



# INTRODUCTION

## OBJECTIVE RANKING TOOL

*To choose*

*Which option and why?*

*Objective Ranking Tool (ORT) supports*

*In any form of decision making and comparison*

# What is your question?

- Which decision I have to take...
- Which stakeholders are needed...
- Which criteria I want to involve...
- Are all criteria equally important...
- Which alternatives I want to judge...
- How can I take any decision...
- Can I justify my choices...

# Objective Ranking Tool (ORT)

- Similarity Judgment as the underlying principle
- Calculation model developed to compare several alternatives
- Elements
  - Reference tab
  - Scoring tab
  - Result tab

# Reference tab

<i>Object</i>	<i>Risk class</i>
Reference	1
A	1
B	3
C	2
D	4
E	3
F	3
G	3
H	4
I	4
J	1
K	1
L	1
M	1
N	5
O	1
P	2
Q	1

<i>Relative weight (in 5 classes )</i>	<i>A correction to judge a inequality between alternatives</i>
50%	1
35%	2
30%	3
20%	4
5%	5

# Score tab

Score Matrix	Objects ->	Weighting actor per criterium	Reference	A	B	C
			1	3	2	4
First category    35%	Criterion 1	5%	1	1	1	1
	Criterion 2	35%	1	1	1	1
	Criterion 3	35%	1	0	0	1
	Criterion 4	25%	1	0	0	0
	Additional criteria with	0%	0	0	0	0
	weightfactors	0%	0	0	0	0

# Result tab

Legenda Color	<i>Similarity Matrix</i>	Referencee	A	B	C
> 0,95	Reference	1	0,58412	0,593567	0,832813
> 0,90	A	0,735359	1	0,892341	0,796807
> 0,85	B	0,69685	0,893756	1	0,719079
> 0,80	C	0,913133	0,77433	0,690772	1
	D	0,655877	0,65252	0,680323	0,559083
	E	0,799087	0,858513	0,764195	0,734239
	F	0,743802	0,989189	0,883944	0,785055
	G	0,650852	0,81457	0,697147	0,605911

# Results

<i>Similarity Matrix</i>	Reference	A	J	M	L	K	O	D	P
Reference	1	0,93048	0,91891	0,89958	0,89196	0,88734	0,86039	0,79168	0,73578

- If demarcation:  $> 0,9$
- Outcome is: A, J
- If demarcation:  $> 0,8$
- Outcome is: A, J, M, L, K, O



# Conclusion thesis

- Model theoretical substantiated in cognitive psychology, developed in 1977, still in use
- Conditions
  - Set of features
  - Reliable weighting of features
  - Relative ranking, no probability

# Summary

- Objective allocation of choices
- Wide perspective of views
- Common process with relevant stakeholders
- Sensitivity analysis possible

# Principle broad applicable

- comparison in court ruling, molecule-structures
- Alert locations, theft in buildings, risk for football matches
- Business continuity, investment decisions, critical infrastructure, uncertainty management
- Holiday- or carchoise.....



[www.psjadvies.nl](http://www.psjadvies.nl)

[info@psjadvies.nl](mailto:info@psjadvies.nl)

+ 31 6 1022 7083