SoleCRIS by Solenovo

In this presentation, as the current Product Owner, I will introduce the Finnish current research information system, SoleCRIS. I will start by providing a couple of words about Solenovo, the company behind SoleCRIS. Afterwards, we will focus on the product itself.

Solenovo – the company behind SoleCRIS

SoleCRIS is developed by Solenovo, a close to 30-year-old software development house that resides in Eastern Finland in the city of Joensuu. We have offices also in Kuopio and Helsinki. We offer products and services especially for the higher educational sector but also for municipalities, companies, research institutes, and secondary schools, among others.

Our product portfolio consists of four main products: SoleTM, SoleStudenta, SoleMove, and SoleCRIS. SoleTM is a time management system for work time planning, allocation, and reporting. It has been developed in close cooperation with the Finnish higher education institutions. SoleStudenta is a vocational education management system starting from the application process and ending with the diploma in the student's hand. SoleStudenta enables faculty and students to organize, facilitate, and manage everything related to vocational learning, including financial planning and reporting. SoleMove is an international mobility management system catering to the needs of the whole organization. SoleMove enables management of the entire international exchange program, including the submission and processing of applications, the communication between students and personnel, and the final feedback of the exchange experience.

Now, we shall turn to the topic at hand, to the world of CRIS. As a company, Solenovo has a broad substantive knowledge of research data collecting and funder-oriented information gathering with different platforms and applications. We have strong cooperation with the CSC, which is the IT Center for Science, owned by the Finnish state and higher education institutions. The CSC provides ICT services for higher education institutions, research institutes, culture, public administration, and enterprises. Solenovo is enthusiastic to cooperate with any developmental needs that the euroCRIS-community may have. We have knowledgeable project leaders and developers available to engage in such cooperation.

SoleCRIS – the renewal

The last – but not the least – item mentioned in our product portfolio, SoleCRIS offers an up-to-date view of all research activities and publications. Dynamic reports and impact meters make research data easily accessible and facilitate extensive information utilization. SoleCRIS supports research activities and management as well as offers transparency to all internal and external stakeholders. Role based interface optimization ensures the best possible usability, functions, and processes for all user groups. SoleCRIS can be integrated with other Solenovo systems as well as third party software and metadata sources. Open REST API grants endless opportunities for data import and export.

Notably, the system has been developed in close cooperation with a community consisting of a variety of customers from different research sectors.

The project for renewing SoleCRIS started in 2020 by establishing the technological basis. The actual development phase of the product began in 2021. The deployment phase was made in two parts: The librarians first and the researchers second between June and November of 2022. The production use of the "new CRIS," started a little more than a year ago by our university clients. Before that the "old CRIS" saw roughly a fifteen-year lifespan. One of the key aspects of the renewal process of SoleCRIS was to develop the new version in close cooperation with the university and other research-oriented clients from specifications all the way to commissioning of the system. In addition, we wanted to greatly emphasize making the UI and especially inputting of research data as easy as possible for the basic user, the "Researcher." This emphasis led us to creating a role-based system architecture.

There were several reasons for the renewal project. First, the old technologies were about to reach the end of their lifespan. We wanted to create a technological basis that utilizes microservice architecture. The new SoleCRIS uses up-to-date technologies, for example, REST APIs for integrations. Second, the old CRISes were difficult and expensive to maintain. I intentionally used plural, CRISes. That is because the software was heavily tailored for individual customers causing them to have a significant number of different functionalities from one another. In comparison, for the new CRIS, we wanted to have one SaaS-based CRIS, with only minor differences between customers. In conjunction, our customers have shown interest in gathering their research information systems under one master system. In addition, we wanted to promote a communal mindset with our customers for developing the product. Third, the renewal of SoleCRIS makes it possible for us to serve our end users, the researchers with a more convenient system and also the librarians with a more robust set of tools for handling various information.

We regard SoleCRIS as the national CRIS of Finland. That is because SoleCRIS is the only system in the Finnish market that has been developed particularly to satisfy the information gathering needs of our Ministry of Education. Solenovo is the only Finnish CRIS software provider. However, at the same token, it must be emphasized that our technological base with microservices and REST APIs allows for flexibility in considering the information gathering needs of other funders as well. This flexibility allows, for instance, dynamic form and reporting implementations based on the funders data collecting requirements.