



7. Multi-Actor Multi-Criteria Analysis

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The Multi-Actor Multi-Criteria Analysis (MAMCA) method is a way of evaluating several project or policy options through taking stakeholder preferences explicitly into account. MAMCA is an extension of Multi-Criteria Analysis (MCA), differing from the latter by explicitly introducing stakeholders before the criteria and weights are defined. Through encouraging stakeholders to reflect on what they want and the rationales behind this, MAMCA facilitates reaching consensus. On-line software is available to conduct the evaluation.



MAMCA AT-A-GLANCE

- Makes synergies and conflicts between stakeholder preferences explicit (and quantified) to aid decision making.
- Requires MAMCA software (www.mamca.eu), and rigorous analysis requires resources and thematic experts in order to operationalise.



Benefits

1. Better-informed decisions through the inclusion of multiple sources of knowledge.
2. Can increase support for those decisions among stakeholders.
3. Fosters problem ownership and learning among stakeholders.



Challenges and limitations

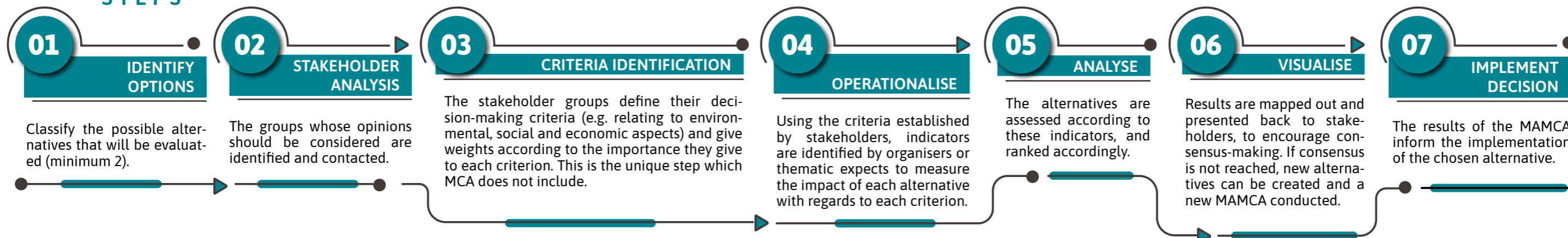
1. **Data availability:** Like any model, accuracy of outputs depends on quality of inputs, but high-precision data on impacts can be difficult or costly to find.
2. **Participation:** engaging a representative sample of participants can be hard and participants may struggle to assign weights to impact factors.
3. **Exploring why:** Care must be taken to not blindly follow the outcome and instead unpick why certain solutions rank high or low.
4. **Conflict:** MAMCA itself is not a conflict-solving tool and a willingness to cooperate is required.



Participants

MAMCA can be used by anyone confronted with multi-stakeholder problems, in particular (local) governments, academics or consultants. As participants, any stakeholder relevant to the project can be included, such as citizen or business interest groups or political actors. MAMCA has most added value in problems with more than three stakeholders. For a rigorous assessment, experts are needed to provide factual input.

STEPS



Timeframe: The time needed for data collection and stakeholder analysis ranges from several hours to several weeks depending on the scope and depth.

OUTCOMES AND IMPACT



MAMCA results in a ranking of decision options for each stakeholder, which can provide a valuable base for negotiation. As the method is intended to foster better-informed decision making, the scope of the impact is potentially as large as the scope of the project in which it is applied.

ONLINE/OFFLINE



MAMCA can be run fully online using MAMCA software, but in-person workshops are helpful for guiding participants.

LEARN MORE

- Macharis, C., Turcksin, L., and Lebeau, K., 2012. *Multi actor multi criteria analysis (MAMCA) as a tool to support sustainable decisions: State of use. Decision Support Systems*, 54(1), pp.610-620.
- Keserü, I., Bulckaen, J., and Macharis, C., 2016. *The multi-actor multi-criteria analysis in action for sustainable urban mobility decisions: The case of Leuven. International Journal of Multicriteria Decision Making*, 6(3), pp.211-236.

REAL LIFE EXAMPLE: LOOPER

MAMCA was applied in the [LOOPER project](#) to assess different solutions to mobility problems in Brussels from the perspectives of transport operators, NGOs, citizens, and authorities.

RESOURCES NEEDED

MAMCA software is available online to support the process (www.mamca.eu). Skills required are basic digital literacy and familiarity with charts and numbers. If the aim is a rigorous assessment, factual information or data and experts with knowledge of the field are needed to assign the performance scores.