

Software tools

for scientific activity
reporting

Reporting software

- Reporting tools allow real-time access to essential data as well as the rapid generation of multidimensional reports from diverse data sources
- Active promotion of scholarship is an aspect of the publication cycle and funding

Research reporting – key applications

- **Research assessment:** due to the need for all institutional research outputs to be collected and described in a standardised way in a single institutional system that is also able to gather information on impact indicators
- **Research administration:** Research impact and its analysis, Research collaborations across institutions and with Industry, Preparation of project proposals and subsequent management of awarded grants, Knowledge Exchange
- **Business intelligence:** extracting business intelligence indicators for decision-making purposes at institutions and beyond

Reporting software in *business*

- Datadog Monitoring
- Winward Studios
- Timetoreply
- AgencyAnalytics
- Reportz
- Exchange Reporter Plus
- Calypsus
- Pentaho Business Analytics
- Board
- ActivTrak
- Agency360
- Cumul.io
- Information Builders
- QlikView
- New Relic
- Logi Analytics
- SAP Crystal Reports
- Wdesk
- IBM Cognos Analytics
- BI360
- Phocas Software
- Informer
- InsightSquared
- Reportei

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RN: Research networking tools – what are?

- tools to identify, locate and use research and scholarly information about people and resources
- serve as knowledge management systems for the research enterprise
- connect institution-level/enterprise systems, national research networks, publicly available research data (e.g., grants and publications), and restricted/proprietary data by harvesting information from disparate sources into compiled profiles for faculty, investigators, scholars, clinicians, community partners and facilities.
- facilitate collaboration and team science to address research challenges through the rapid discovery and recommendation of researchers, expertise and resources

RN: Research networking tools – stand out

- differ from search engines such as in that they access information in databases and other data not limited to web pages
- differ from social networking systems in that they represent a compendium of data ingested from authoritative and verifiable sources rather than predominantly individually-posted information, making RN tools more reliable (yet, they have sufficient flexibility to allow for profile editing)
- provide resources to bolster human connections: they can make non-intuitive matches, do not have a propensity to return only to previously identified collaborations/collaborators.
- have associated analytical capabilities that enable evaluation of collaboration and cross-disciplinary research/scholarly activity, especially over time

RN: digital research services - categories

1. **Author/Researcher Identification**—these services provide infrastructure that may be used in the other two categories, such as unique identifiers and name disambiguation.
2. **Academic and Professional Networking**—most succinctly described as “social networking for academics,” these services focus on connecting users based on research interest, affiliation, geography or other variables.
3. **Reference and Citation Management**—these tools and services include some of the functionality and features of other categories, although their primary focus is on management of citations that a researcher compiles for use within a publication or for sharing with other researchers.

RNs

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- Academic Room
 - Activity Insight
 - C-IKNOW
 - CAP
 - Converis
 - Curvita Profile
 - CUSP
 - Digital Vita
 - Dimensions
 - Elsevier's Pure
 - Elsevier's SciVal
 - Epernicus Network
 - Epistemio
 - ERIM MSI
 - Esploro
 - Eureka! Enhancing Res.
 - Expertise
 - Faculty Profile System
 - FRIP
 - Faculty Scholarly Productivity
 - Faculty180
 - GENIUS
 - Google Scholar
 - HUBzero
 - iamResearcher
 - iAMScientits
 - i2iConnect
 - InCities
 - INDURE
 - IRIS
 - Knode
 - Lattes Database
 - LatticeGrid
 - LinkedIn
 - Life Science Network
 - Loki
 - Loop
 - Lyterati
 - McCormick Collaboration
 - Mendely
 - MizzouLinks
 - MyScienceWork
 - OSU:pro
 - Pivot
 - Portofoloi/Showroom
 - PROFILES by Mentis
 - Profiles Research Networking
 - REACH NC
 - Research Accelerator
 - ResearchID
 - ScholarBridge
 - SciENcv
 - Sympletic Elements
 - UniWeb
 - VIVO
 - WorkWeb
 - Yaffle



Criteria for comparison

- Open source
- Adopters
- Data source / infeed functionality
- Auto ingets?
- Linked Open Data?
- Data export types
- Interoperability with institutional systems
- Interoperability with external systems
- Integration with add-on Components or products
- Regional, national, international or federated connectivity?
- Profiled user population
- Can user update their own profile?
- Type of networking (active or passive)
- Includes functionalities to match expertise with funding opportunities?
- Thesauris/controlled vocabulary used
- Ontology/ontologies supported
- Automatic author disambiguation
- H-index
- Citation count
- Altmetrics
- SNIP and SJR
- Journal Impact Factor

“Best” commercial ones

Link to Product Page	Developer /Owner	Open Source	Data Source / Infeed	Auto Ingest?	Linked Open Data?	Interoperability with Institutional	Interoperability with External	Integration with Add-on Components	Regional, National, International or	Can Users Update Their Own	Type of Networking (Active or Passive)	Includes Functionality to Match	Thesaurus /Controlled Vocabulary	Automatic Author Disambiguation	h-index	Citation count	Altmetrics	SNIP and SJR	Journal Impact Factor*
Activity Insight	Digital Measures	No	Functionality on typically imported Automated	Yes	Yes	Yes (Banner, Datatel, PeopleSoft)	Yes (Google Scholar, Scopus, Yes (has	Yes (EndNote, Mendeley, Zotero, Yes (funding opportunities from	No	Yes	Active and Passive	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PROFILES by Mentis	Inknowledge, Inc	No (Profiles is available in a free	or on-demand import Default connection to Clarivate	Yes	Yes	Yes	API, works with Yes -	(funding opportunities from	Yes (National and International	Yes	Active and Passive	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Converis	Clarivate Analytics	No	connection to Clarivate	Yes—can be pre-populated and alerts	Yes—can be used to power VIVO	Yes - Bidirectional and one-way	Standard integration with Yes -	Integrates with Pure	Yes	Unknown	No networking	Unknown	In some fields	Yes (Author clustering capabilities)	Yes	Yes	Yes Can integrate with altmetrics	No	Yes
Pure	Elsevier	No	Sources include Scopus, Web of Scopus and ScienceDirect	Yes	Yes	Yes institutions have access to	Yes Scopus, PubMed, Yes	Yes (Integrates with Pure)	Yes The Pure Community	Yes, SciVal links to external files	Passive	No	The "Elsevier Fingerprint" Elsevier Fingerprinting	Yes	Yes	Yes	Yes Altmetric and Plum	Yes	No
SciVal	Elsevier	No	and ScienceDirect	Yes	No	(Institutions have access to	(Integrates with Pure)	(Scopus & ScienceDirect)	No	Yes (for Epernicus Network)	Passive	Unknown		Yes	Yes	Yes	Yes Views data from ScienceDirect and	Yes	No
Esploro	Ex Libris	No	Information is imported from	Yes	Yes	Esploro provides multiple Yes	Integration with the, Yes	Yes	Yes Plans to enable consortium	Yes	Active and Passive	Yes (integration with Pivot and	ProQuest thesaurus, ERA, MeSH,	Yes	YesPlanned	Yes integrated with external	Yes	Yes planned	Yes planned
Symplectic Elements	Symplectic	No (VIVO Harvester extension is	Custom import from any internal	Yes Through integrated portals like	Yes Source for linked data	Yes Clients have the ability to	Yes Elements integrate with a	Yes Elements can be linked to	No	Yes (Profiles are automatica	Passive and Active	Through integrations with	Fields of Research, ScienceMe	Yes	Yes	Yes	Yes	Yes	Yes

“Best” open-source

Link to Product Page	Developer /Owner	Open Source	Adopters	Data Source / Infeed Functionality	Auto Ingest?	Linked Open Data?	Data Export Types	Interoperability with Institutional	Interoperability with External Systems	Integration with Add-on Components or	Regional, National, International or Federated	Profiled User Population	Can Users Update Their Own	Type of Networking (Active or	Includes Functionality to Match Expertise	Thesauri s/Control led Vocabulary Used	Ontology /Ontologies Supported	Automatic Author Disambiguation
DigitalVita	Center for Dental Informatics	Yes	University of Pittsburgh	PubMed, some from HR system	Yes (Some)	Yes	PDF, RTF	No	Yes (only PubMed)	Unknown	Yes National federated connectivity	Any researchers can be included	Yes	Passive	Yes the Funding Discovery	Unknown	Unknown	No (but can be done manually)
HUBzero	Purdue University	Yes	Indiana CTSI, Indiana University	Comprehensive portal to support Medical School databases	Yes	Yes	Unknown	No	Yes PubMed; data is semantic	Possibly	No	Indiana University, Indiana University Curriculum and institution's database	Unknown	Active	Unknown	Unknown	Unknown	No
LatticeGrid public Wiki	Northwestern University	Yes	Northwestern Feinberg School of Medicine	PubMed / Information entered manually	Yes	Yes	Microsoft Word, Excel, PDF	Yes InfoEd, eIRB, Medical	Yes (PubMed)	Yes (Possible)	Yes National federated connectivity	Anyone who creates a profile	Yes	No apparent networking	Unknown	Unknown	Unknown	Unknown
Life Science Network	Life Science Network GmbH	Yes (upon request)	Anyone can use.	Information entered manually	No	Yes	CSV (for some modules).	No	Yes (Pubmed)	No	No	Anyone who creates a profile	Yes	Active and Passive	No	Unknown	Unknown	No (but can be done manually)
Profiles	Harvard University	Yes (BSD license)	Harvard, UCSF, and many others	HR systems, PubMed, NIH	Yes	Yes	XML, RDF, SPARQL	Yes	Yes Pubmed, commercial sources	Yes	Yes Profiles Users Group has	All users as defined by each institution.	Yes	Passive and Active	No	MeSH, others are being developed	VIVO RDF ontology with	Yes Harvard Profiles uses an
SciENcv	A pilot program sponsored by the Federal	Yes	Sponsored by the Federal Demonstration	Information that would normally be found	Yes	Unknown	Uses open data exchange standards	Yes (is possible through open data exchange	Yes	Unknown	No	Not yet established	Not yet established	No apparent networking	No	No thesaurus used	Unknown	No

Most known

- Elsevier's [Pure](#)
- Elsevier's [SciVal](#)
- Google [Scholar](#)
- [InCities](#)
- [Mendeley](#)
- [ResearchID](#) (& publons)
- Symplectic's [Elements](#)

To do: visit their sites

CRIS: current research information system

- stores and manages data about research conducted at an institution
- also known as Research Information Management or RIM Systems
- its scope is to provide researchers, managers and administrators, funders and decision makers, with a solid knowledge of the research activities, their outputs and results to inform institutional strategies
- useful to evaluate research performance, expose results to find new funding opportunities, avoid duplication of activities, analyze trends, reference to full-text or multimedia scholarly publications, locate new contacts and identify new markets for products of research, disseminate research to support open knowledge
- e.g. UK system REF, euroCRIS

Dspace-CRIS

- free open-source extension of DSpace for the Research Data and Information Management
- enables the ingestion, storage, display and management of data and metadata
- has the institutional repository as its core component, providing high visibility on the web to all the collected information and objects
- - compliant with ORCID, OpenAIRE

RN example: Romanian BrainMap

To do: visit the site

The screenshot shows the homepage of the Romanian BrainMap website. At the top, there are logos for the European Union, the Government of Romania, POCA (Programul Operațional Capacitate Administrativă), and the Instrumente Structurale 2014-2020. The BrainMap logo is on the left, and 'Log In' and 'SIGN UP' buttons are on the right. The main heading reads 'The online community of researchers, innovators, technicians and entrepreneurs' with '36.590 accounts' below it. A row of colorful avatars represents different professional roles: Student, Researcher, Professor, Engineer, Entrepreneur, Technician, Civil servant, and Retired professional. Below the avatars is a search bar with the text 'Search for BrainMap users by work country, name, skills, institution...'. The central message states 'We connect your expertise to Romania, for your voice to matter'. At the bottom, there are three main navigation buttons: 'Explore by Skills' (with a magnifying glass icon), 'NEW Research Outputs Registry' (with a globe icon and the note 'Requires authentication, Romanian language'), and 'Explore by Map' (with a globe icon). The footer includes the UEFISCDI logo and links for 'Copyright © 2020 UEFISCDI', 'Terms and Conditions', 'About Us', 'FAQ', and 'Contact'.