

Development of a Group Model Building-based workshop for an ex-post process evaluation of local mobility services

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The Austrian government aims to reduce carbon emissions in the transport sector close to zero in order to achieve carbon neutrality by 2040. To achieve this goal, the implementation of pilot action and research into their effectiveness is encouraged, regarding for example flexible on-demand mobility services (BMK, 2021). An evaluation of the implementation process for local mobility services can help to identify barriers and driving forces. However, process evaluation is rarely conducted in transport (Dziekan, 2013) and if so, most often standardised templates are used that only provide superficial results. Therefore, we developed and tested an alternative approach to process evaluation: a group model building-based ex-post process evaluation workshop that uses systems thinking principles and participatory system dynamics modelling techniques with the aim to include different stakeholder perspectives upon the implementation process. The poster explains in depth the Group Model Building sessions and the adaption of existing methods for the purpose of process evaluation. The method was based on scripts from the System Dynamics Community from Scriptapedia: we used Vennix’s (2001) description of the modified version of the Nominal Group Technique by Delbecq, Van de Ven and Gustafson (1975) and we adapted it to process evaluation purposes: In place of a problem variable that is increasing or decreasing, we asked about factors that have influenced the implementation process. We further adapted the Script “Initiating and Elaborating a ‘Causal Loop Diagram’ or ‘Stock & Flow Model’” by using our problem variables “Progress of implementation” & “Quality of project output”. This resulted in Causal Loop Diagrams, which represented the participants perspective about their project implementation. From feedback questionnaires we concluded that participants found the workshops very useful and were satisfied with the format. Overall, we concluded that Group model building causal loop diagrams can provide a process evaluation method for funded mobility projects based on systems thinking.

References

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