

## Supporting Users to Find Appropriate Visualizations of Spatio-Temporal Open Data Sets

Jan Schulte<sup>1</sup>, Laura Helene Zepner<sup>2</sup>, Stephan Mäs<sup>2</sup>, Simon Jirka<sup>1</sup>, and Petra Sauer<sup>3</sup>

<sup>1</sup>52°North GmbH, Germany

<sup>2</sup>TU Dresden, Dresden, Germany

<sup>3</sup>Beuth Hochschulte, Berlin, Germany



EGU2020: Sharing Geoscience Online, 4th May 2020

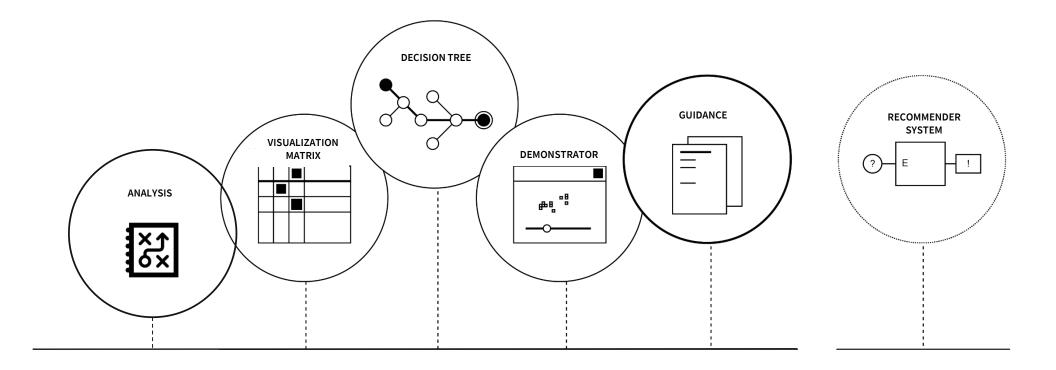
Gefördert durch:

Bundesministerium für Verkehr und digitale Infrastruktur

aufgrund eines Beschlusses des Deutschen Bundestages

#### Overview

- Open data portals offer a broad range of input for science and decision-making
- Immense amount of different types of data that may be relevant for a user
- Aim: Facilitate the efficient and user-friendly exploration of available data sets
- Visualisation to support the exploration of data sets
- Focus of this project: open data portal mCLOUD
  - Open data portal offering data on traffic, climate, weather, infrastructure
  - Often highly dynamic data in complex structures
  - Selection of data sets is a challenge, especially for non-expert users
- Provide decision support for delivering appropriate preview visualization of data sets



### mVIZ Approach

#### Team

#### Technische Universität Dresden (TUD)

- Coordinator
- Concept development for decision matrix
- Evaluation

#### 52°North Initiative for Geospatial Open Source Software GmbH

- Design and implementation of demonstrator
- Development of visualisation recommendations

#### Beuth Hochschule für Technik Berlin

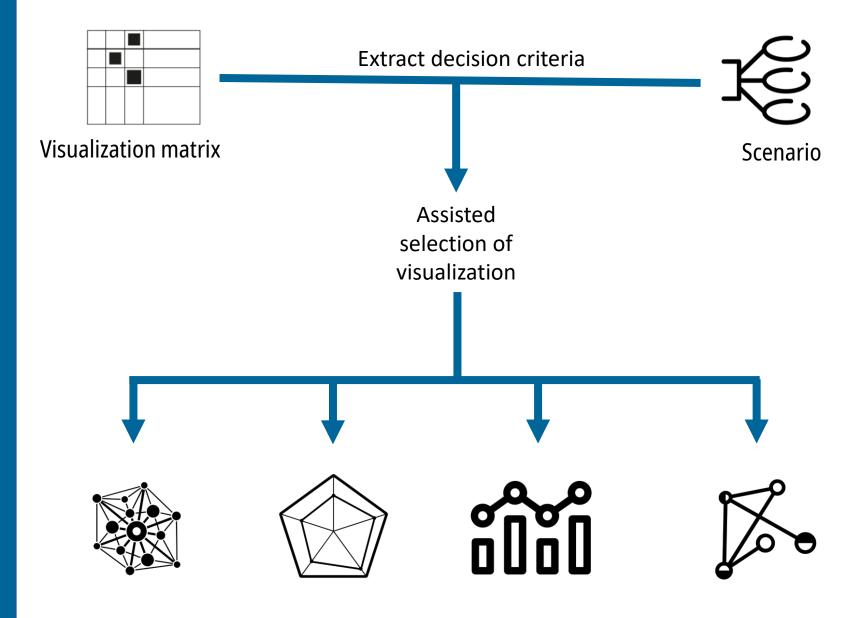
- Analysis and concept development
- Metadata extraction
- Demonstrator







#### **Decision Matrix**



#### Demonstrator and Guidance Development

- Development of demonstrator to evaluate the feasibility of supporting the visualization selection
- Includes
  - User interface
  - Implementation of decision matrix
  - Extraction of metadata from data sets → inputs for decision matrix
  - Based on mCLOUD data
- Creation of guidance document summarizing the project findings
  - Overview of relevant visualization techniques
  - Concept of the decision matrix and decision criteria
  - Metadata extraction
  - Demonstrator design





#### Gefördert durch:



Bundesministerium für Verkehr und digitale Infrastruktur

aufgrund eines Beschlusses des Deutschen Bundestages

# Thank you for your attention!