

Raubal, M. and C. Rinner (2004). Multi-criteria Decision Analysis for Location Based Services. Geoinformatics 2004, 12th International Conference on Geoinformatics, 7-9 June, 2004, Gävle, Sweden.

Test profiles for 3 user groups

Values to choose from:

Hotel price: 30 – 130 €

Private bath: Yes / No

Check-out time: 9:30 – 13:00

Business traveler

Criterion	Original values	Standardized values	Weights
Hotel price	80-120	Good	26
	50-80	Fair	
	>120	Poor	
Private bath	Yes	Good	37
	No	Poor	
Check-out time	>10:00	Good	37
	<10:00	Poor	

Tourist

Criterion	Original values	Standardized values	Weights
Hotel price	<37	Good	33,33
	37-60	Fair	
	>60	Poor	
Private bath	Yes	Good	33,33
	No	Poor	
Check-out time	>12:00	Good	33,33
	10:00-12:00	Fair	
	<10:00	Poor	

Low-budget tourist

Criterion	Original values	Standardized values	Weights
Hotel price	<32	Good	58
	32-37	Fair	
	>37	Poor	
Private bath	Yes	Good	21
	No	Fair	
Check-out time	>11:00	Good	21
	9:00-11:00	Fair	
	<9:00	Poor	

Scenario 1



Business traveler

Start of evaluation at 03.03.2004 14:28:11

*** standardization settings ***

criterion 1: poor from 120 to 130, fair from 50 to 80, good from 80 to 120

criterion 2: poor from No to No, fair from to , good from Yes to Yes

criterion 3: poor from 09:30 to 10:00, fair from to , good from 10:00 to 13:00

*** record structure ***

NAME, then 3 criteria with ORIGINAL and STANDARDIZED values, followed by SCORE

Criterion weights are set as follows: 26%, 37%, 37%,

Martinihof, 58, 2, Yes, 3, 11:00, 3, 2,74

Feldmann, 71, 2, Yes, 3, 11:00, 3, 2,74

International, 51, 2, Yes, 3, 11:00, 3, 2,74

Central-Hotel, 90, 3, Yes, 3, 11:00, 3, 3

Busche am Dom, 49, 1, Yes, 3, 11:00, 3, 2,48

Tourist

Start of evaluation at 03.03.2004 14:48:31

*** standardization settings ***

criterion 1: poor from 60 to 130, fair from 37 to 60, good from 30 to 37

criterion 2: poor from No to No, fair from to , good from Yes to Yes

criterion 3: poor from 09:30 to 10:00, fair from 10:00 to 12:00, good from 12:00 to 13:00

*** record structure ***

NAME, then 3 criteria with ORIGINAL and STANDARDIZED values, followed by SCORE

Criterion weights are set as follows: 33%, 33%, 33%,

Martinihof, 58, 2, Yes, 3, 11:00, 2, 2,31

Feldmann, 71, 1, Yes, 3, 11:00, 2, 1,98

International, 51, 2, Yes, 3, 11:00, 2, 2,31

Central-Hotel, 90, 1, Yes, 3, 11:00, 2, 1,98

Busche am Dom, 49, 2, Yes, 3, 11:00, 2, 2,31

Low-budget tourist

Start of evaluation at 03.03.2004 14:52:16

*** standardization settings ***

criterion 1: poor from 37 to 130, fair from 32 to 37, good from 30 to 32

criterion 2: poor from to , fair from No to No, good from Yes to Yes

criterion 3: poor from to , fair from 09:30 to 11:00, good from 11:00 to 13:00

*** record structure ***

NAME, then 3 criteria with ORIGINAL and STANDARDIZED values, followed by SCORE

Criterion weights are set as follows: 58%, 21%, 21%,

Martinihof, 58, 1, Yes, 3, 11:00, 3, 1,84

Feldmann, 71, 1, Yes, 3, 11:00, 3, 1,84

International, 51, 1, Yes, 3, 11:00, 3, 1,84

Central-Hotel, 90, 1, Yes, 3, 11:00, 3, 1,84

Busche am Dom, 49, 1, Yes, 3, 11:00, 3, 1,84

Scenario 2



Business traveler

Start of evaluation at 03.03.2004 15:04:35

*** standardization settings ***

criterion 1: poor from 120 to 130, fair from 50 to 80, good from 80 to 120

criterion 2: poor from No to No, fair from to , good from Yes to Yes

criterion 3: poor from 09:30 to 10:00, fair from to , good from 10:00 to 13:00

*** record structure ***

NAME, then 3 criteria with ORIGINAL and STANDARDIZED values, followed by SCORE

Criterion weights are set as follows: 26%, 37%, 37%,

TRYP Kongresshotel, 82, 3, Yes, 3, 11:00, 3, 3

Ibis, 65, 2, Yes, 3, 12:00, 3, 2,74

City, 56, 2, Yes, 3, 11:00, 3, 2,74

Bockhorn, 30, 1, No, 1, 11:30, 3, 1,74

Hansa Haus, 56, 2, Yes, 3, 11:00, 3, 2,74

Tourist

Start of evaluation at 03.03.2004 15:08:46

*** standardization settings ***

criterion 1: poor from 60 to 130, fair from 37 to 60, good from 30 to 37

criterion 2: poor from No to No, fair from to , good from Yes to Yes

criterion 3: poor from 09:30 to 10:00, fair from 10:00 to 12:00, good from 12:00 to 13:00

*** record structure ***

NAME, then 3 criteria with ORIGINAL and STANDARDIZED values, followed by SCORE

Criterion weights are set as follows: 33%, 33%, 33%,

TRYP Kongresshotel, 82, 1, Yes, 3, 11:00, 2, 1,98

Ibis, 65, 1, Yes, 3, 12:00, 3, 2,31

City, 56, 2, Yes, 3, 11:00, 2, 2,31

Bockhorn, 30, 3, No, 1, 11:30, 2, 1,98

Hansa Haus, 56, 2, Yes, 3, 11:00, 2, 2,31

Low-budget tourist

Start of evaluation at 03.03.2004 15:11:51

*** standardization settings ***

criterion 1: poor from 37 to 130, fair from 32 to 37, good from 30 to 32

criterion 2: poor from to , fair from No to No, good from Yes to Yes

criterion 3: poor from to , fair from 09:30 to 11:00, good from 11:00 to 13:00

*** record structure ***

NAME, then 3 criteria with ORIGINAL and STANDARDIZED values, followed by SCORE

Criterion weights are set as follows: 58%, 21%, 21%,

TRYP Kongresshotel, 82, 1, Yes, 3, 11:00, 3, 1,84

Ibis, 65, 1, Yes, 3, 12:00, 3, 1,84

City, 56, 1, Yes, 3, 11:00, 3, 1,84

Bockhorn, 30, 3, No, 2, 11:30, 3, 2,79

Hansa Haus, 56, 1, Yes, 3, 11:00, 3, 1,84