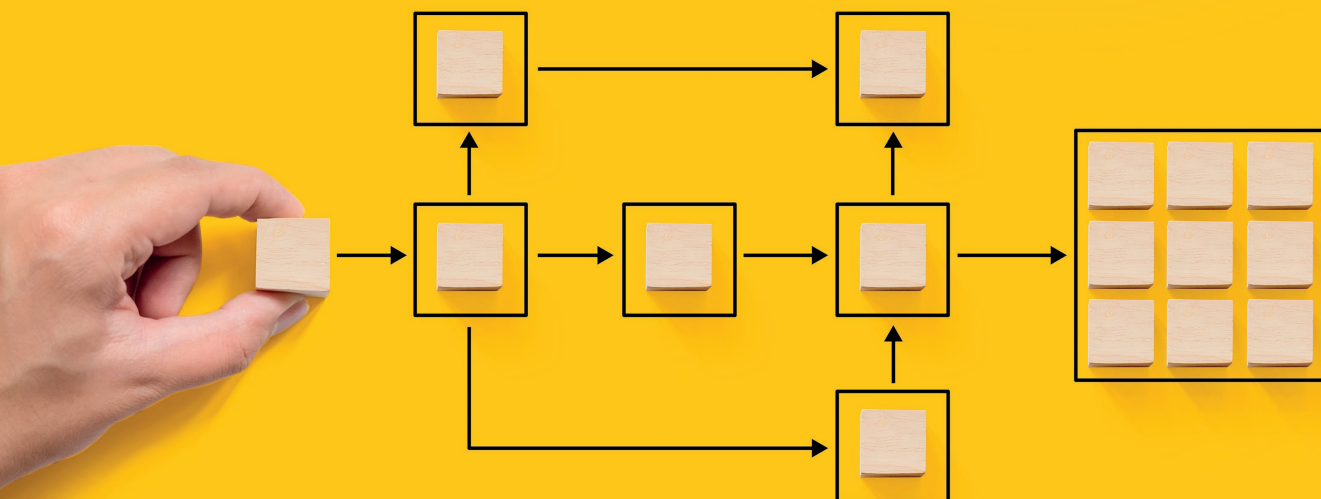
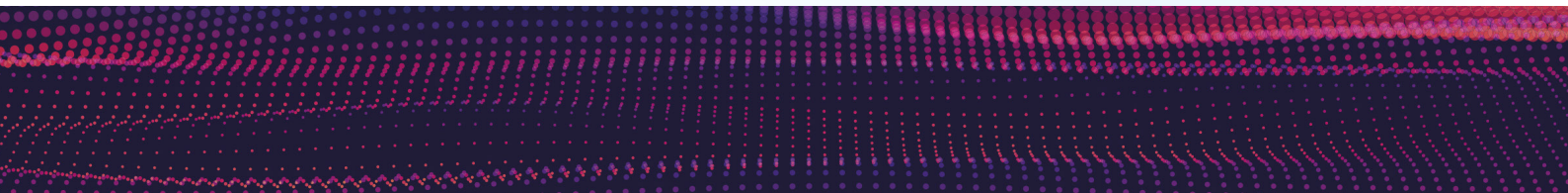


Examining the technicalities of implementing FAIR at the Technical University of Cluj-Napoca



Authors names, affiliations and ORCIDs:

- Teodor Stefanut, Technical University of Cluj-Napoca - <https://orcid.org/0000-0002-2072-1783>
- Victor Bacu, Technical University of Cluj-Napoca - <https://orcid.org/0000-0002-1310-1009>
- Deborah Thorpe, DANS - <https://orcid.org/0000-0002-2307-8770>
- Salomé Landel, Centre National de la Recherche Scientifique - <https://orcid.org/0000-0001-5360-5693>

Support programme:

FAIR-IMPACT's Support Programme for Repositories and Data Service Providers aimed to help participants better understand their drivers for becoming more FAIR-enabling, self-assess their current FAIR-enabling capacity, develop an action plan with considerations for stakeholder engagement, and to work on implementing this. The support programme ran between September 2024 and March 2025, during which six virtual workshops and continuous dedicated and tailored mentoring support was offered to help participants identify and establish their unique journey toward becoming more FAIR-enabling. This FAIR Implementation Story outlines the specific aims and actions of the Technical University of Cluj-Napoca in relation to their participation in this Support Programme.

Keywords:

Cultural Heritage Data; PIDs; technical insights; FAIR

Summary:

When the Technical University of Cluj-Napoca applied to join the support Programme for Repositories and Data Service Providers, they had the central aim of learning more about how to define and implement a FAIR enabling data repository for cultural heritage objects.

Over the course of the programme they used this support as an opportunity to define a 'FAIR ready data repository' and take time to examine technical questions around FAIR implementation, especially in relation to Persistent Identifiers (PIDs). In this FAIR Implementation Story we learn how a highlight of the programme was making a valuable connection with the Digital Repository of Ireland – another repository that provides long-term preservation and access to cultural digital data.



■ Introduction:

The Technical University of Cluj-Napoca is a public university in north-western Romania. The university is involved in the European project ChemiNova, to create a repository for the cultural elements in Europe. They are currently in the process of implementing the first prototype of the data repository and the API to access these data.

For this reflective story, we spoke to Teodor Stefanut and Victor Bacu about their participation in this FAIR-IMPACT support programme – they are doing the technical work of implementing the repository. As such, they joined the programme wanting to learn more about best practices on FAIR, and the technical aspects of how to actually implement FAIR.

As technical specialists, the team identified that they needed to learn more about the technical details relating to FAIR, such as dealing with versioning in their repository and assigning PIDS that would identify a specific version of the data in their repository. They had questions on how to achieve this in their repository, so were seeking technical conversations and insight as part of the programme.

Teodor and Victor were mentored through their progress in this programme by Sandra Boerman (DeiC) and Laurence Horton (Digital Curation Centre).

■ Approach taken:

In the support programme, the participants met together regularly for online workshop sessions on different topics. In one of these sessions, the Cluj-Napoca team spoke to the other participants about their technical questions around FAIR implementation and the issue of PIDS, versioning of data, metadata persistence, and long term support for PIDs. One advantage of this programme is that the facilitators and other participants in the programme each had their own networks of colleagues and collaborators. As such, one of the programme facilitators, Deborah Thorpe was able to connect Teodor and Victor with her former colleague, Stuart Kenny, Senior Software Engineer at the Digital Repository of Ireland. As a technical specialist working with cultural heritage data, it seemed likely that Stuart would be a good sounding board for their ideas and questions.

The Cluj-Napoca team found an online conversation with Stuart to be very helpful; it helped them to untangle how to approach their problem. This impactful meeting, as Teodor puts it: 'changed our mindset and gave us technical insight to be implemented in our solutions'.

■ Challenges encountered and addressed:

The support tools offered by the project follow the steps of the FAIR Implementation Framework (Consider your Drivers, Assess your capabilities, Create your Action Plan, Add your Engagement Strategy) and have a focus on planning. However, Teodor and Victor, as technical specialists, were more focused on implementation – so they felt that these planning steps were more useful for policy makers. Reflecting on the programme in general, they thought that anyone who is thinking of participating in such a support programme could consider joining as a mixed team of policy-makers and technical specialists, to make the most out of the opportunity to collaborate on a shared goal.

The team identified a challenge for repositories in addressing problems with how data is prepared before the stage of data sharing in the repository. There is the need for training, support and policies at an institutional level if you really want a successful repository, they reflected. One exercise that the team have done in addressing this is to develop training workshops, which they felt have benefited from this FAIR-IMPACT experience.



■ ■ Future plans:

When asked what they would like to achieve in the future, Teodor expressed a need to 'interconnect' with other repositories in their work to realise the FAIR Principles: 'in order to achieve the FAIR principles, we need to be better interconnected'. With this in mind, the team also expressed their willingness to share their own expertise and experiences with others who want to learn, in the future.

■ ■ Key messages:

In order to implement FAIR in a repository, it is important to fully understand FAIR and best practices around FAIR

When working on a project like the one that the Technical University of Cluj-Napoca undertook, it could be useful to form a team with mixed expertise: policy and technical. Making FAIR a reality depends on both sides.

As technical specialists working on FAIR implementation, it is useful to make contact and have discussions with other people with technical expertise who have worked on similar challenges

'From our perspective, being FAIR-enabling cannot be achieved in one run, it is a process that goes in circles. It is not an easy task to provide FAIR data but we will manage to do it!'





@fairimpact_eu



company/fair-impact-eu-project/



fair-impact.eu

