

euroCRIS Spring Membership Meeting 2023 May 30 - June 1 2023 Brussels, Belgium

BEYOND THE TRADITIONAL CRIS APPROACH & USE CASES







Yann Mahé

- √ 15 years in developing innovative solutions to help researchers and their institutions better accessing, analysing and promoting their research activities.
- ✓ <u>Gf2i</u> (French Think Tank for professional information and knowledge): Board member and co-leader of the Open Science Working Group.
- ✓ Regular speaker in international conferences on Open Science, AI, Research metadata – Last conferences: Documation/i-expo (Paris -March 2023), Biennale du Numérique de l'ENSSIB (Lyon - Dec. 2021), Pomeranian Open Science Conference (Dec 2021)..

LinkedIn profile here.

Make sense of your research data



MyScienceWork (MSW) is an innovative technology company based in France that provides a <u>suite</u> of <u>data solutions</u> for universities, academic libraries, research institutions, publishers, funders....





Polaris OS is an innovative open source solution for data management. In all its different forms, it is used to store, manage and showcase contextual metadata for research activities.

Polaris OS manages entities such as people, organisations, projects, research outputs, grants, contracts... and all the links between them.

Sirius is a suite of innovative data science solutions that helps scientists and their institutions to automate tasks to map, manage, analyse, and promote their results to all stakeholders of research.

MyScienceWork & Open Science



Open Science is at the heart of most of our projects. In essence, we know very well the goals of scholarly content industry stakeholders (research organizations, publishers, funders...).

MyScienceWork team is highly involved and trained on Open Science. During the last years, we organised several webinars and interviews of experts on that topic. For more information, please check our <u>YouTube channel</u>.



- Open source: GitHub
- Permissive Licence: MIT
- Team
 - 6 developers
 - MSW expert team of Data Scientists



CRIS CHALLENGES

Classic CRIS goals



Metadata structure

- Centralized research contextual metadata (people, organisations, projects, outputs...)
- Automate metadata harvesting and updating

Analytical purposes

- Understand its own research activities
- Nurturing its research strategy (invest., staffing...)

Institutional visibility

- ❖ Tech transfer
- Evaluation, ranking
- Media visibility

CRIS transformation



The Transformation of the Green Road to Open Access

by ② Joachim Schöpfel ^{1,*} \bowtie ⁰, ② Stéphane Chaudiron ¹, ② Bernard Jacquemin ¹, ② Eric Kergosien ¹, ② Hélène Prost ² and ② Florence Thiault ³

Abstract

(1) Background: The 2002 Budapest Open Access Initiative recommended the self-archiving of scientific articles in open repositories, which has been described as the "green road" to open access. Twenty years later, only one part of the researchers deposits their publications in open repositories; moreover, one part of the repositories' content is not based on self-archived deposits but on mediated nonfaculty contributions. The purpose of the paper is to provide more empirical evidence on this situation and to assess the impact on the future of the green road. (2) Methods: We analyzed the contributions to the French national HAL repository from more than 1000 laboratories affiliated with the ten most important French research universities, with a focus on 2020, representing 14,023 contributor accounts and 164,070 deposits. (3) Results: We identified seven different types of contributor accounts, including deposits from nonfaculty staff and import flows from other platforms. Mediated nonfaculty contributions (deposits by libraries, import of bibliographic records, migration from other platforms, etc.) account for at least 48% of the 2020 deposits. We also identified differences between institutions and disciplines. (4) Conclusions: Our empirical results reveal a transformation of open repositories from self-archiving and direct scientific communication towards research information management. Repositories like HAL are somewhere in the middle of the process. The paper describes data quality as the main issue and major challenge of this transformation.

Keywords: open science; open access; open repositories; green road; self-archiving; contributor; research assessment; monitoring

(4) Conclusions: Our empirical results reveal a transformation of open repositories from selfarchiving and direct scientific communication towards research information system.

Schöpfel, J.; Chaudiron, S.; Jacquemin, B.; Kergosien, E.; Prost, H.; Thiault, F. The Transformation of the Green Road to Open Access. Publications 2023, 11, 29. https://doi.org/10.3390/publications11020029

CRIS main challenges



- A platform able to store, manage and exchange all metadata related to research activities
- A platform based on the experiences of researchers and research managers (metadata, workflows, forms flexibility...)
- A platform that allows admin and RIS managers to take back the control of the platform without advanced IT skills
- A modular platform able to take into consideration the specificities of every disciplines, countries, organisations and functions (Grants, CRIS, Research Outputs Repository, Peer Reviews...)



BEYOND CRIS - USE CASES

Why Polaris OS?



Open innovative technologies

- Data oriented technologies
- ❖UX/UI: Reactive & Responsive
- High level of interoperability

Low code

- Highly configurable
- Less IT Expertise (focus on added value feature development)
- ❖ Goal: no code solution

Cost effective

- Less dev. needed
- Infrastructure
- Easy dev. environment

Flexible and sustainable

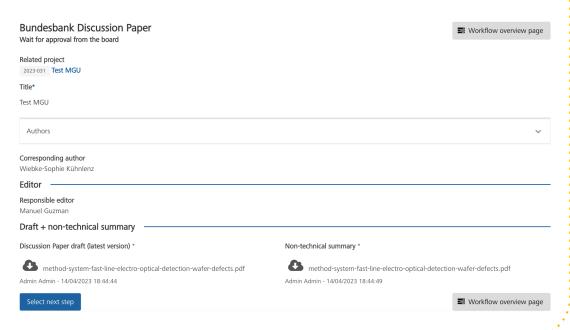
- ❖ Data models, forms, workflows...
- Multiple application / Highly customizable
- Sustainable ID

Use case – Peer review system



<u>Context:</u> as a research institution, I need a peer review system for the two journals we publish with specific workflows and criteria.

- Selection of your reviewers (internal and/or external)
- Double/single blind or open peer review
- Reviewers complete their reports online



Use case - Plagiarism



<u>Context:</u> researcher can submit articles within the RIS and a verification of plagiarism can be asked by the admin. research manager

Solution:

- Interoperability with existing plagiarism platform. e.g:
 Ithenticate
- Follow up the status of the plagiarism process advancement
- Get the full report automatically uploaded in the RIS

Plagiarism check

Waiting for editor to review report

Related project

2023-031 Test MGU

Version to be checked



method-system-fast-line-electro-optical-detection-wafer-defects.pdf

Admin Admin - 14/04/2023 18:44:44

Plagiarism check report *

Select next step

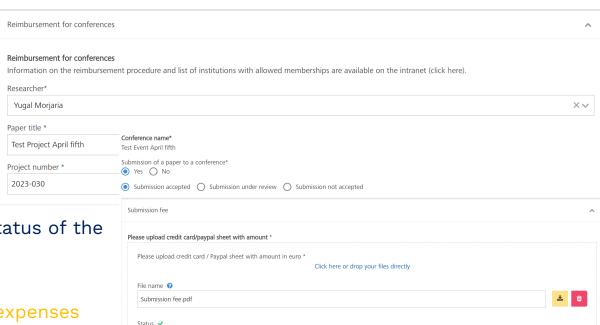
Use case - Reimbursement form



Context: a researcher asks reimbursement of conference expenses

Reimbursement request validation

- Online reimbursement demand
- Several level of approvals
- Following up the status of the reimbursement
- Checking proof of expenses through file upload

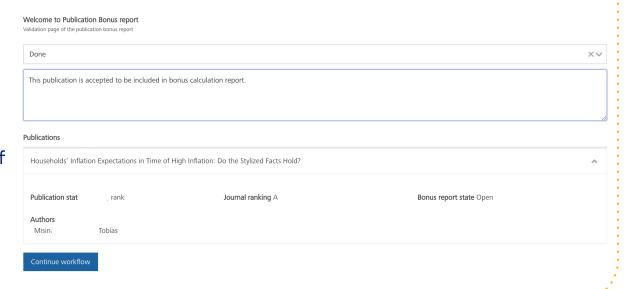


Use case - Bonus calculation



<u>Context:</u> as a research institution, I give bonus to my researchers depending the number of publications they did during a certain period of time and the journals they published in.

- Easy access to publications information
- Online calculation of the bonus based on predefined criteria
- Follow up: alerts, status...

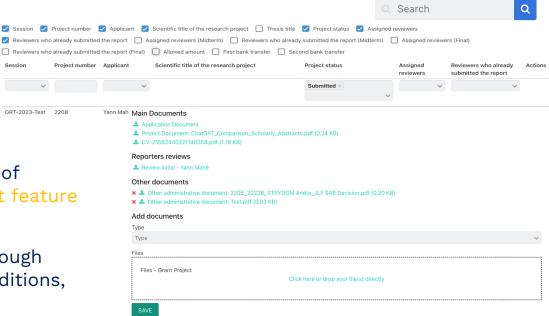


Use case – Contract management



<u>Context:</u> management of contracts related to research activities such as research project contracts, partnerships... has now an important place in academic institutions.

- Get the full view of all ongoing and terminated contracts
- Automate the follow up of contracts thanks to alert feature
- Search for contracts through filters: dates, types, conditions, stakeholders...



Use case – Grant Management



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Documents

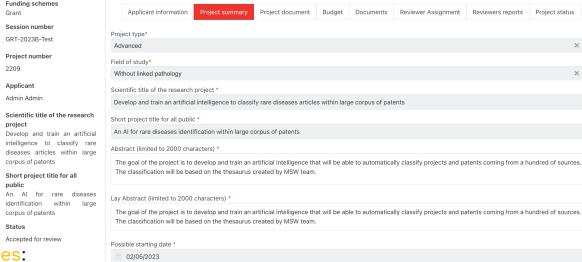
Reviewer Assignment

Reviewers reports

Context: as a research institution that also have funder missions, I need to have a grant management module in my RIS.

Solution:

All grant management platform features e.g: call for projects, submission process, online reviews, scientific board meetings...



Links between entities: research outputs, financial information, projects...

probiotic agents × Artificial intelligence × Machine Learning × Multidisciplinarity × brain

5 keywords*



Conclusion – Flexibility & Adaptability



- Storing, managing and analysing contextual research activities metadata are crucial but not sufficient
- Admin tasks related to research activities must be <u>handled by CRIS</u>
- Specificities of countries, research fields and researcher communities must be part of CRIS customisation
- CRIS must digitally translate users' offline practices
- CRIS must simplify as much as possible the administrative tasks related to research activities



QUESTIONS?



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