

Field report documenting the implementation of the FWF's funding management system in conjunction with the national RIS Synergy initiative

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The [Austrian Science Fund FWF](#) is digitalising its services for researchers, research institutions, employees, and stakeholders with the FWF4.0 project. The project involves modernizing and transforming the FWF's core processes bridging the gap between Work 4.0 and Industry 4.0. FWF4.0 was initiated in 2020 and is in the software development phase in 2024. The aim of the project is a service-oriented processing of basic research applications, considering the FWF's surrounding committee landscape.

The IT systems still in use are outdated and currently do not fully exploit the opportunities offered by complete digitalisation. A key factor is the FWF's aspiration to shape a networked scientific landscape. The national initiative of universities and funding bodies "[RIS Synergy](#)", which was also launched in 2020, is therefore a welcome platform for developing fundamental principles and requirements but also for implementing new use cases in concrete terms. In addition to our own objectives, there is a large overlap with the objectives set with RIS Synergy¹:

- Digitisation and increasing the effectiveness of administrative support for research projects in the spirit of "debureaucratisation in the higher education sector"
- Saving resources and increasing the competitiveness of researchers through qualitative support
- Increase in data quality and transparency for research institutions, funding organisations and public bodies (national and international)
- Standardised open interfaces
- Implementing the once-only principle
- Sustainable handling of data in accordance with the GDPR
- Representation of input and output of the research landscape according to international standards (CERIF)

Project methodology, results and lessons learned:

Anticipate new opportunities alongside potential disruptions and increased expenses

Because projects of this scale generate resistance, mistrust and high costs, management must be convinced of the project's merits. Digitalisation means seizing new opportunities, but

¹ <https://forschungsdaten.at/en/ris/ueber-ris-synergy/>

it also means dealing with complexity and change. Trust between management and the people involved needs to be worked on constantly. Sooner or later in the course of the project, both groups will realise that digitalisation means change down to the last corner of the organisation.

Explain the why

Why the system needs to be changed and the expectations associated need to be communicated transparently. Otherwise, false hopes (an all-in-one solution that is suitable for all purposes) can arise on the one hand, and fear of loss on the other.

Be realistic about time runs

Due to the large number of stakeholders and the different interests involved, the lead time and effort required to find and implement a suitable solution must be seriously considered. The analysis (2020-2021) is followed by the tendering process (2021-2022), then the detailed specification (2022-2023), then the implementation (2023-2024) and finally the commissioning of the new solution (2025). The biggest problem over time is that if the process takes too long, the results will be out of date by the time they are implemented and live.

Bring in new knowledge

Organisations are experts in their core business processes, but often not in project management, business process reengineering and new technologies. Knowledge that does not exist within the organisation can be built up and skills can be bought in. But before this can happen, organisations, like people, need to realise that they don't know what they don't know².

Invest in Process-Analysis

During the analysis, it became clear that processes were duplicated across different funding programs or departments. There were also steps that no one could remember exactly why or for whom they were being taken. With the commitment of managers and key experts at all levels, it was essential to define the new requirements and eliminate outdated issues. The specifications needed to describe the new desired processes, based on a harmonisation that was feasible to implement.

² Kruger, Justin & Dunning, David. (2000). Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments. *Journal of Personality and Social Psychology*. 77. 1121-34. 10.1037//0022-3514.77.6.1121.

Involve people

Sufficient and motivated team members at all stages of project delivery is the key to success. Many resources are needed, some as specialists and others to keep an overview and understand the interrelationships. Their involvement in a large project organisation (Figure 1: FWF's project organisation) throughout all phases is time-consuming, but essential.

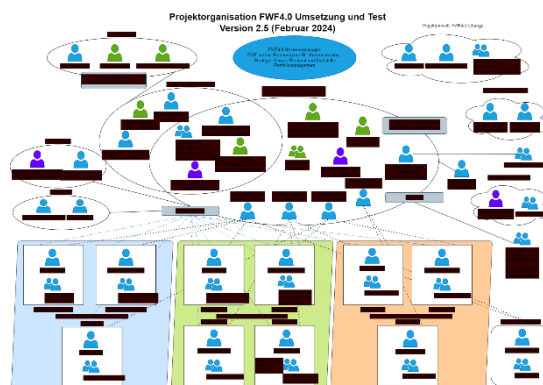


Figure 1: FWF's project organisation

Put blinkers on during implementation

Consistency is required during implementation, because the more people are involved, the more you will be faced with complaints and additional demands. The previous system is never as popular as it was before it was replaced by an as-yet-unknown solution. There is simply no system that is better than the previous one in every way, and at the same time meets all the new requirements and expectations.

In order to provide modern, simple and efficient administration for researchers and research institutions, as well as for FWF staff, scientific advisors, international reviewers and partner organisations, we have already achieved the following results:

- Process model for intuitive steps for users and automated processes where possible and appropriate
- Technical interfaces to partners, research databases and research information systems based on standards (e.g. CERIF, OpenAIRE) and a common language.³
- Sustainable data provision (with PID for people, funding, organisations and outcome, OpenData)
- A motivated group of people who are willing to grow with the challenges and dare to try new things.

As the FWF continues its digital transformation with the FWF4.0 project and aligns its efforts with the national RIS Synergy initiative, we anticipate both new opportunities and challenges. Key learnings include the importance of proactive management support, transparent communication, realistic planning and thorough stakeholder engagement throughout the digital transformation process. In addition, recognising the challenges associated with change management and maintaining consistency during implementation are essential to achieving successful outcomes.

³ See e.g. [Nationale Standards und Schnittstellen zur Übertragung von Forschungsinformationen | Zeitschrift für Hochschulentwicklung \(zfhe.at\)](https://www.zfhe.at)