

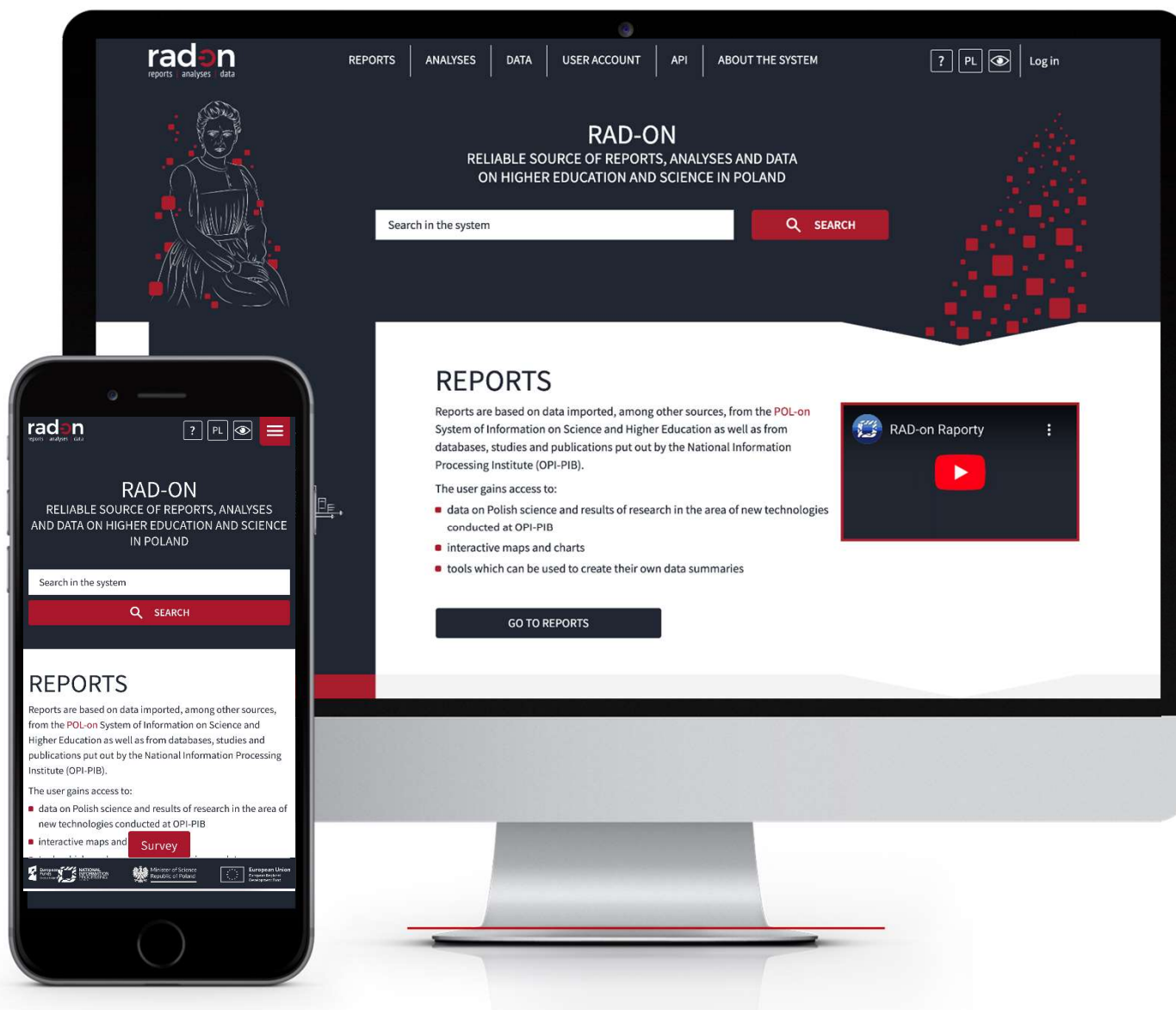


NATIONAL
INFORMATION
PROCESSING
INSTITUTE

RAD-on: A research and higher education information system in Poland

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REPORTS, ANALYSES and DATA on
the science and higher education
system in Poland

— RAD-on

The National Information Processing
Institute and the Ministry of Science and
Higher Education in Poland

www.radon.nauka.gov.pl

RAD-on as an analytical platform integrating various databases

radon



Since 2011, OPI PIB has been engaged in the development of various data collection systems, which operate according to official legal regulations.

Due to the majority of research institutions being obligated to upload data to the systems on a regular basis, the information stored by such systems is the most up-to-date and reliable.

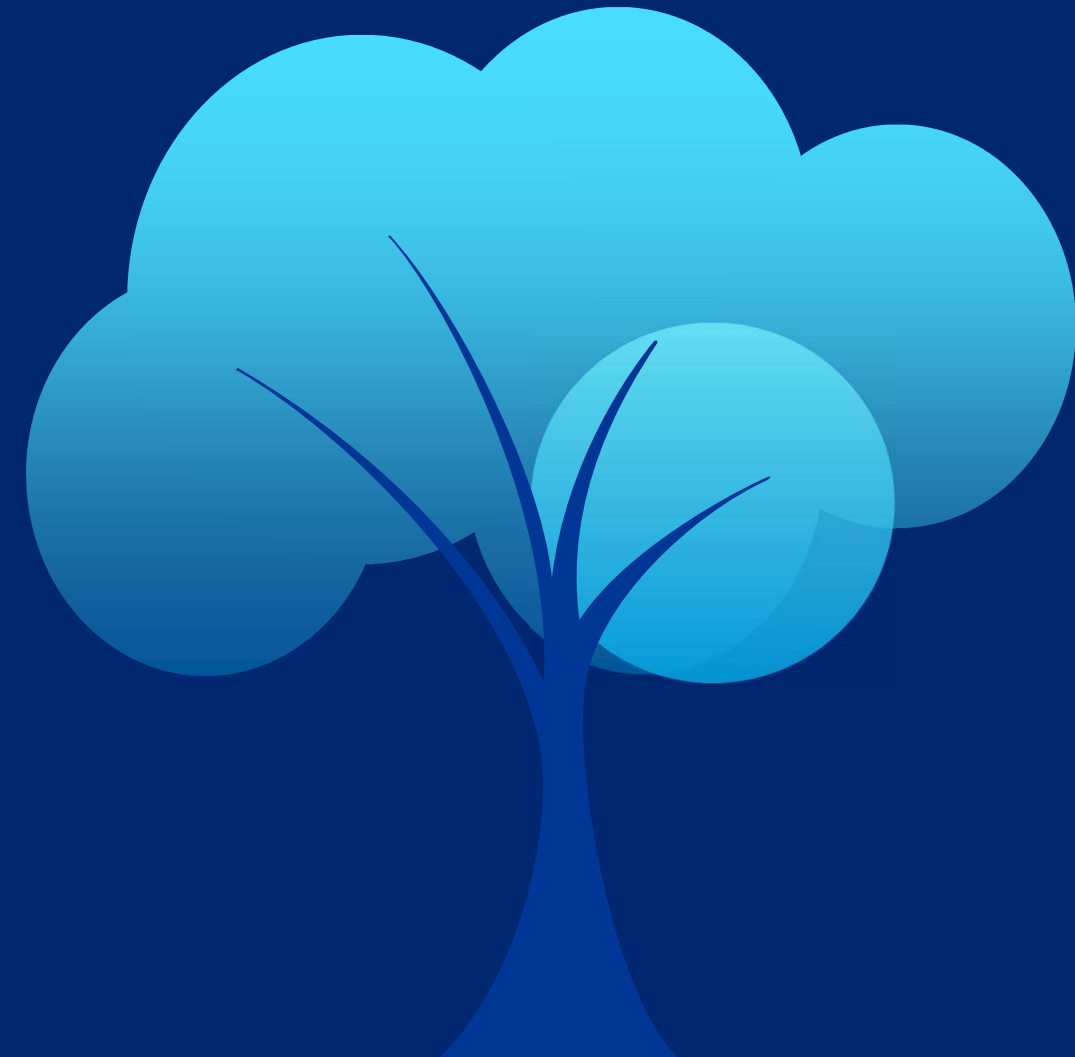
Goals of RAD-on

OPEN
GOVERNMENT
DATA



DATA-DRIVEN
POLICY MAKING

FAIR data (findable, accessible, interoperable, reusable)



PUBLIC SYSTEM



RAD-ON

RELIABLE SOURCE OF REPORTS, ANALYSES AND DATA
ON HIGHER EDUCATION AND SCIENCE IN POLAND

Search in the system

🔍 SEARCH

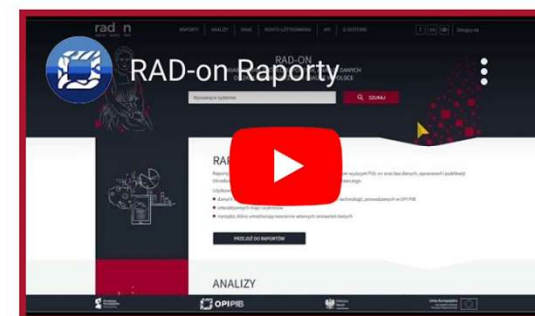


REPORTS

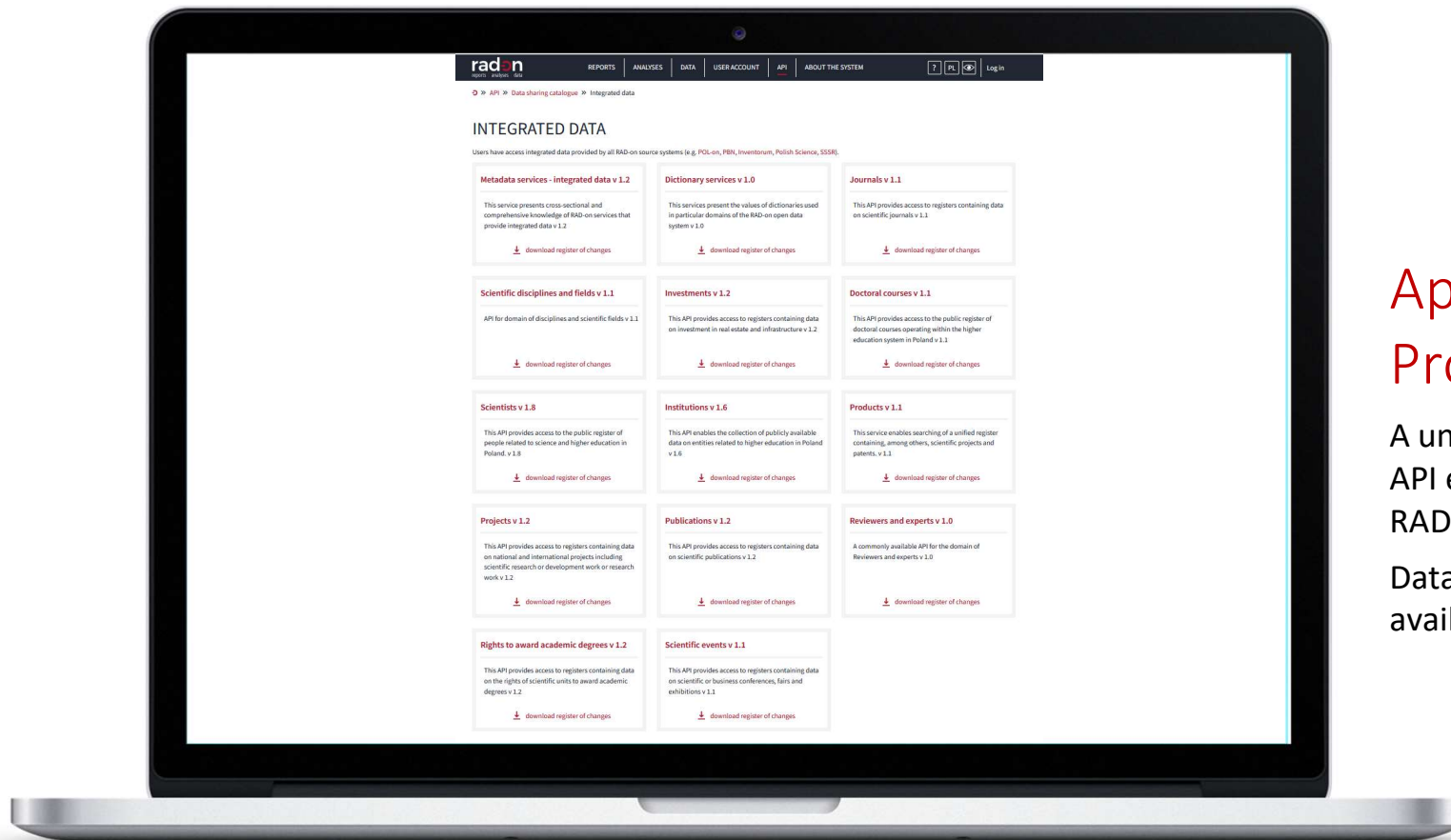
Reports are based on data imported, among other sources, from the **POL-on** System of Information on Science and Higher Education as well as from databases, studies and publications put out by the National Information Processing Institute (OPI-PIB).

The user gains access to:

- data on Polish science and results of research in the area of new technologies conducted at OPI-PIB
- interactive maps and charts
- tools which can be used to create their own data summaries



FAIR data: API



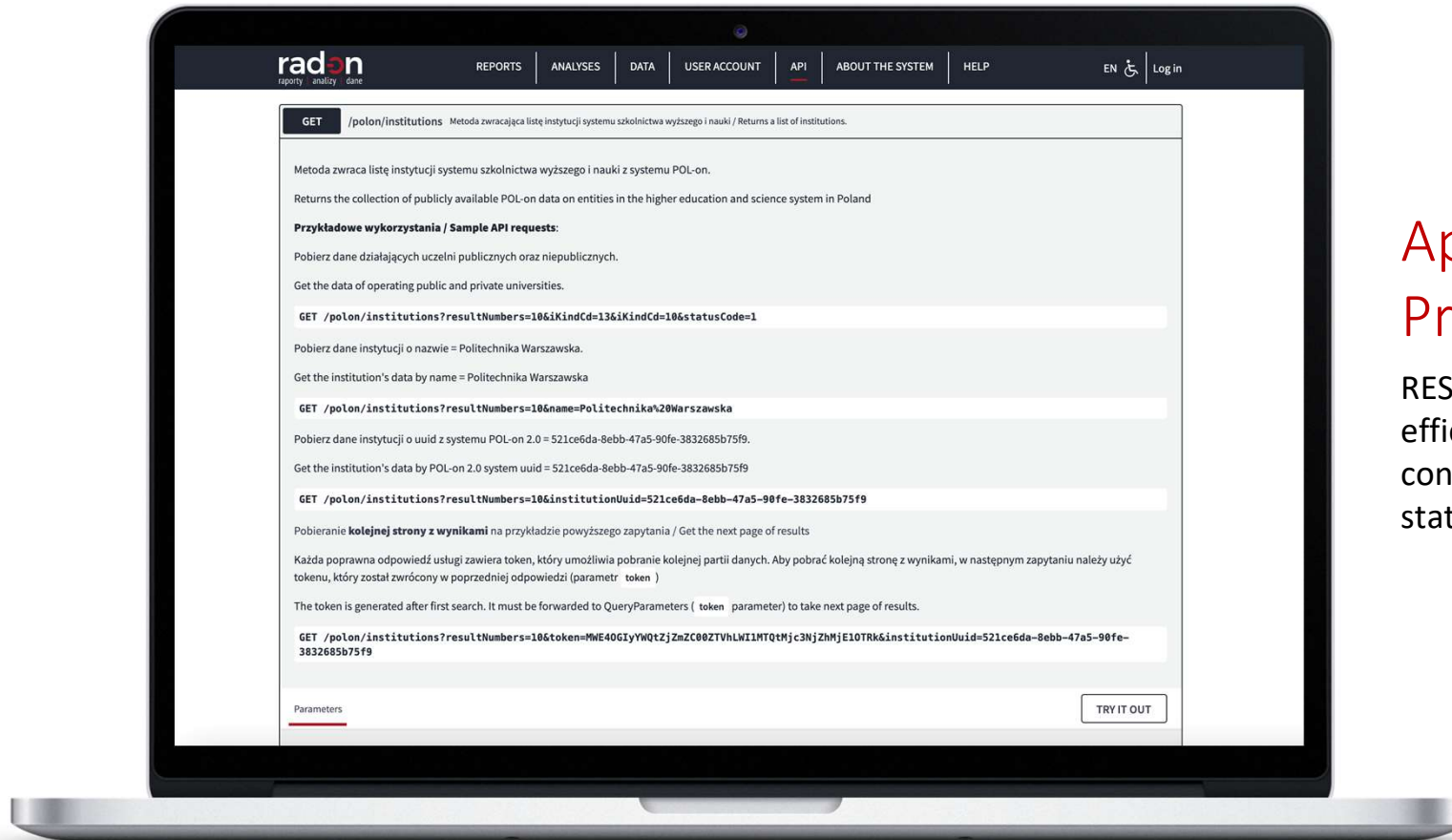
Application Programming Interface

A uniform programming interface – REST API enables free and public access to the RAD-on databases.

Data from the Data section of RAD-on is available through API services

www.radon.nauka.gov.pl

FAIR data: API

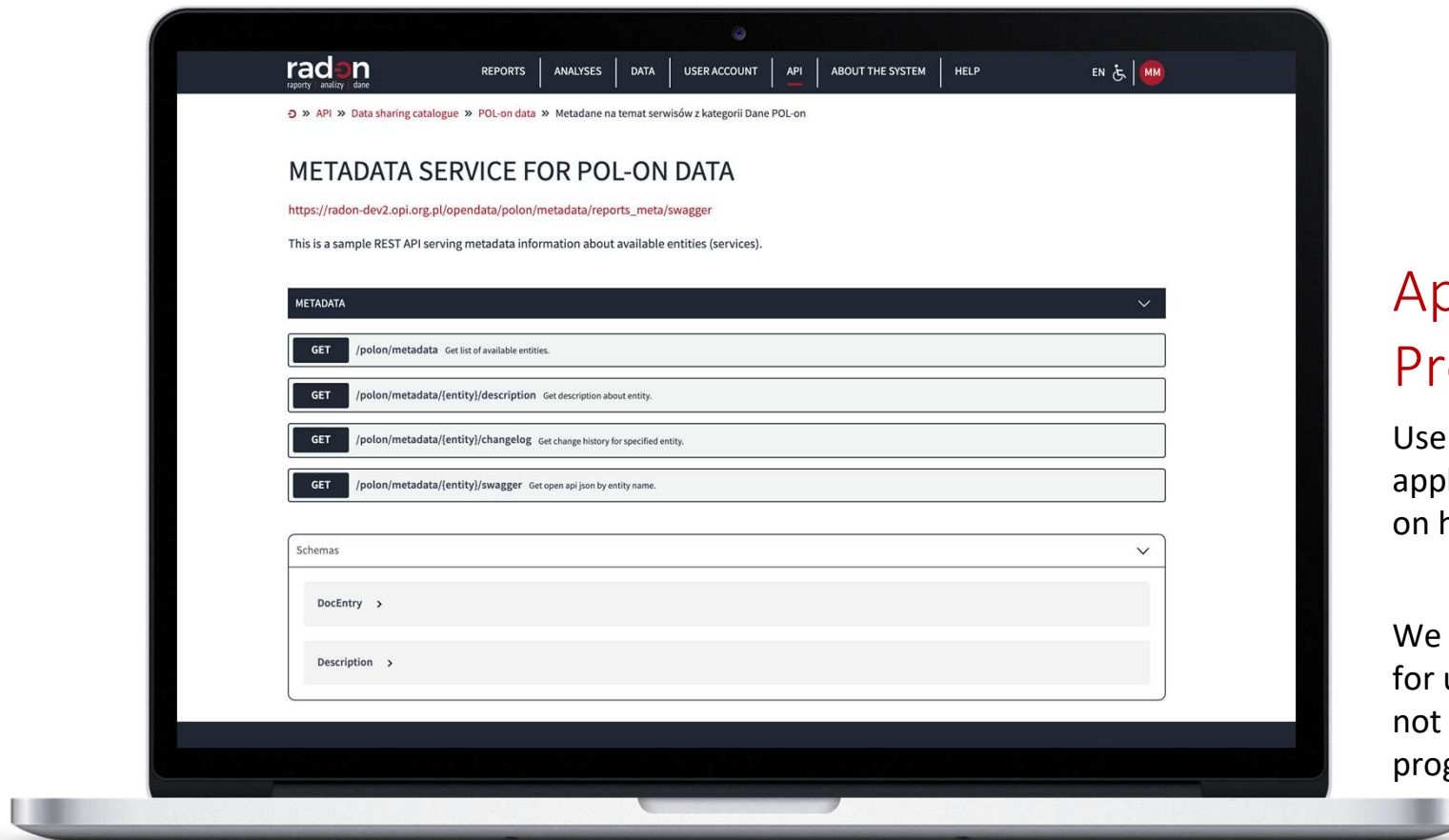


Application Programming Interface

REST API allows users to quickly and efficiently download data that is useful in conducting analyses and in creating statistics, reports and summaries.

www.radon.nauka.gov.pl

FAIR data: API



Application Programming Interface

Users can develop original solutions and applications that require access to data on higher education.

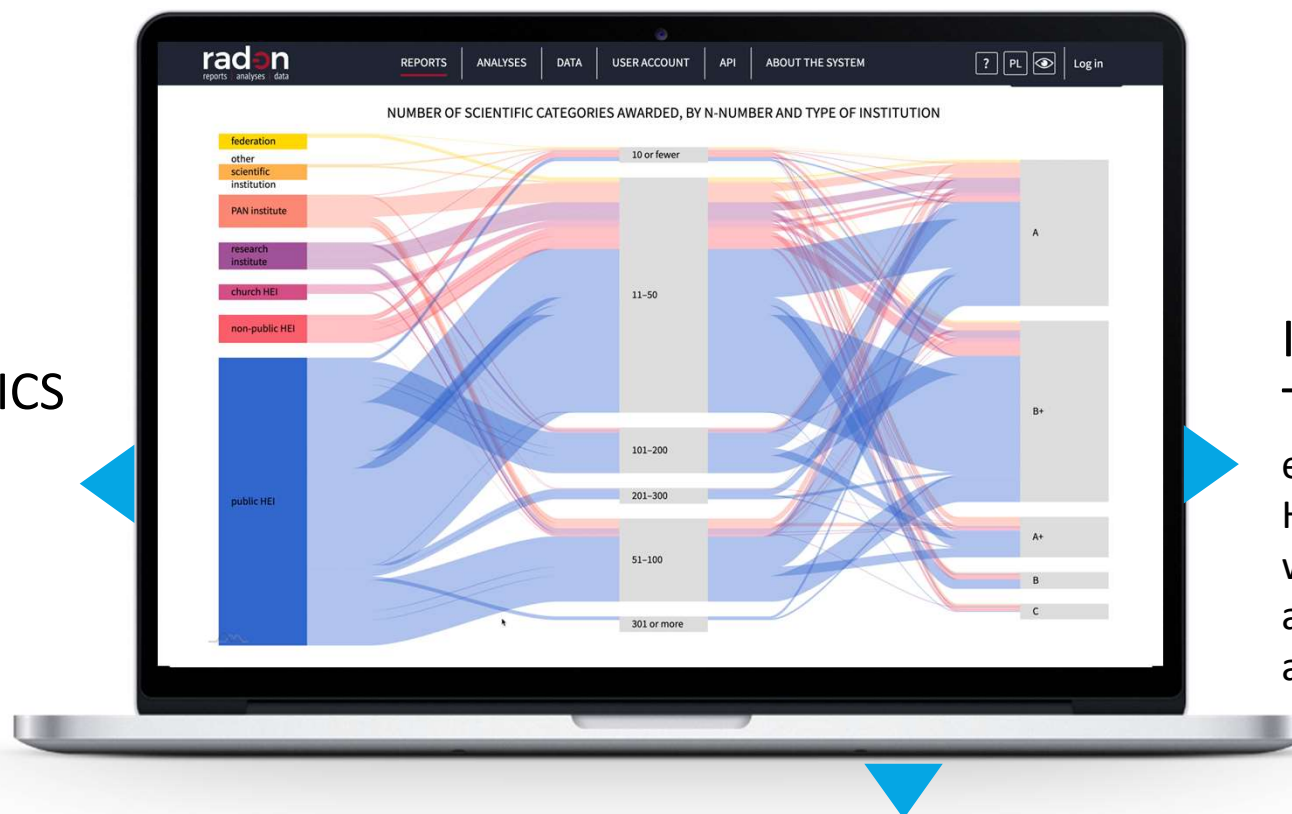
We have provided R and Python scripts for users, such as data analysts, who are not professional application programmers.

www.radon.nauka.gov.pl

Data-driven policy making: Reports Section

70+ reports

SCIENCEMETRICS
REPORTS



IMPORTANT
TOPICS
e.g. Ukrainians in
HEIs in Poland,
women in STEM
among students
and researchers

HIGHER EDUCATION STATISTICS

Data-driven policy making: Analyses Section

30+ analyses

TRADITIONAL
IN-DEPTH REPORTS



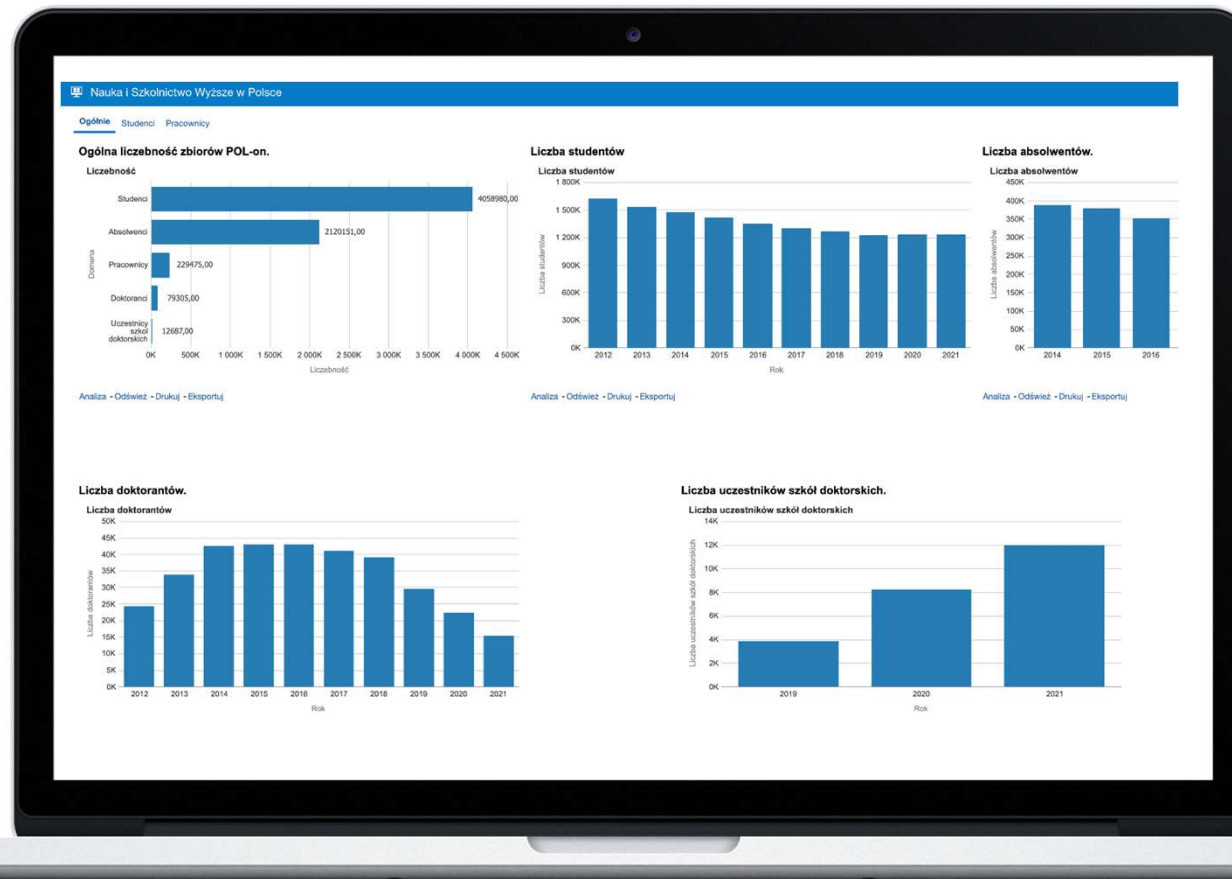
SOMETIMES IN
COOPERATION
WITH OTHER
ORGANISATIONS

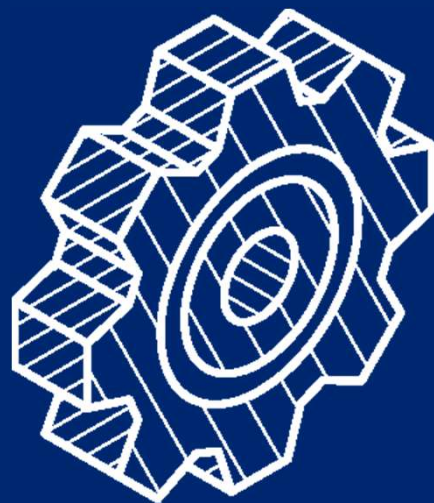
PREPARED BY OUR EXPERTS

Data-driven policy making

Business Intelligence
Tools for users with
additional credentials

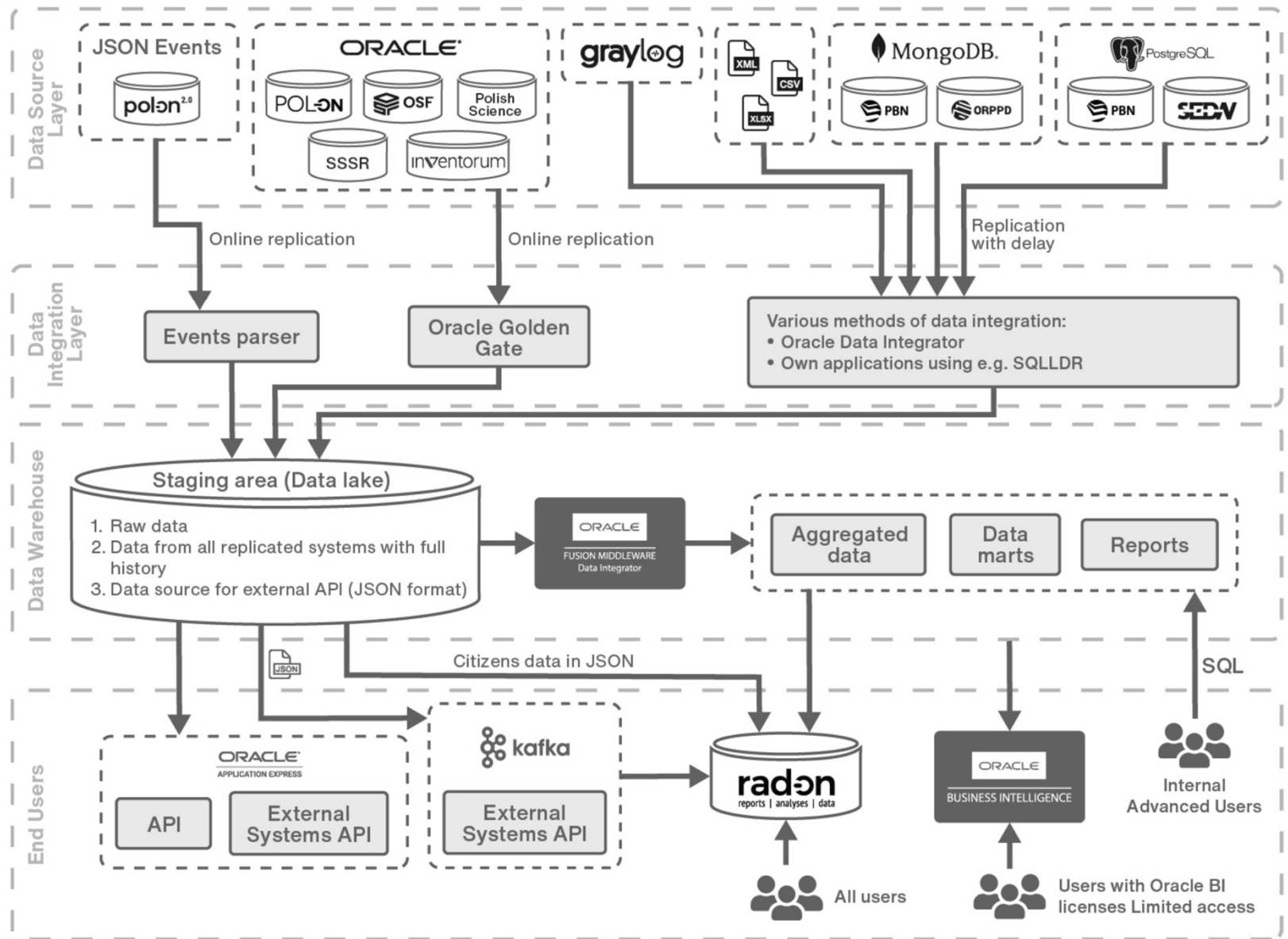
Governmental organizations
(ministries, national scientific
councils, research funding
organizations) who can access
non-public data benefit from
more advanced dashboards
created using the BI tool.



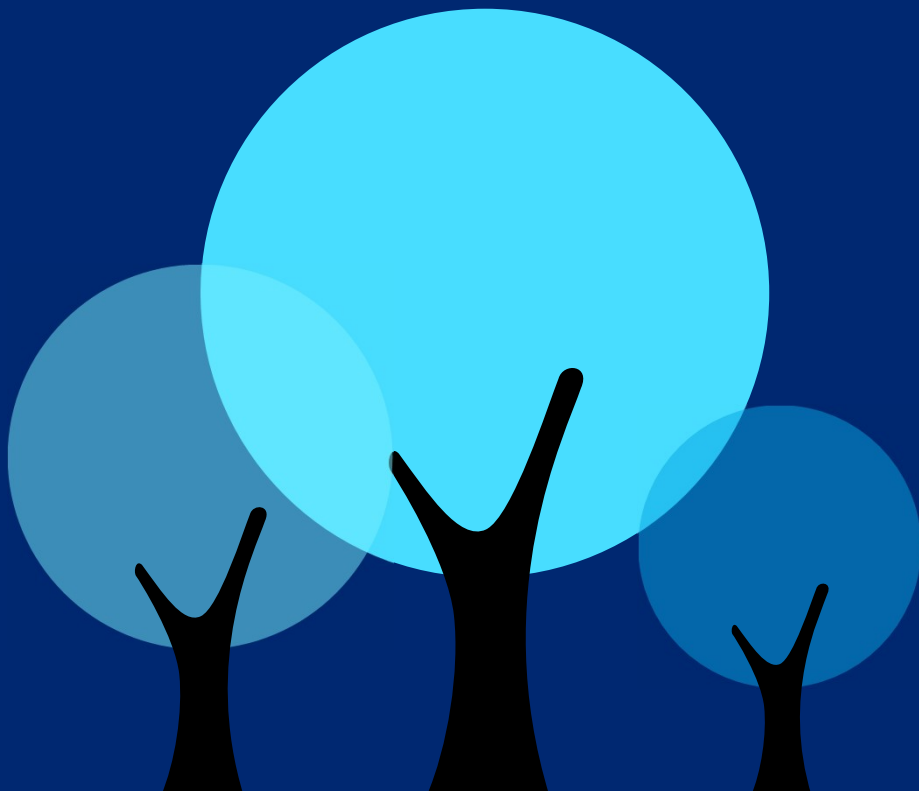


TECHNOLOGY

Overall schema of internal architecture of RAD-on



PROJECT IMPACT



Statistics: public system



11.45 TB of data
from 9 systems

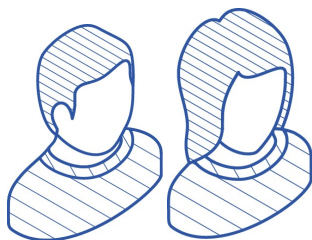
ON SCIENCE AND HIGHER EDUCATION
were integrated
and shared

670 million
downloads of documents

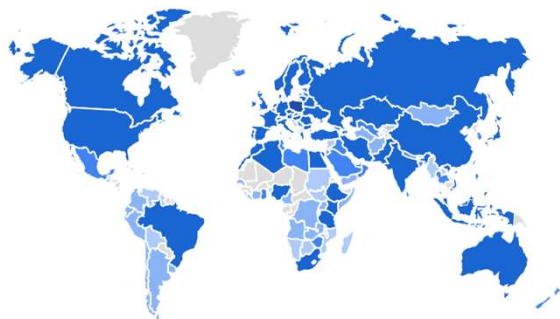
API was most commonly
used to download data on:

- research institutions
- evaluation outcomes
- university programmes

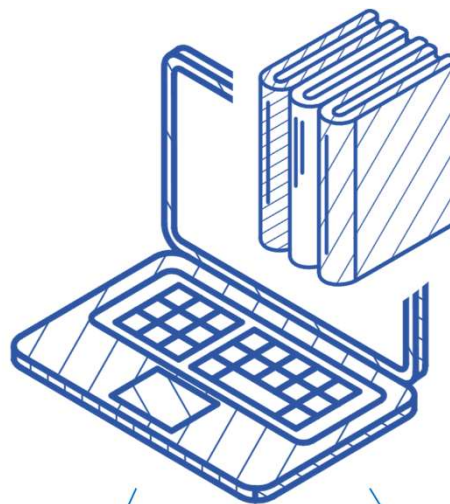
Statistics: public system



150 000 USERS*



mostly from Poland, but also from the
US, Germany and Ukraine



1 700
ONLINE MEDIA
MENTIONS*

56
WRITTEN PRESS
AND RADIO
MENTIONS*

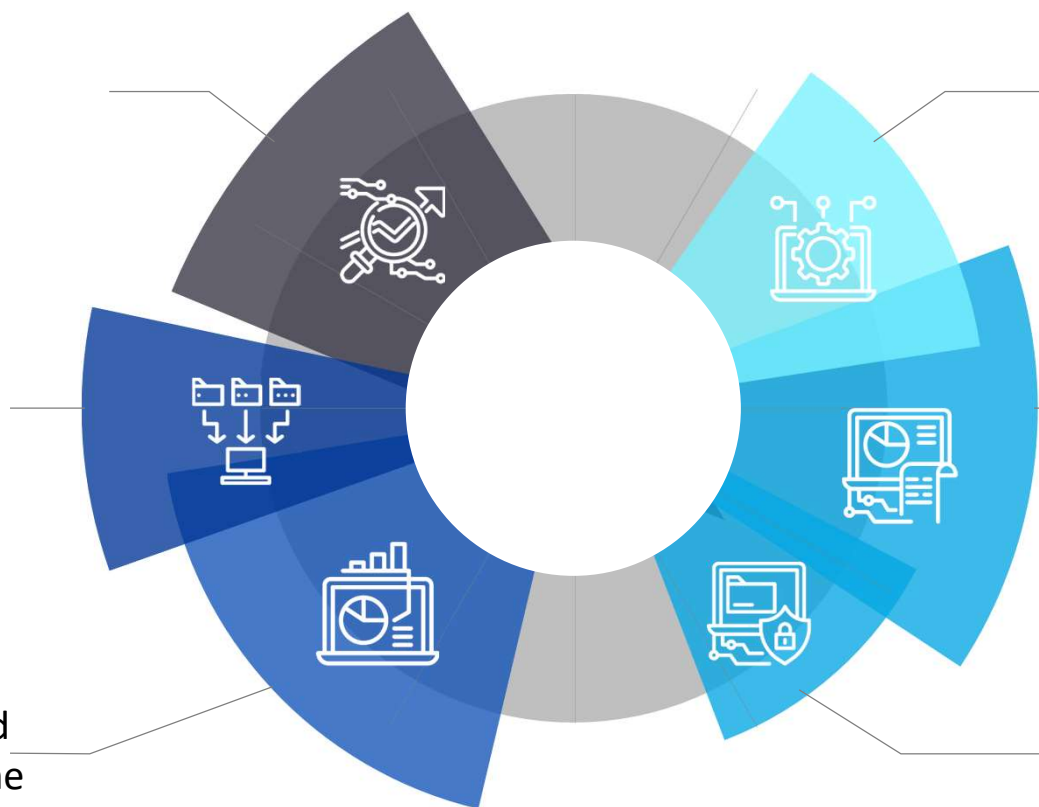
*within the last 12 months

Conclusions

RAD-on offers the most up-to-date and credible information, as scientists or students can correct their own data through a single point-of-entry.

Journalists and the general public can download comprehensive analyses with in-depth interpretation of data.

Decision-makers who can access non-public data benefit from more advanced dashboards created using the BI tool.



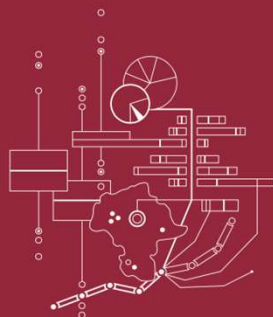
RAD-on is the first fully integrated system for science and higher education that enables access to governmental and other data from multiple databases.

Users can interact with data in a variety of ways, depending on their analytical skills and level of authorisation.

Programmers and data scientists benefit from an integrated API; whereas researchers prefer to download pre-defined tables and visualisations.

RAD-on

Reports
Analyses
Data



Scientific editors
Aldona Tomczyńska
Anna Knapieńska
Sylvia Ostrowska

More about RAD-on

in a book available at:

www.opi.org.pl/wydawnictwo



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