IMPLEMENTATION STORIES

FAIRSFAIR
Fostering Fair Data Practices in Europe

IMPLEMENTATION STORIES

Recognising and implementing FAIR throughout the organisation

Authors
Maaike Verburg, Marjan Grootveld (DANS)

From an interview with
Dr. Judith de Haan (Programme manager Open Science - Utrecht University)

Utrecht University

Introduction

For an organisation to successfully implement a programme for open and FAIR science, it is vital that its approach is one that both connects to all relevant actors throughout the organisation and is also supported by senior management. Utrecht University showcases an extensive Open Science Programme that includes support for FAIR practices. This programme is carried out through collaborations with many different parties and stakeholders to ensure alignment throughout the organisation and a focus on the aspects that are most relevant to academics. Awareness, training, and recognition are the main pillars of this programme. Based on the TRIPLE model, Utrecht University strives to remain at the forefront of the Open Science movement in the Netherlands. This story depicts the organisation's programme and gives examples of the resulting practical implementations of training and recognition efforts.

■ Approach taken

To follow up on the ambition formulated in the strategic plan of Utrecht University published in 2016, the university's Rector Magnificus commissioned a task force to draft an Open Science Programme for the period 2018-2021. The aims of this programme were to align the Utrecht University strategy with the Dutch National Plan for Open Science (NPOS[1]) and to operate at the forefront of the Open Science movement in the Netherlands. The approach to this programme shows that a focus on collaboration and knowledge exchange can lead to successful university-wide integration and uptake.
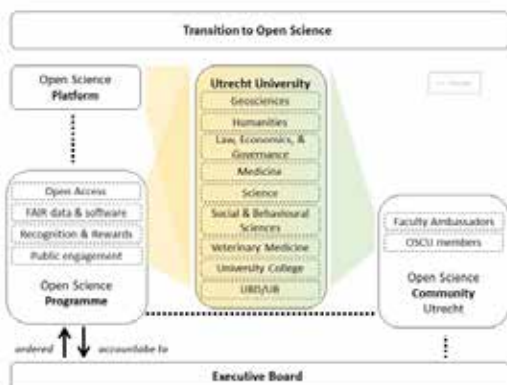
The task force consisted of academics and representatives from the Research IT department, the University Library, and the Academic Affairs Office and was supported by a library working group. The draft version of the programme was discussed with academics from all faculties, ranging from PhDs to Principal Investigators, and support staff at the research, policy, and management levels. To add focus to an otherwise very broad topic, the programme is made up of four tracks:

1. Open Access,
2. FAIR Data and Software,
3. Public Engagement,
4. Recognition and Rewards.

After three years, the first phase of this programme is coming to a close. The university is already formulating a continuation plan for the next phase, including new focus points and goals. For example, a new track will be added to focus on Open Science in Education.

The implementation of the programme has been designed with a holistic focus. For each track, there are representatives at all faculties who monitor the related practices and needs of the researchers. These representatives collaborate at the faculty level to make connections between the tracks (e.g., to encourage new practices regarding FAIR data and software, it is necessary to change how these practices are currently recognised and rewarded). To unite the different faculties, there is an overarching coordinating team that steers and further develops the university programme. This team has a close knowledge exchange with the faculty representatives, as well as connections with the library and IT department to create and develop training materials. The team has also built a relationship with the Open Science Community Utrecht[2] to aid in the alignment of the top-down focus of the programme with the bottom-up grassroots initiative of the community. With all these interrelated connections as well as the explicit support from the university's executive board, the programme reaches throughout the entire organisation and makes it so that all voices can be heard.

Another important aspect of the programme is the explicit focus on FAIR. Initially, the FAIR Data and Software track was called "FAIR and Open Research Data", but after some evaluation the decision was made to focus on FAIR in this track. This decision was based on the idea that FAIR is the necessary first step before you can consider making your data open. Therefore, it was reasoned that the focus of the programme should be on this aspect first. Software was also recognised as an important and related topic to pay attention to and was therefore included in the track as well. The two topics, data and software, have different centres of expertise in the organisation, which collaborate closely to facilitate this track.

Utrecht University organisation and governance of the Open Science Programme[3].

1. https://www.openscience.nl/en/national-plan-open-science/national-plan/index
2. https://openscience-utrecht.com/
3. Image used with interviewee's permission

Challenges encountered and addressed

In the effort to implement this holistic approach to the open and FAIR science programme, a significant challenge has been presented.
The many initiatives and collaborations ensure that the programme is relevant for all and that the implementation and uptake of the vision and goals can be facilitated organisation-wide. However, these collaborations are quite complex and can complicate the decision-making process. The implementation of some changes or policies will help some but challenge others and it can be difficult to align all perspectives in practical solutions. This challenge is greatest for the coordinating Open Science team, who function as a central point of connection to facilitate these connections and collaborations.

An Open Science monitor was conducted in 2020[4] with researchers from all faculties to identify challenges regarding Open Science. Researchers were asked about the main opportunities and barriers they saw when approaching the topic. The results showed that most researchers had a good understanding of the possible opportunities and benefits of Open Science, but that high workloads and lack of recognition were barriers that made researchers more reluctant to engage in open and FAIR practices. This is why one of the Open Science tracks is exclusively dedicated to improving the recognition and rewards that come with these practices.

Another challenging aspect of the Open Science programme has been to educate researchers in order to explain the importance of specific requirements or practices for Open Science, and to get the actual outputs of the organisation to reflect the desired prominent position in the Open Science movement. There can still be anxiety and hesitancy with researchers about the topic, which can translate into reluctance to engage in these practices. However, with a general sense of goodwill, the key to overcoming such a challenge lies in education. By facilitating training that targets specific groups, it is possible to address the questions and fears that are relevant for their specific situation. It can take some time and conversation to learn to speak about Open Science and FAIR data in a way that connects with specific groups of researchers. Once this is achieved and the core fears and doubts of a group have been identified, training materials can be developed to address those topics specifically. Researchers can then also showcase which training events they have engaged in on their personal organisation profile.

Impacts

A programme regarding a topic as far-ranging as Open Science is difficult to track in outputs. An assessment has been executed of the organisation's repository (YODA[5]) to evaluate the findability of data in the system. Following this, a report with recommendations for improvement has been published. Utrecht University is looking into ways to gain a better insight into the impacts of their programme; for example, by developing a dashboard to automatically keep track of certain metrics. However, it is important to realize that while measuring can provide knowledge, an exclusive focus on quantitative metrics can be detrimental to data quality in the long run. Measures and metrics should really only be used as conversation starters. For example, if open access publishing seems to be lacking, this could start the conversation about the meaning and importance of open access.

Through work in the Recognition and Rewards track, a switch has been made from the MERIT model to the self-developed TRIPLE model for evaluation earlier this year[6]. TRIPLE, which stands for Team spirit, Research, Impact, Professional performance, Leadership, and Education, aligns with Utrecht's priorities when it comes to working in their organisation. This set of principles is used when evaluating researchers' performances and when hiring new employees. There is a clear switch in focus from quantitative to qualitative performance with this model, with open and FAIR practices being a strong indicator of qualitative investment. The organisation is currently in the process of developing guidance on how to effectively put this model into practice in evaluations.

4. The preregistration, questionnaire, and monitor report can be found on the Zenodo community of the Open Science Programme Utrecht University (OSPUU)
   https://zenodo.org/communities/ospuu/?page=1&size=20
5. https://www.uu.nl/en/research/yoda
6. https://www.uu.nl/en/news/from-merit-to-triple

The end goal for this programme is for it to ultimately cease to exist. This will be achieved when the organisation's support system has matured enough. This means that, on the one hand, support and training on the topics of Open Science, FAIR data and software, and research data management is developed and established enough, and on the other hand that employees know exactly what kind of support is offered within the organisation and where they need to go to receive that support. Once this awareness and outreach has been achieved, the organisation is mature enough to continue facilitating Open Science without this dedicated coordination. Their goal is not to remain a 'frontrunner' in this movement, as they hope all relevant organisations will work according to the principles of Open Science in the future.

Further information

Faez, S., van der Heuvel, M., de Jonge, H., Kemner, C., Möller, O., Quené, H., Rasch, M., & Smit, A. (2018). *Utrecht University Open Science Programme 2018-2021* [PDF file].
Retrieved from
https://www.uu.nl/sites/default/files/utrecht-university-open-science-programme.pdf

Utrecht University (n.d.).
Recognition and Rewards Vision [PDF file].
Retrieved from
https://www.uu.nl/sites/default/files/UU-Recognition-and-Rewards-Vision.pdf

About FAIRsFAIR Implementation Stories

FAIRsFAIR Implementation stories illustrate good practices in research communities and organisations to support the implementation of the FAIR principles. These practices encompass 'FAIR-enabling' actions as recommended in the EC Expert Group on FAIR report Turning FAIR into Reality and the FAIRsFAIR Recommendations on practice to support FAIR principles. FAIRsFAIR "Fostering FAIR Data Practices In Europe" has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 Grant agreement 831558. The content of this document does not represent the opinion of the European Union, and the European Union is not responsible for any use that might be made of such content.

FAIRsFAIR - Fostering FAIR Data Practices in Europe

European Commission Grant Agreement No. 831558
H2020-INFRAEOSC-2018-4
www.fairsfair.eu - support@fairsfair.eu

Acknowledgements

This report has been produced by the FAIRsFAIR (GA No. 831558) project, which received funding from the European Union's Horizon Programme call H2020-INFRAEOSC-05-2018-2019. FAIRsFAIR gratefully acknowledges everyone who we could interview for this series.

Disclaimer

The content of this document does not represent the opinion of the European Commission, and the European Commission is not responsible for any use that might be made of such content. **January 2022**

Copyright rests with the authors