APPLICATION OF MULTI-CRITERIA DECISION-MAKING METHODS IN DESTINATION BENCHMARKING

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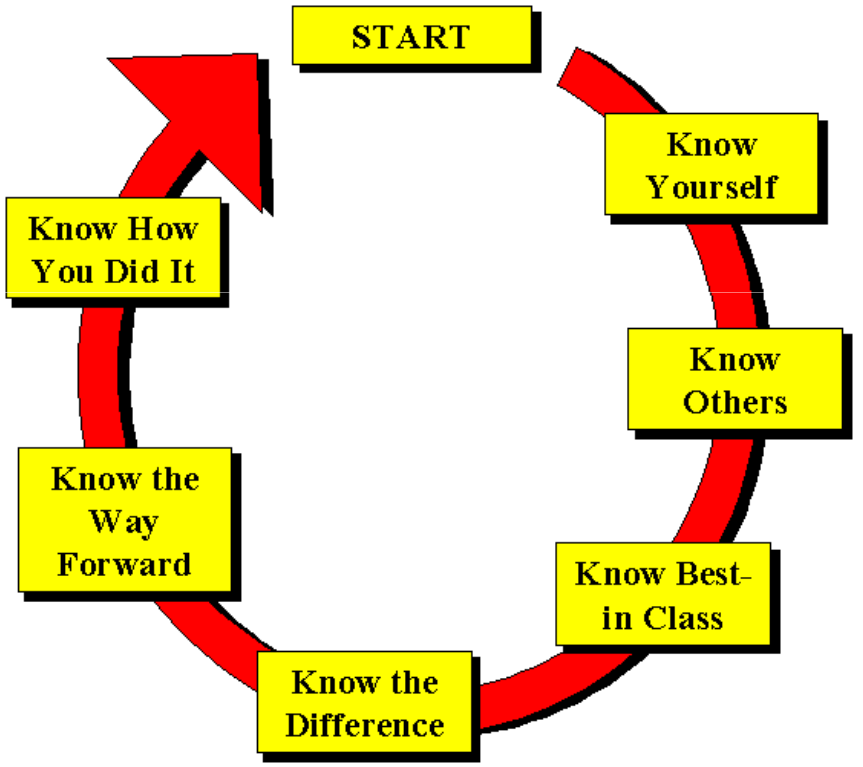
Research Projects

- IGA 06/2010 “Draft of a system for evaluation of the regional program documents in tourism“
  - Draft complex procedure which enables local governments to evaluate quality of their tourism development strategies
- IGA 05/2011 “Evaluation of the results of tourism regional planning“
  - Integrate new evaluation criteria into pre-defined evaluation procedure
- **IGA 04/2012 “Application of Benchmarking in tourism“**
  - Realize benchmarking survey of tourism destinations‘ planning in selected EU regions

Benchmarking Process

- Benchmarking has the ability to support an achievement of sustainable competitive advantage
- It can be described as a structured process by which an organization seeks to identify “best practices” to enhance its strategic position
  1. **Benchmarking planning**
  2. Data collection
  3. Data analysis
  4. Adoption of adequate measures



Benchmarking Planning Phase

- Key elements of the Planning Phase
  - Benchmarking methodology procedure
  - Possible partners‘ destinations
    - Czech, Slovak, British regions
  - Partners selection process
    1. Gathering of tourism development strategies
    2. Setting of evaluation criteria
    3. Selection of suitable evaluation method
    4. Evaluation of the strategies and analysis of the results
    5. Selection of suitable partners (regions)

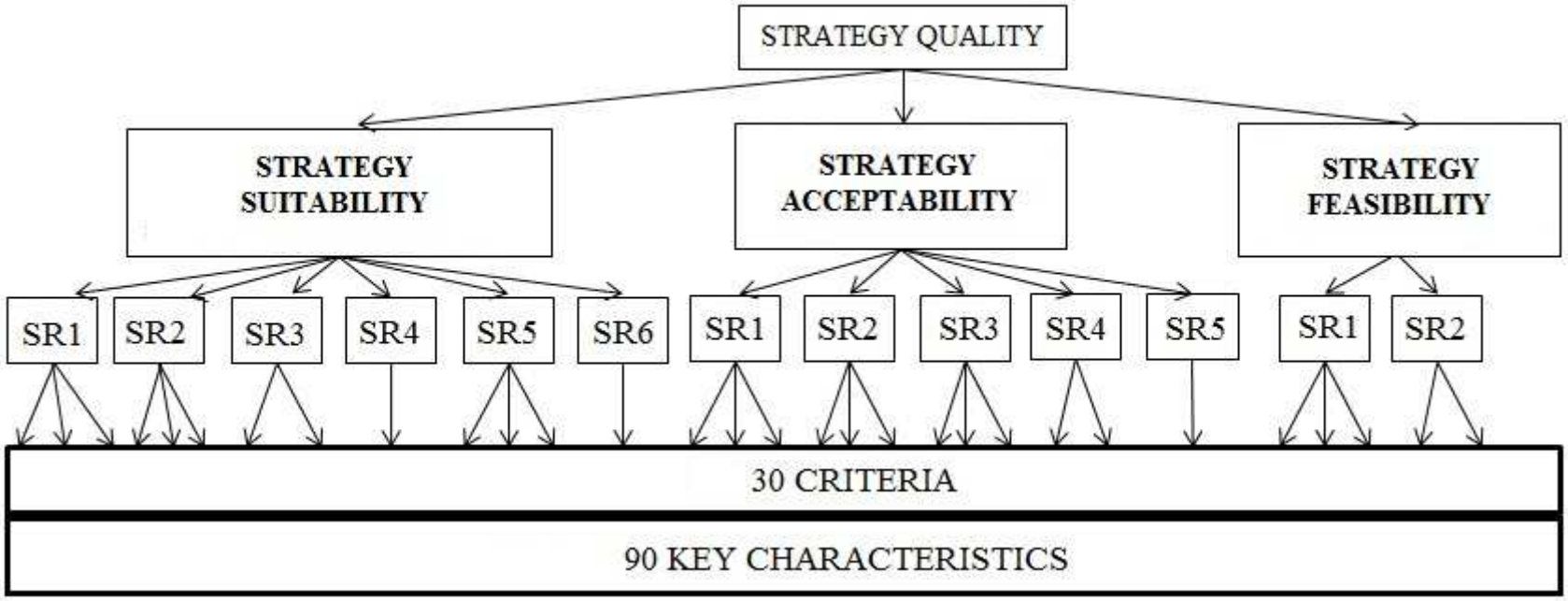
Research Method: Step 1

- Number of strategies: 27
  - Czech Republic: 13
  - Slovak Republic: 5
  - Great Britain: 9

- Evaluators: cca 1200
  - regional governments
  - local governments
  - regional tourism organizations
  - regional branches of tourism associations
  - main information centers

Research Method: Step 2

- The basis for tourism development strategies evaluation is comprised by three general requirements (so-called quality spheres)
  - the requirement of strategy **suitability** with a regard to the strategic position of the region
  - the requirement of strategy **acceptability** for key stakeholders
  - the requirement of strategy **feasibility**



Research Method: Step 2

- Specific criteria were verified and evaluated by the key regional actors
  - relevant departments of regional authorities
  - professional associations
  - CzechTourim
  - Ministry of Regional Development
  - regional development agencies
  - local action groups

- To determine the weights of the criteria Saaty`s pairwise comparison method was used

- Weight = Principal eigenvalue

Intensity of importance	Definition
1	Equal importance
3	Moderate importance of one over another
5	Essential or strong importance
7	Very strong importance
9	Extreme importance

Research Method: Step 3

- Evaluator judges the level of criterion fulfillment by three key characteristics on a quality scale “entirely – partially – not at all”
- Based on this judgment the criterion is automatically classified into one of the five qualitative levels
- Then the evaluator assigns a concrete point value from the pre-defined range to this criterion

Value	Characteristics of the qualitative level
0 – 10	Insufficient – the key characteristics are achieved in a minimal intensity
11 – 40	Sufficient - the key characteristics are achieved in a limited intensity
41 – 60	Good – the key characteristics are achieved in a medium intensity
61 – 90	Very good - the key characteristics are achieved in a high intensity
91 – 100	Excellent - the key characteristics are achieved in a maximal intensity

Survey progress (1 / 3)

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<<< 1 / 40 >>> 10% 100%

The strategy has clearly defined its purpose and method of elaborating

KCH1: Starting conditions for strategies creation are defined

Please choose...

KCH2: Strategy creation reason is explained

Please choose...

KCH3: Strategy creation process is described

Please choose...

Qualitative degree N/A

Previous question Next question

Research Method: Step 3

- **TOPSIS method** is used for selection of suitable benchmarking partners on the basis of the results of their development strategies evaluation
- Selection of the strategies is done according to their distance from the ideal and basal solutions

$$d_i^+ = \sqrt{\sum_{j=1}^{k} (w_{ij} - H_j)^2}, where\ i = 1, 2, \ldots, p$$

$$d_i^- = \sqrt{\sum_{j=1}^{k} (w_{ij} - D_j)^2}, where\ i = 1, 2, \ldots, p$$

Research Method: Step 3

- Arrangement according to decreasing values of indicators of relative distance from the basal solution

$$c_i = \frac{d_i^-}{d_i^+ + d_i^-}$$

$$c_i \in \langle 0,1 \rangle$$

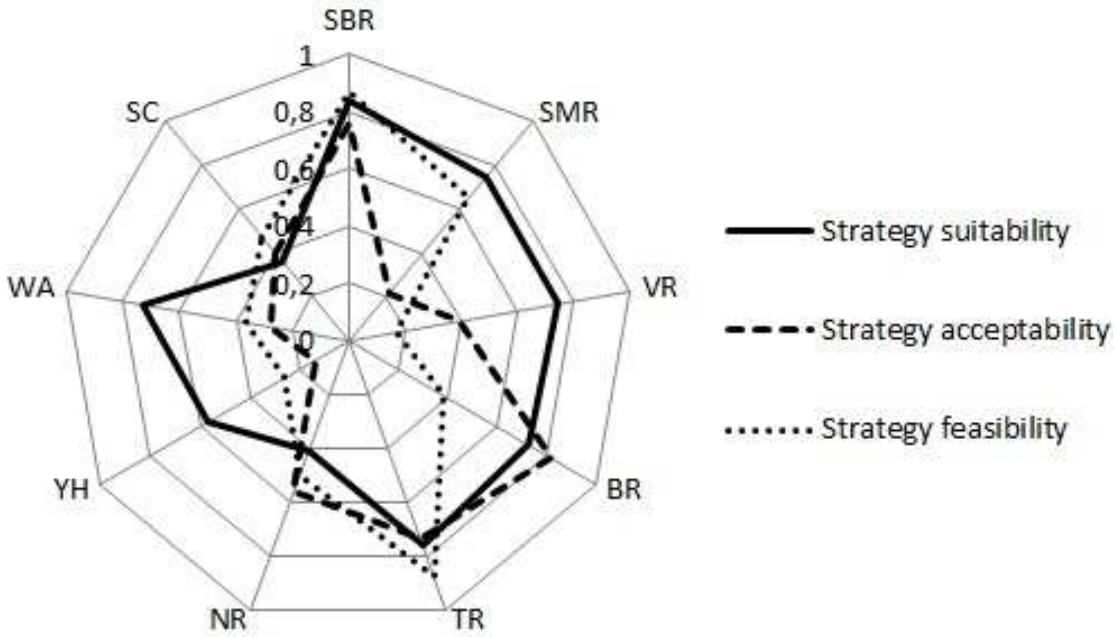
Research Method: Step 4 (Test)

- The following regions were chosen as a test sample
  - Czech regions: South Bohemia Region (SBR), South Moravia Region (SMR), Vysocina Region (VR)
  - Slovak regions: Bratislava Region (BR), Trnava Region (TR), Nitra Region (NR)
  - British regions: Yorkshire & Humber (YH), Wales (WA), Scotland (SC)

- The evaluation process was made by four evaluators – members of the research team

Overall Results

- The evaluation based on TOPSIS method points out **the South Bohemia Region** as the most suitable benchmarking partner
- If we divide the evaluation procedure into the quality spheres, the partial results will be following
  - Strategy suitability: South Bohemia Region
  - Strategy acceptability: Bratislava Region
  - Strategy feasibility: Trnava Region



Next Steps of the Research

- Fully-implementation of the evaluation process to a user-friendly online application
- Utilization of this application for selection of the suitable benchmarking partners with the best regional strategies
- Realization of the Benchmarking survey focused on planning process and process of strategies implementation in selected regions
- Creation of the international benchmarking database of the best examples from tourism management

Thank you for your attention and have a nice day!

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