

# Assessing the Quality of RDF Mappings with EvaMap



Benjamin Moreau, Patricia Serrano Alvarado **opendatasoft**

UNIVERSITÉ DE NANTES

## MOTIVATION AND PROBLEM

- **RDF Mappings** describe the transformations of structured datasets into RDF datasets.
  - Making RDF mapping is challenging, and for one dataset, different mappings are possible.
  - We argue that a tool capable of evaluating the quality of an RDF mapping would make the creation of mapping easier.
- The problem we address is:

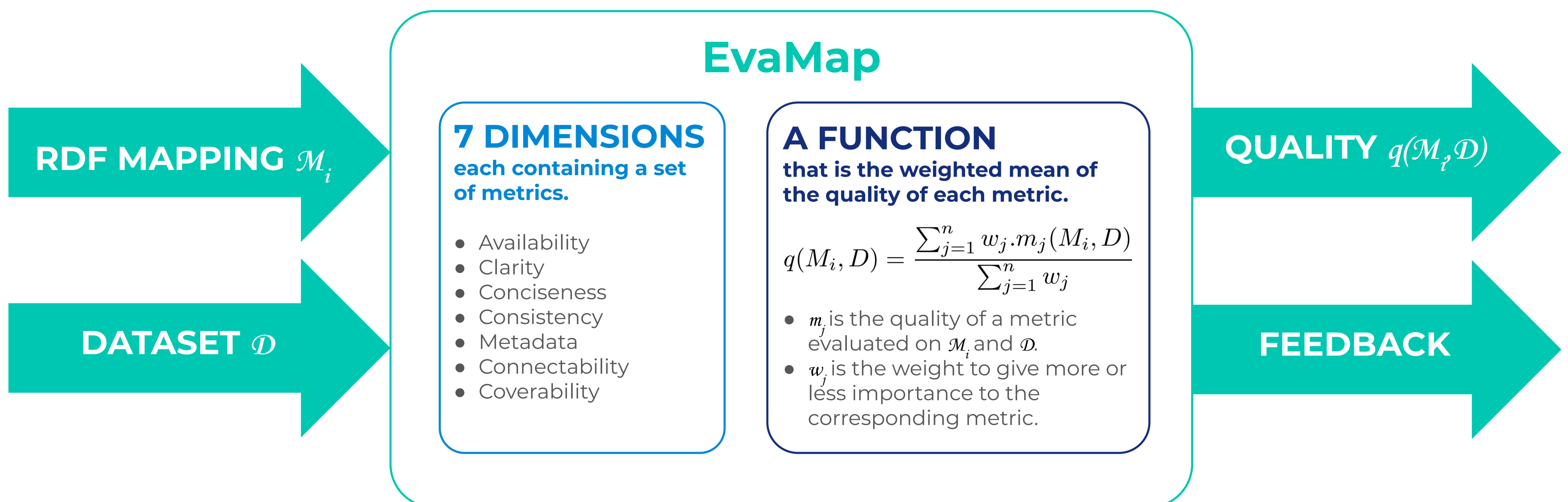
**How to automatically help users to create RDF mappings without errors and how to choose the best mapping from a set of RDF mappings?**

## SOLUTION

EvaMap is a framework to **Evaluate** RDF **Mappings**.

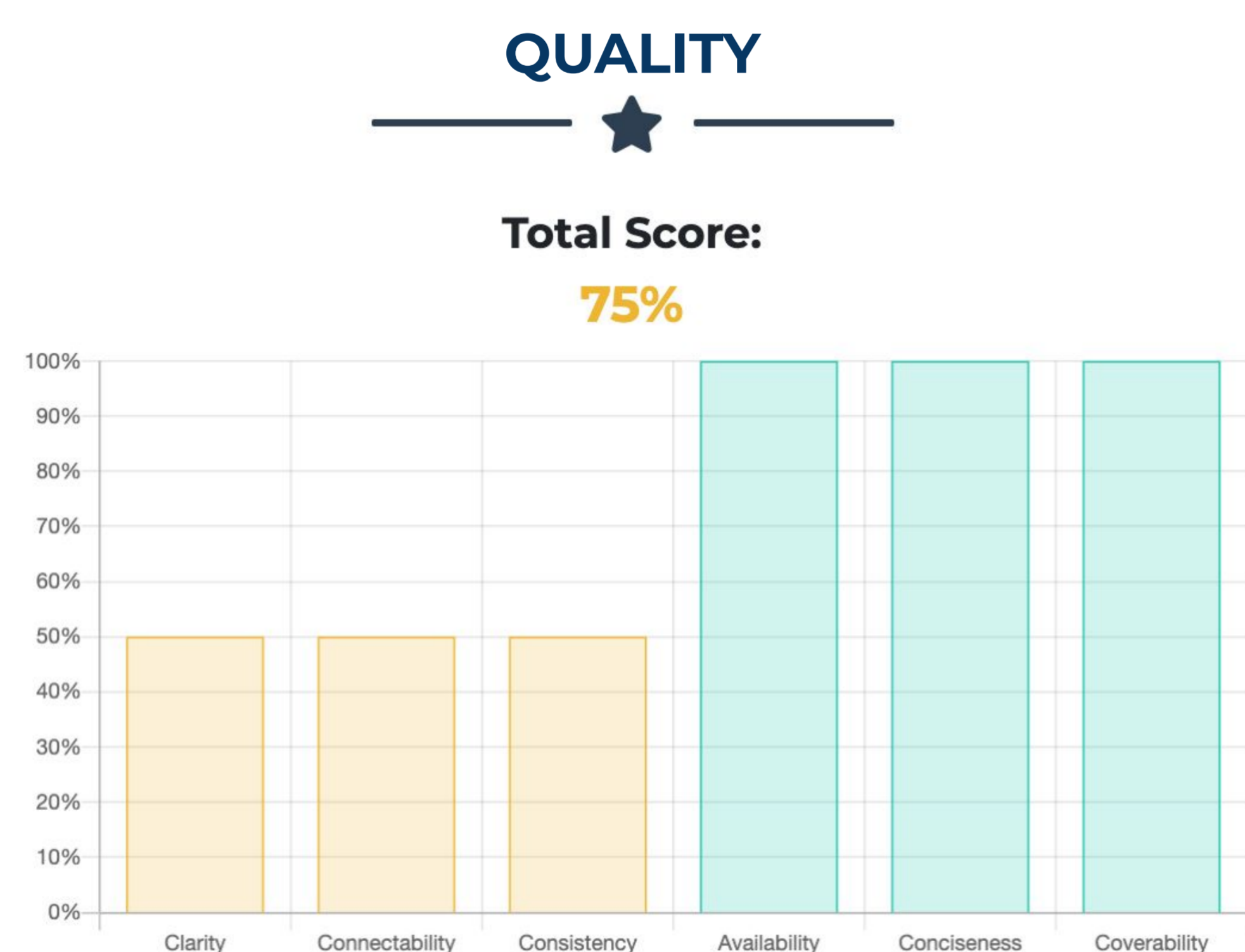
It can evaluate the quality of the resulting RDF dataset through its RDF mapping without having to generate the RDF dataset. It is based on:

- a set of **metrics** organized in **7 dimensions**.
- a **function** that is the weighted mean of the quality of each metric to compute the global quality of an RDF mapping.
- **feedback** for each metrics allowing user to improve its RDF mapping.



## OUR DEMONSTRATION

is an implementation of EvaMap to evaluate YARRRML mappings for datasets of the Opendatasoft's data network.



**FEEDBACK**

Metric	Score (%)	Feedback
Clarity	50%	Human readable description of the resource <code>https://example.org/\${name}</code> is missing. Please add an <code>rdfs:comment</code> or <code>rdfs:label</code> Human readable description of the resource <code>https://example.org/\${home_team}-\${away_team}</code> is missing. Please add an <code>rdfs:comment</code> or <code>rdfs:label</code> Human readable description of the resource <code>https://example.org/\${name}-\${home_team}</code> is missing. Please add an <code>rdfs:comment</code> or <code>rdfs:label</code> Human readable description of the resource <code>https://example.org/\${name}-\${away_team}</code> is missing. Please add an <code>rdfs:comment</code> or <code>rdfs:label</code>
Connectability	50%	No sameAs defined resource <code>https://example.org/\${name}</code> is not linked to another resource resource <code>https://example.org/\${home_team}-\${away_team}</code> is not linked to another resource resource <code>https://example.org/\${name}-\${home_team}</code> is not linked to another resource resource <code>https://example.org/\${name}-\${away_team}</code> is not linked to another resource

<https://evamap.herokuapp.com/>



Github [github.com/benjimor/EvaMap](https://github.com/benjimor/EvaMap)  
 Demo paper [hal.archives-ouvertes.fr/hal-2612705](https://hal.archives-ouvertes.fr/hal-2612705)  
 Contact [benjamin.moreau@opendatasoft.com](mailto:benjamin.moreau@opendatasoft.com)  
 Contact [patricia.serrano-alvarado@univ-nantes.fr](mailto:patricia.serrano-alvarado@univ-nantes.fr)

