

Why you need a Research Information Management System (RIMS)

A closer look for research leaders

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Universities operate in an increasingly complex and competitive environment. To thrive, you need data and a system that provides insights into your research and helps you:

- Advance research performance
- Grow global reputation
- Expand funding streams
- Enable collaboration – especially international
- And more

“Centralizing all of the university’s research on [a RIMS] not only helps facilitate our ability to make better strategic decisions as an organization, it has propelled the institution to new heights of visibility that were not possible without this tool.”

— Professor Jian Lu, Vice President (Research & Technology),
City University of Hong Kong

Chapters

- What is a research information management system (RIMS), also known as a CRIS?
- What is the difference between RIMS and CRIS (Current Research Information System)?
- Why should you use a RIMS? What are the benefits?
- What is the difference between RIMS and an Institutional Repository (IR)?
- Should I buy or build my RIMS?
- Tips for a successful RIMS implementation

What is a research information management system (RIMS), also known as a CRIS?

Research Information Management Systems are commonly referred to by a few names and acronyms, including RIMS, Current Research Information Systems or CRIS. These systems increase the efficiency and effectiveness of research information management activities by integrating and linking the various elements and processes that comprise the research ecosystem. They also centrally store related data for analysis, reporting, and research promotion activities

[Learn more about Pure – Elsevier’s RIMS](#)

What is research information management?

To understand the tools that help research information management, let’s quickly review what it is.

According to OCLC:

“Research information management is the aggregation, curation, and utilization of information about research.”

Does this sound simple? Given the complexity and the challenges in the research ecosystem, managing data created during just one research project alone is challenging. Managing research data across your university without a system is impractical, if not impossible.



Research challenges and stakeholders illustrate the need for a solution to provide metadata connections and systems interoperability to report and understand university research fully.

Who are the RIMS stakeholders?

Multiple stakeholders are involved in each part of the research ecosystem and with each research challenge. When good quality data and research management is available, stakeholders can use it to help improve their contributions to the university and beyond.

These are some categories of stakeholders.

Decision-makers

Includes institutional leaders that use research information data to make strategic decisions on internal funding allocations, staffing, facilities, equipment, public relations, and internal policies that govern workflows related to research.

Enablers

Includes the libraries and research management offices that provide critical support for the management of research.

Supporters

Internal departments or teams that contribute to research information management. These include:

- Information technology
- Finance
- Human resources
- Registrar
- Legal
- Risk management
- Ethics boards
- Communications

Researchers

Includes individuals involved in research execution, publication, and promotion:

- Faculty
- Staff
- Researchers
- Higher degree research students
- Research support staff

External stakeholders

Includes funding bodies, government or commercial partners who have an interest in the research. It also can consist of members of communities either being studied or impacted by the research and results.

How does a RIMS work?

Research information management systems work by integrating and linking the various elements and creating interoperability between solutions in the research ecosystem.

RIMS centrally stores related data for:

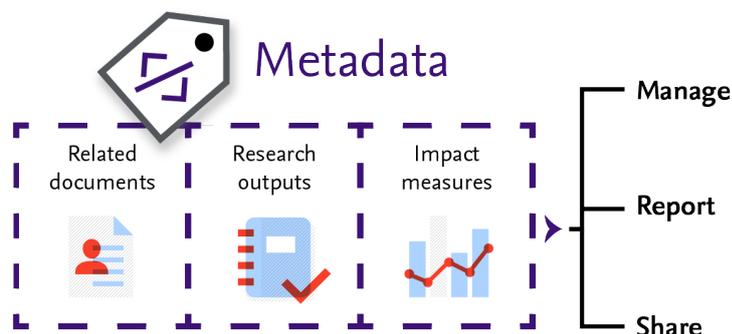
- Analysis
- Reporting
- Research showcasing and communication
- Managing information in one place through one interface

In turn, having this centrally located data and interface helps drive:

- Research performance
- Global reputation
- International collaboration
- Funding

Research and metadata

The items generated from research can fall into three broad categories – research outputs, impact measures and related documents.



Linking all these things together with their metadata in an interoperable system enables the benefits of RIMS. Significantly, by sharing metadata, reporting and management are simplified.

What is the difference between RIMS and CRIS (Current Research Information System)?

There is no difference between these two terms; they are interchangeable. According to an [ACRL publication](#):

“It is important to note that RIMS is not the only name by which these systems are known. In Europe, where these systems were first developed and used, a more common term is Current Research Information Systems (CRIS). Other terms include ‘profile system’ or ‘networking tool’ and variations thereof.”

euroCRIS and CERIF

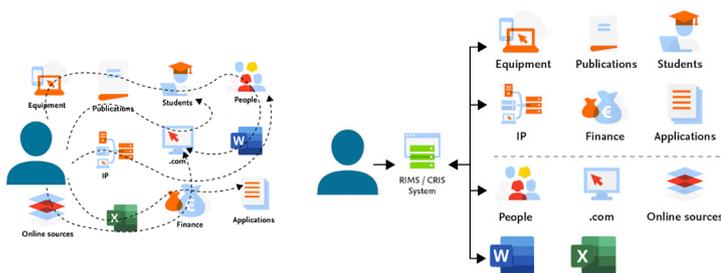
The organization [euroCRIS](#) was founded in 2002 as an international not-for-profit association that brings together experts on research information in general and research information systems (CRIS) in particular.

One of the things that euroCRIS does is maintain a metadata standard known as Common European Research Information Format or [CERIF](#). The adoption of CERIF varies by region and country.

Why should you use a RIMS? What are the benefits?

Disconnected data sources with different identifiers lead to complicated research management, slow decision-making and missed opportunities.

Connected and linked data with unique identifiers leads to simpler research management, easier reporting and more.



What is the value and benefit of accurate and timely information?

This is a question asked by many organizations, including governments, small businesses, large enterprises and universities.

“[RIMS] are an essential tool...They can tell you things about your citation indices that can help you build your academic reputation...They can help you focus resources...Such tools allow you to see how your university stacks up against competitors...You can undertake trend analysis... You can help faculty understand how their scholarship helps the university to advance.”

— *David Weindorf, Vice President of Research and Innovation University of Central Michigan*

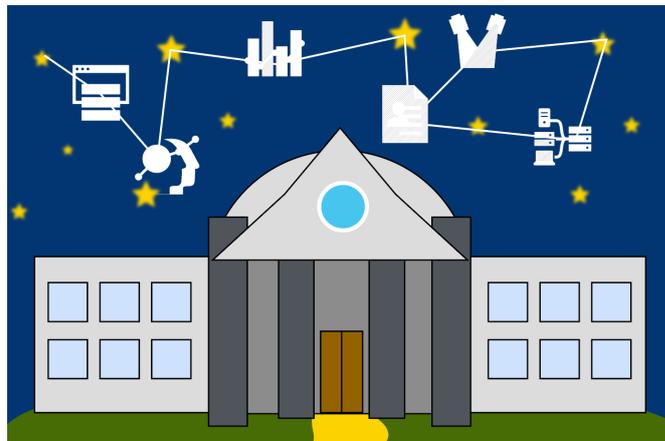
Moving from a world of disconnected systems and data to linked data and a unified system facilitates:

- Informed decision-making
- Easier communication
- Improved research performance
- Increased collaboration
- And more

When living in a disconnected world, it isn't easy to get a clear picture of what is happening. You do your best by accessing different systems and keeping complicated spreadsheets and documents that you hope to tie together the entities and data.

When this world gets connected by linking metadata and systems into one source of truth, it is like Jack Kerouac said in his novel, *Big Sur*:

...when the fog's over and the stars and the moon come out at night it'll be a beautiful sight.



In this new connected world, you now leverage accurate and timely information. Many RIMS customers have described some of the benefits they had after implementation.

Top 10 RIMS benefits

- **Visibility** - Increase the global visibility of institutional research and researchers and grow recognition and rewards by showcasing vibrant researcher profiles in international portals that highlight their research output, expertise, and impact.
- **Strategic Decision Making** - Draw on the comprehensive analytics to make informed strategic decisions on resource allocation and target setting.
- **Collaboration** - Increase your collaboration – especially international collaboration – with increased visibility of your research, researchers, labs, and equipment.
- **Societal Impact** - Demonstrate your societal impact and your contributions to the UN Sustainable Development Goals (SDGs).
- **Research Management** - Expertly manage all aspects of research administration with configurable communication and workflow tools.
- **Reporting** - Improve the accuracy, speed, and cost of reporting individual and academic program evaluations, funding requirements, national performance assessments, and global rankings submissions.
- **Performance** - Boost the efficiency and impact of researchers by ensuring access to the best resources and state-of-the-art search and analytics tools.
- **Funding** - Identify funding and collaboration opportunities.
- **Open Science** - Promote open science activities and comply with related mandates.
- **Assessments** - Streamline faculty and program assessments.



What is the difference between a RIMS and an Institutional Repository (IR)?

COAR (Confederation of Open Access Repositories) lists how RIMS and institutional repositories (IR) differ.

- Broad Research Activity vs. Research Outputs**
 A RIMS or CRIS focuses on all institutional activity around research. In comparison, an institutional repository (IR) emphasizes research outputs.
- Reporting vs. Dissemination**
 Because a RIMS collects comprehensive information about research activities, you can use it to describe or report on research. An IR – developed primarily to support the Open Access movement – aims to provide access to research publications and other outputs.
- Internally vs. Externally Focused**
 Since these systems grew up with different goals, RIMS tend to be more internally facing tools and IRs more externally facing. As both product categories mature, this is changing. Most RIMS have an externally facing aspect with a public portal containing research outputs. Likewise, IRs are evolving to provide more internal reporting.

Should I buy or build my RIMS?

According to the [article](#) in CIO, “How to determine when to build or buy enterprise software,” making a choice is difficult with generally two types of responses:

- Make an emotional decision that “feels right”
- Make a rational decision driven by data

The article further states that most decisions are a blend of these.

[Download Buy or Build RIMS White Paper](#)

To focus on the data part of the decision, one primary part of this evaluation is cost. While “free” open source platforms are attractive, the costs of implementation are generally higher. In the White Paper “[Buy or build: An exploration of the total cost of ownership for a RIMS](#),” the research firm KnowledgeE looked at both one-time and ongoing costs.



KnowledgeE defined these costs as:

One-time costs:

- Software licensing
- Implementation

Annual operational costs:

- Infrastructure
- Ongoing maintenance
- Operations staff

KnowledgeE determined that building a system – even when starting from an open source platform – is over 50% more expensive than purchasing a commercial solution.

For example, there are opportunity costs as it takes time to build a solution containing all the necessary features of a commercial solution.

[RTI International](#) is an independent nonprofit research institute dedicated to improving the human condition. It was founded in 1958 as a collaboration between government, industry and three North Carolina Universities.

RTI implemented the Elsevier Pure RIMS and found that their move from the DIY to Pure was the correct balance of stable system and customization.

“Pure is sort of the middle-line of having something that is very stable, well-constructed and works properly at the same time as it allows for a lot of customization.”

— *Bonnie Nelson, Research Librarian
RTI International*

To learn more about the work KnowledgeE did to determine Total Cost of Ownership (TCO) and Return on Investment (ROI), [download the white paper](#).

Tips on a successful RIMS implementation

Whether you buy or build, we have been involved in many RIMS implementations and offer the following tips on making it successful.

Identify key players

Identify the key people across the university that need to be involved in making the RIMS implementation successful. Likely you will draw from the Office of Research, Library,

Deans, and other faculty. There may be others such as the Communications office and Tech Transfer to consider.

Choose the right technology

We partly covered this topic in the previous section, “Should I build or buy?” In addition to this primary question, you need to ensure that whatever platform you choose meets your current and foreseen future needs.

Understand the benefits

Undertaking a RIMS implementation requires buy-in from your stakeholders and key players. To be successful, everyone needs to understand the value of accurate and timely information and want to achieve that.

Secure buy-in

Even if you are confident the key players understand the benefits, it is wise to formalize their commitment to making the implementation a success.

Strong project management

There are many reasons that solid project management is essential when implementing a RIMS. One of the primary reasons is risk management. Project managers need to analyze potential risks and develop a mitigation plan against them, and a contingency plan should any of them materialize.

Training

It is difficult for people to change how they do things and use a new system – even when it makes their job easier. Effective and timely training helps solve this. Creating a training plan, getting buy-in for it, and implementing it is a critical success factor.

Plan for feedback

Even after you achieve buy-in, you will likely have obstacles during implementation. The more you can anticipate that and communicate openly and transparently, the higher the likelihood of success.

Ongoing support

While the bulk of your resources are going towards implementing your RIMS, ongoing support is essential. Support includes both technical support and “people” support. You can lessen the technical support burden with a vendor’s cloud solution. People support is also aided by ongoing vendor training, support websites and FAQs.

Plan for growth

Once you finish the initial implementation, the team can lose momentum. There were likely features you did not get to or new features the vendor releases if it is a commercial product. Plan to continue an ongoing project to keep your RIMS relevant and take advantage of all it can offer.

Plan for change

Stakeholders, university initiatives, reporting requirements evolve. Since RIMS is the core to many of your reporting and processes, these changes will demand that you be flexible in your implementation to accommodate them.

Learn more about Pure – Elsevier’s RIMS

