


8. Participatory Knowledge Mapping

Author: Luciano d'Andrea (dandrea@knowledge-innovation.org), Knowledge & Innovation, Italy

Participatory Knowledge Mapping (PKM) refers to approaches aimed at visualising (through diagrams, graphs, workflows, tables, images, or geographical maps) the relationships and issues within an organisation or community. This visualisation is achieved using participatory mechanisms such as workshops, interviews, or deliberative meetings. PKM can also be referred to as Participatory Modelling, Group Model Building, Participatory Mapping, or Participatory System Mapping. It is often used in development contexts.



PKM AT-A-GLANCE

- Fosters cooperation and the combining of different kinds of knowledge by helping participants showcase what they know, and shape a shared view of them.
- Requires inclusive facilitation skills as well as resources to manage the chosen visualisation techniques.



Benefits

1. Identifies existing knowledge assets (experts, practices, documents, etc.) and helps visualise and transfer this knowledge, as well as flagging up future knowledge needs.
2. Provides a methodological basis allowing different kinds of knowledge (scientific, professional, experiential, political, emotional, etc.) to interact. Resulting conceptual frameworks can be used in planning or evaluation.
3. Can suggest cause-effect relations among factors contributing to a problem or situation.
4. Increases mutual understanding and creates common ground among participants, favouring the involvement of marginalised groups.



Challenges and limitations

1. **Valuing all types of knowledge** (both scientific and lay) as relevant to the problem in hand.
2. **Ensuring stakeholder participation** is willing and motivated, including agreement among the participants on the overarching goals of PKM.
3. **Inclusive facilitation** to manage any tensions among participants and prevent the dominance of some or marginalisation of others.

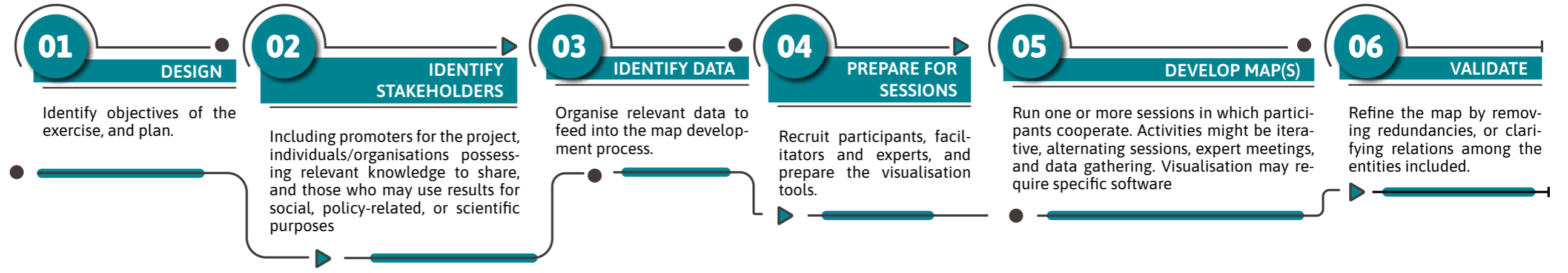


Participants


As many as possible of the stakeholders relevant to the topic(s) the PKM is dealing with should be involved (for example students, women in an organisation, farmers, inhabitants of a neighbourhood or rural area, etc.) as well as experts and researchers. Individual sessions usually involve a maximum of 20 participants

STEPS

Whilst PKM exercises vary according to aims, stakeholders, context, visualisation tools, etc., six main steps can be identified:




Timeframe: A PKM exercise can take from 3 days to several months, depending on the level of complexity (e.g. number of people, kinds of issues considered, or methodologies used in map development)




OUTCOMES AND IMPACT

A key tangible outcome is the maps developed which may include **geographical maps** (connecting knowledge items to specific areas of a given territory), **organisational maps** (identifying knowledge items held by specific individuals or units in an organisation) or **conceptual or interpretive maps** (organising knowledge items using concepts like causes, effects, risks, or benefits). Ideally these are of direct use to the participants of the PKM exercise. There are four main types of resultant impact: Information sharing; Awareness-raising; Cohesion building; Knowledge co-creation.



RESOURCES NEEDED

The simplest PKM exercises can be implemented with limited resources (flip charts, one room, etc.). The complexity increases with the number/type of sessions and participants, and the use of visualisation software (for mapping and management ideas, for managing geospatial data, etc.). Facilitators of PKM sessions, as well as the capacities normally required (leadership, active listening, etc.), should be knowledgeable of the PKM and the techniques applied. Support from experts on PKM is needed.



ONLINE/OFFLINE

PKM exercises can be done both online and offline. The visualisation should be supported with online project collaboration software in the former case.

LEARN MORE

Eppler, M. J., 2006. *Toward a pragmatic taxonomy of knowledge maps*. In *Tenth Int' Conf. on Information Visualisation (IV'06)* (pp. 195-204). IEEE.

Evans, W., and Beutler, J., 2018. *Participatory Mapping Toolkit: A Guide for Refugee Contexts*. Humanitarian OpenStreetMap Team.

Gerritsen, S., Harré, S., Rees, D., Renker-Darby, A., Bartos, A. E., Waterlander, W. E., and Swinburn, B., N2020. *Community group model building as a method for engaging participants and mobilising action in public health*. *International journal of environmental research and public health*, 17(10), 3457.

Matti, C., Martín Corvillo, J.M., Vivas Lalinde, I., Juan Agulló, B., Stamate, E., Avella, G., and Bauer dA., 2020. *Challenge-led system mapping. A knowledge management approach*. *Transitions Hub series*. Brussels: EIT Climate-KIC.

REAL LIFE EXAMPLE: IFAD

The International Fund for Agricultural Development (IFAD) has produced a [Good Practices Guide](#) which draws on work supporting communities in Angola, Kenya, Madagascar, Mali, Mozambique, Peru, the Philippines, Sudan, and Tunisia.