What to integrate within Research Information System

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Abstract

In 2010 the OMEGA-PSIR project has started, aiming at building a system compromising the needs of the researchers (focussing to Open Access) with the needs of the university authorities (focussing mainly on research management). As an effect of this approach, we have decided to integrate within one system the functionalities of institutional repository, CRIS and RPS.

In [1] we have discussed how such integration influences various aspects of the system architecture and its usage at the university. We have shown that such an integration leads to significant savings in maintaining the information infrastructure at the university, on the other hand it provides new opportunities giving rise to a much more rational organization of the workflow regarding the processes for the maintenance of the database contents.

In this paper we will present some thoughts regarding the impact of integrating IR, CRIS and RPS. One of the first effects was a fairly easy way to expand the system functionalities. In spite of the fact that the system architecture was flexible, it was due to the potential resulting from having under one system all data resulting from the integration of the aforementioned system. In particular, it referred to:

1. Incorporating to the system the module(s) responsible for organizing processes for the national evaluation of the university; amid of a quite difficult evaluation system we were able to develop the functionalities in parallel with the development of the national level CRIS;
2. Developing tools for improving the research management workflow, covering the process starting from registering a project application at the Project Servicing Center, and ending with describing the research outcomes by the project leader (covering publications, patents, defended theses, but also technologies, prototypes); all this is possible because all these data types are present in the integrated system.
3. Implementing tools for teams leaders to describe the achievements of the research team, again covering projects, publications, patents, technologies; having already in the knowledge base all the data linked to each other, it is indeed quite easy and simple to update the research team record to be then presented as a team profile;

In addition to the upgrade of the system at the transactional level various needs have appeared at more strategic (research management) level. Hence, we present in the paper the issues related to:

1. development of the module for monitoring cooperation with external bodies; this covers integration of the institution database, being part of the knowledge base, with external resources, first Scopus, the ROR.org, making it easier to maintain the uniqueness and higher reliability of data regarding the cooperation of the university with academia, business,

administration, etc.; the development makes us possible to monitor the cooperation, identify the partners, find out the most active teams at the universities that improve research networking, etc.;

2. developing of the mentoring module, thought as a tool for improving the success rate in fund raising; the idea is based on matching the young (less experienced) researchers with the ones having a background in preparing project applications; so, having already in the integrated knowledge base all the project applications we can monitor how the mentoring improves success rate and optimize the mentoring processes;

Our experience regarding the integration of various functionalities within one Knowledge Base led us to consider whether to expand the integration with other important research management related components. This refers to:

1. full-fledge research data repository; having deposited research data one can easily refer to them as project outputs, link to the publications (and *vice versa*)
2. research equipment catalogue, not only cataloguing the resources, but also making possible to report demand for the research services, btw linked to the projects (which are stored in the same system), so that finally one can easily monitor how the equipment is used, compared to the research outcomes, which gives a background for rationalizing purchase planning.