

# FAIR Maturity Matrix

## Why a FAIR organisational maturity model?

Organizations are at different stages in implementing FAIR data principles. FAIR data metrics exist but are not sufficient. Benchmarking across organizations is very hard. Organizations spend time clarifying situations, defining possible actions for desired outcomes, and road mapping. How to assess, qualify, and manage progress towards FAIR implementation?

## Intended use

The FAIR Maturity Matrix is a descriptive (self-)assessment instrument for Leadership and Communities of FAIR data practitioners evolving in the life-sciences. It provides a frame for actionable conversations, aligning stakeholders towards shared FAIR implementation goals. It is not a prescriptive model: each organization and their journey are unique. "More FAIR" is not a goal *per se* and should align with organizational and business goals.

## Levels

There are 6 maturity levels, L0-L5, in alignment with FAIR data frameworks.

Capabilities tend to be cumulative (Level N encompasses Level N-1).

Level 4 reflects current best practice. Level 5 is aspirational.



Thanks to AstraZeneca for the marketplace analogies.

## Dimensions

7 dimensions were identified to provide a complementary perspective on FAIR journeys:

- **Data**, metadata, data products
- **Leadership** necessary for FAIR implementation
- **Strategy** for FAIR stage and how to get there
- **Roles** necessary to implement FAIR
- **Processes** which must be implemented
- **Knowledge** required for FAIR implementation
- **FAIR Tools** (e.g. persistent identifiers, controlled vocabularies, semantic models)

The dimensions are not hierarchical.

Each column and row point to the respective definitions. The cells point to a narrative text describing the related characteristics. Each cell can be viewed in the context of either level (column) or also of its evolution (row).

	0 Life is unFAIR	1 Started the FAIR journey	2 Getting FAIR	3 Pretty FAIR	4 Really FAIR	5 FAIRest of them all
FAIR data	data 0	data 1	data 2	data 3	data 4	data 5
FAIR leadership	leader 0	leadership 1	leader 2	leader 3	leader 4	leader 5
FAIR strategy	strategy 0	strategy 1	strategy 2	strategy 3	strategy 4	strategy 5
FAIR roles	roles 0	roles 1	roles 2	roles 3	roles 4	roles 5
FAIR processes	process 0	process 1	process 2	process 3	process 4	process 5
FAIR knowledge	knowledge 0	knowledge 1	knowledge 2	knowledge 3	knowledge 4	knowledge 5
FAIR tools	tools 0	tools 1	tools 2	tools 3	tools 4	tools 5

## Contents

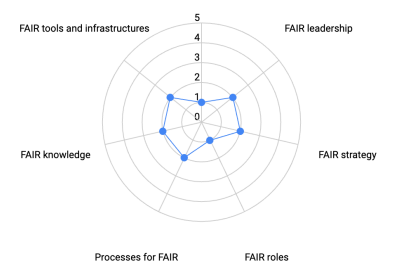
A summary of all levels is provided as first orientation. For each one a summary of generally observable features, capabilities and issues is given. Each level has description of: Capabilities, Business value, Questions to ask. Further each dimension a narrative text describes each dimension. The "tools" dimension also includes relevant references.

Level	Nickname	Marketplace metaphor	Features	Picture
2	"Getting FAIR"	"Street Market"	FAIR Pilots for implementation are in place	

**Level 2: "Getting FAIR" summary**  
The organization initiates data conforming processes to local models in a shared data platform and progresses to system-level controls. These processes include: Tools for metadata, controlled vocabularies and persistent identifiers. Data is more "findable" thanks to unique identifiers. Emerging metadata and controlled vocabularies make accessing data with less specific knowledge requirements possible. Leadership awareness grows, initiating initial FAIR projects and forming champions within the company. Vision, strategy, and role development follow, integrating FAIR as a key element in the broader data strategy. Designated roles emerge, fostering prototypes and showcasing value. Formal training



**Level 2 "Getting FAIR"**  
Owned by Giovanni Nisato —  
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Level 2 - Capabilities  
Level 2 - Business value  
Level 2 - Questions to ask  
Level 2 - FAIR data  
Level 2 - FAIR leadership  
Level 2 - FAIR strategy  
Level 2 - FAIR roles  
Level 2 - FAIR processes  
Level 2 - FAIR knowledge  
Level 2 - FAIR tools and infrastructures



### Key Information

#### Contact details

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#### Project website

<https://www.pistoiaalliance.org/projects/current-projects/fair-implementation/>



#### Key project info resources

<http://fairmm.pistoiaalliance.org/>



### Sponsors/ Steering



### Contributors



Thanks to our funders who are making this project possible, without their help this community would not exist or collaborate. Thanks for all the in-kind contributors for their time and expertise.

### Resources

Since its inception in 2018, the FAIR implementation project created among others

[fairtoolkit.pistoiaalliance.org](http://fairtoolkit.pistoiaalliance.org): resources and uses cases of FAIR in life-sciences

[fair4clin.pistoiaalliance.org](http://fair4clin.pistoiaalliance.org): a document mapping FAIR in the clinical space

[fairmm.pistoiaalliance.org](http://fairmm.pistoiaalliance.org): an organizational maturity model for FAIR

## Getting involved

Feel free to use the model and to cite it (<http://fairmm.pistoiaalliance.org/> is CC BY 4.0). To get involved, provide feedback or co-create the next version, feel free to write us at [fair-maturity-matrix@pistoiaalliance.org](mailto:fair-maturity-matrix@pistoiaalliance.org)



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