decision in Case of the Bids for the Olympic Games 2024?

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Abstract: The aim of the paper is to identify the aspects of decision which countries will be the host city of the Olympic Games 2024. There are many different statistical methods used, just as expert interviews to recognise the most important factors which can influence the host city election. Furthermore, the article helps to the prognoses what will be the odds of Budapest, Los Angeles or Paris being the host city of the above mentioned game. These paper mainly focuses on the factors without providing the final assessment but in the future the authors try to offer the final result regarding the opinion of a famous Hungarian professional.

Keywords: Olympic Summer Games 2024, decision-theory, content analysis, weights

1 Introduction

According to Persson (2002) “Olympic Games is big business.” (Persson, 2002, p 27) The brochure of OECD LEED (2010) Programme detailed the local benefits of hosting global events, which are divided into primary and secondary benefits. As we can realise later the secondary benefits are related to the sustainability view of IOC. These are the following: (1) Post event usages of improved land and buildings (2) Connectivity and infrastructure legacies (3) Labour market impacts and social/economic inclusion (4) Secondary impacts in the property market (5) Global positioning, events strategy going forwards, and project management capability. (OECD LEED 2010, p 12)

Although the authors mostly focused on London but their findings are general. General and true for Hungary as well. Budapest (Hungarian capital city) is one of the candidates, it is not the first time. Because it is big business also for Budapest, regarding its vision: “The Olympic Games are an enduring force that unites and uplifts us.” (<https://budapest2024.org/en/>) (available 15/12/2016) However the

final decision comes later we try to sum up the way of judgement taking into consideration criteria of IOC and opinions of experts.

2 Process of host city evaluation

Firstly, we highlight the official part of this evaluation, how is the host city election process looks like? It is regularized by the 33rd Rule of the Olympics Charta. The process was renewed currently, that is why it is included in the paper. The application is divided into three phases. In the informal phase the IOC is inviting applications, where candidate cities need to declare their interest on hosting the Olympic Games. This step needs to be with ten years earlier before the named Olympic Games. So in this example the invitation period started already in 2014 for the 2024 hosting cities. In this phase there is a possibility to attend on an individual workshop held by the IOC for the representatives of the interested cities.

After this informal invitation stage the cities become official candidates through agreeing with the IOC and with that move the official candidature procedure begins. In our case this stage ended in June 2016 and it was time when the candidate cities needed to hand in a candidature file including the vision, strategy and goals of the application. Since the Olympic Agenda 2020 highlights the value of sustainability, the cities also needed to include in this first documentation, how the hosting of the Olympic Games would be fitted into the long-term city vision. The first part of the application fee needed to be payed during this period. Before first time presenting the candidate cities, videoconferences and workshops were hold organised by the IOC in order to answer the questions of the candidate cities' representatives. In this stage there were five candidates (listed in alphabetical order): Budapest (Hungary), Hamburg (Germany), Los Angeles (United States), Paris (France) and Rome (Italy). After the results of the referendum in Hamburg showed that the people are against hosting the Olympic Games, Hamburg withdrawn its application¹. In September 2016 Rome also decided to withdrawn its application after the mayor of Rome and the city council did not support the thought of hosting the games.

¹ Although the analysis modell suggested by Maennig and Vierhaus (2014) resulted the best estimated probality as winner for Hamburg.

In the first stage of the application procedure logos were presented of each candidate cities including the name of the candidate city and the year 2024. The logos can be found in Figure 1.:



Figure 1
Logos of the candidature cities 2024
Source: IOC

The second stage ended in December 2016 and it focused on the governance, legal and venue funding. The cities needed to detail in their plans: the Olympic villages, sport venues and media centres etc. These plans needed to be pictured on map. The second stage was the deadline for the budget. IOC gives a brief overview about each application by setting up a questionnaire to each cities. The candidates have to reply to the questions of the IOC. At the same time new workshops are offered.

In the third stage topics such as games delivery, experience and venue legacy are explained. This stage will finish in September 2017 before the final decision is made on the 15th September 2017 on IOC Congress held in Lima. In this stage the values of the Olympic Agenda 2020 are taken into consideration, especially the sustainability, since the candidate cities needs to give exact details for the members of the IOC. Their plans have to clarify using the Olympic venues after the games. So after the final decision and therewith the winner of this application procedure is chosen, the winner city has 3 years to build and update the venues and to develop the infrastructural background. This means that being able to host an Olympic Games is a result of a 10 years long process which requires precise planning in order to successfully organise the games.

The Figure 2. shows the above explained process of hosting the Olympic games:

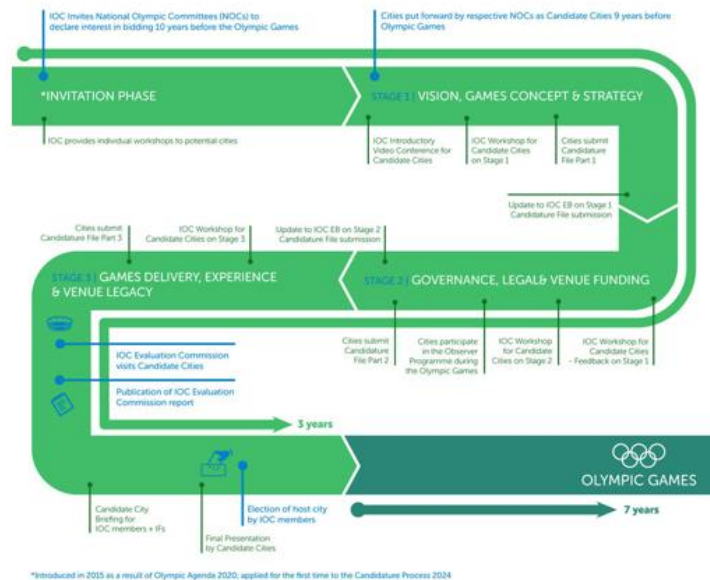


Figure 2
The process of choosing the host city
Source: IOC

The detailed process and host city elections can be found: <https://www.olympic.org/documents/host-city-elections> (available 15/12/2016). In this paper² we will not judge the odds of candidates instead of that we asked and observed the opinion of real experts of this topic.

3 Empirical research

3.1 Content analysis of the IOC president

In order to identify the decision-making criteria, we tried to examine the aspects of the IOC by analysing an interview of IOC president, Thomas Bach. We used the software Textanalyser to gather data from the speech of the president. The IOC president stated that final decision will not be based on the infrastructure it will be based on which candidate would really like to host the Olympic games. (Bach, 2015)

² But in the following part we assume the Hungarian odds.

The analysed interview was published by the IOC in 2016 and the title of the article is Olympic Games Candidatures Beyond 2024. General data about the article can be seen in Table 1.

Total word count :	101
Number of different words :	84
Complexity factor (Lexical Density) :	83.2%
Readability (Gunning-Fog Index) : <i>(6=easy 20=hard)</i>	15.1
Total number of characters :	1047
Number of characters without spaces :	686
Average Syllables per Word :	1.9
Sentence count :	6
Average sentence length (words) :	28
Max sentence length (words) :	44
<i>(what makes the relationship between olympic sport and sustainability so special is that sustainability is not simply a 'nice to have' it is an indispensible part of the olympic philosophy since the effective transmission of our values depends on a broad concept of sustainability)</i>	
Min sentence length (words) :	10
<i>("society today demands more from sports organisations and sports events)</i>	
Readability (Alternative) beta : <i>(100=easy 20=hard, optimal 60-70)</i>	17.5

Table 1.
General data of the text analysing
Own sources

In this table it is highlighted that from his 101 words long speech 84 words are different, so he uses a really complex language in this interview. It also means that his interview is hardly readable, it might need to be read more than once to understand it correctly. There is no surprise in his used words, mostly he speaks about the sustainability of venues after the games, he also mentioned the word of legacy a lot, to make it more clear, that it is a very important criterion, how can cities fit the Olympic venues into their cities image and how can these venues be used effectively. This list of the IOC presidents top used words is not surprising, since it confirms, that using renewable energy and venues which can be restructured is not only a vision in the Olympic Agenda 2020, because the IOC wants to see how can be this principle implemented into the practice.

Frequency and top words :

Word	Occurrences	Frequency	Rank
sustainability	5	5%	1
olympic	5	5%	1
games	4	4%	2
city	2	2%	3
legacy	2	2%	3
cities	2	2%	3
sports	2	2%	3
our	2	2%	3
host	2	2%	3
investments	1	1%	4

Table 2.
Top words of Thomas Bach, IOC President
Own sources

3.2 Important factors according to the state of art

Maennig and Vierhaus (2014) suggested a deeply detailed model calculating the chances of Chances of winning the Olympic host city election 2024. These can be found in Table 3.

Potential bids for the 2024 Olympics		Germany	France	United States	Italy	Hungary
Determinants	Coefficient	Hamburg	Paris	Los Angeles	Rome	Budapest
Urban population in country [m]	0.0186	61.0	52.5	259.8	41.0	7.0
<i>Population in metropolitan area of the city [m]</i>	<i>1.8</i>	<i>11.5</i>	<i>12.2</i>	<i>4.2</i>	<i>2.6</i>	
(Population in metropolitan area of the city [m]) ²	-0.1531	30.9	0.8	0.7	5.6	15.4
5-Year real GDP growth [%]	0.7368	1.5	0.8	2.2	-1.0	1.2
5-Year development of FH political rights [points]*	-2.0537	0	0	0	0	0
World championships in country in last 10 years	0.5472	14	15	8	14	7
<i>Years since the country last hosted the Olympics</i>	<i>52</i>	<i>32</i>	<i>22</i>	<i>18</i>	<i>0</i>	
(Years since the country last hosted the Olympics) ²	0.1896	29.2	11.6	5.8	4.0	0.0
Years since last hosted the FIFA World Cup	-0.1577	18	26	30	34	0
<i>Stadia in country with capacity > 40,000</i>	<i>18</i>	<i>5</i>	<i>139</i>	<i>7</i>	<i>1</i>	
(Stadia in country with capacity > 40,000) ²	-0.0018	28	278	1	156	2500
Involved in dispute with IOC? [D/1]	-7.6261	0	0	0	0	0
Support of the city's population ≥ 67%? [D/1]	3.4115	1	1	1	1	1
Determinants	Estimated values (coefficient * value of bid city)					
Urban population in country [m]	1.1	1.0	4.8	0.8	0.1	
(Population in metropolitan area of the city [m]) ²	-4.7	-0.1	-0.1	-0.9	-2.4	
5-Year real GDP growth [%]	1.1	0.6	1.6	-0.7	0.9	
5-Year development of FH political rights [points]*	0.0	0.0	0.0	0.0	0.0	
World championships in country in last 10 years	7.7	8.2	4.4	7.7	3.8	
(Years since the country last hosted the Olympics) ²	5.5	2.2	1.1	0.8	0.0	
Years since last hosted the FIFA World Cup	-2.8	-4.1	-4.7	-5.4	0.0	
(Stadia in country with capacity > 40,000) ²	0.0	-0.5	0.0	-0.3	-4.4	
Involved in dispute with IOC? [D/1]	0.0	0.0	0.0	0.0	0.0	
Support of the city's population ≥ 67%? [D/1]	3.4	3.4	3.4	3.4	3.4	
Estimated linear value	11.22	10.68	10.51	5.36	1.52	
EXP (estimated linear value)	74429.77	43656.08	36848.84	212.44	4.59	
Estimated probability	47.97%	28.14%	23.75%	0.14%	0.00%	

Notes: *Italicized variables in grey rows are not included in the analysis with their original values. They only enter the analysis in transformed form, which is presented in the respective rows below the grey rows. Population in city [m] is transformed (x/10)²; Years since the country last hosted the Olympics is transformed ((x+2)/10)²; Stadia in country with capacity > 40,000 is transformed ((x+1)/100)²; the Freedom House scale ranges from 1 (most free) to 7 (least free).*

Table 3.
Chances of Winning the Olympic host city election 2024
according to Maennig and Vierhaus (2014, p. 17)

Although they ranked Budapest to the last place and we underlined earlier that we do not deal with the odds of any candidate cities we used their model and factors to our interview guide.

3.3 Deep interviews with Hungarian experts

After this analyse we made structured deep-interviews with two experts about the criterion of the IOC when choosing the host city. Therefore, we asked them firstly to tell us some aspects which they think is important when organising an Olympic game. In this question they needed to associate every aspect they could. After that we asked them to identify the factors which are “crucial” for the athletes and the journalist during an Olympic game based on their previous experience. Then we wanted to know what are the factors, which are important for the IOC in their opinions when they are choosing the host city. They needed to rank these factors. The last big question was to scale the criteria named in the first table regarding

their importance for the IOC. The value 1 meant not important at all, the 5 was the mediate importance and the 10 stand for the most important factor.

Aspects
Ability to organize (based on previous experience)
Political support
Communication and presentation
Accountability
Composition of project team
Relationship marketing
Average distance between the Olympic village and the venues
Average temperature in Celsius
Capacity of hotels
GDP per capita
Population of the city
Support of the citizen
Public transport
Air pollution
Existing and needs-to-be-built venues
Public safety

Table 4

Aspects of the interview based on the article published by Maennig and Vierhaus (2014)

In this paper we focus only on this part of the interview. We made a Spearman rank-correlation analyse to find out how similar are the ranking of the two experts. We found out that the value of the Spearman rank correlation is 0,962, which means that the opinion of the two experts is almost 100 % correlated and significant ($p=0,95$). Some words about the methodology, how we counted that value is detailed in the appendix.

3.3 Criterias of decision making

Because the opinions of two experts are connected together we could use this result for paired comparison analysis. This analysis based on rank ordering process and end in paired comparisons. Experts were asked to place two or more objects into rank order according to some attributes than analysis of all the judgments creates a scale with each object represented by a number – its measurement. Distances between the expert preferences provide the weight for the later judgement. In our case the weights are detailed in Table 5.

Aspect	Expert 1	Expert 2
Ability to organize (based on previous experience)	8,98%	8,59%
Political support	2,73%	8,59%
Communication and presentation	4,30%	8,59%
Accountability	11,72%	8,59%
Composition of project team	1,56%	4,30%
Relationship marketing	4,30%	12,11%
Average distance between the Olympic village and the venues	8,98%	4,30%
Average temperature in Celsius	4,30%	1,95%
Capacity of hotels	6,25%	4,30%
GDP per capita	8,98%	0,78%
Population of the city	1,56%	4,30%
Support of the citizen	0,39%	0,78%
Public transport	8,98%	8,59%
Air pollution	6,25%	4,30%
Existing and needs-to-be-built venues	8,98%	11,33%
Public safety	11,72%	8,59%

Table 5
Weights of all aspects regarding ranking order of two interviewees

All of our results provide a perfect basement to judge odds of every candidate cities. For these later we collected and handled objective macro indexes (like GDP) and asked one of the Hungarian relevant responsible decision maker from field of Hungarian Olympic Games 2024 but all of these results will be presented in Bozány's dissertation (2016) and hopeful later in a new article.

Conclusions

In this paper we tried to organise all important factors of an important 'big business' decision. This time the big business is nothing else than Summer Olympics Games in 2024. Winning this business there are three candidate cities at

the moment, one of them is our capital city, Budapest. Although the real and final procedure is top secret we have taken a chance to observe the most important factors of this decision. First of all, the IOC model was taken as a basis. For this we were taking into consideration viewpoint of the International Olympic Committee (IOC) after that we tried to highlight the most important aspects with the help of tools of the text analysis based on the interviews from IOC members. After analysing the interviews and identifying the keywords from the interviews these aspects were be built into the decision-making criteria. All of these aspects were complemented with findings from field of literature. Finally, two experts helped us to give an order and rank all of these aspects. This process will help to judge all of the host city elections and of course the chance of the Hungarian applications. Finally, the strengths and the weaknesses of the Hungarian application could be listed.

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References

- [1] OECD - LEED (2010): Local Development Benefits from Staging Global Events: Achieving the Local Development Legacy from 2012. <https://www.oecd.org/cfe/leed/46207013.pdf> (Download 10/12/2016)
- [2] Maennig, W.– Vierhaus, C. (2014): Who wins Olympic Bids? HCED50 Hamburg
- [3] Persson, C. (2002): The Olympic Games site decision. *Tourism Management* 23 page 27–36

Appendix

First of all we organised the answer of each experts into decreased ranking order. Than we gave each aspect a number from 1-10. For example when the expert said public safety is the most important aspect, we converted that value into a 1. When the expert said that average distance among the venues is not important at all we converted it into a 10. Then we counted the difference between the opinion of the two experts by each aspect, and finally we quadrated this difference. After that we counted the numerator which is the sum of the quadrat of the difference multiplied with 6. It is 384. Then we counted the denominator by raising the aspect number (16) to the third and removed 1 from it. It is 4095. Then we divided 384 with 4095 and the result of this was removed from 1. This results the before mentioned 0,962 value.

Aspect	Expert 1	Expert 2	Difference	Quadrat of difference
Ability to organize (based on previous experience)	6	4	2	4
Political support	2	3	-1	1
Communication and presentation	4	5	-1	1
Accountability	2	4	-2	4
Composition of project team	2	6	-4	16
Relationship marketing	6	4	2	4
Average distance between the Olympic village and the venues	9	6	3	9
Average temperature in Celsius	3	4	-1	1
Capacity of hotels	2	3	-1	1
GDP per capita	1	3	-2	4
Population of the city	3	4	-1	1
Support of the citizen	4	1	3	9
Public transport	4	3	1	1
Air pollution	1	3	-2	4
Existing and needs-to-be-built venues	2	2	0	0
Public safety	5	3	2	4
Sum:				64

