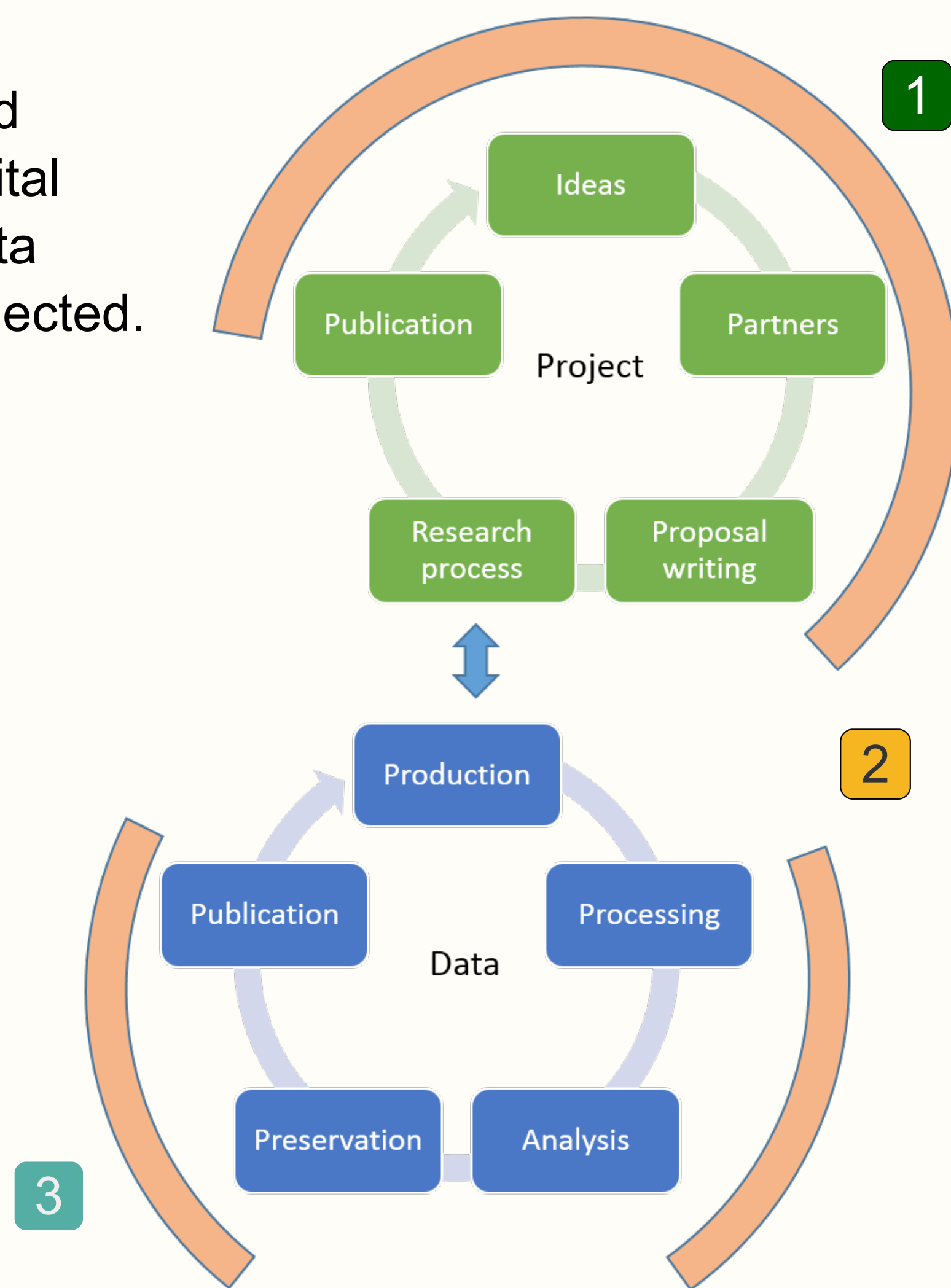


## 0 INTRODUCTION

As Life Sciences are becoming more and more data intensive disciplines, their digital practices have to evolve. Project and data management are now strongly interconnected.

Using a vision centered on the scientific project life cycle and the scientific data lifecycle, CeSGO aims to develop an e-Science platform associated with a **virtual research environment (VRE)** dedicated initially to Life Sciences communities.

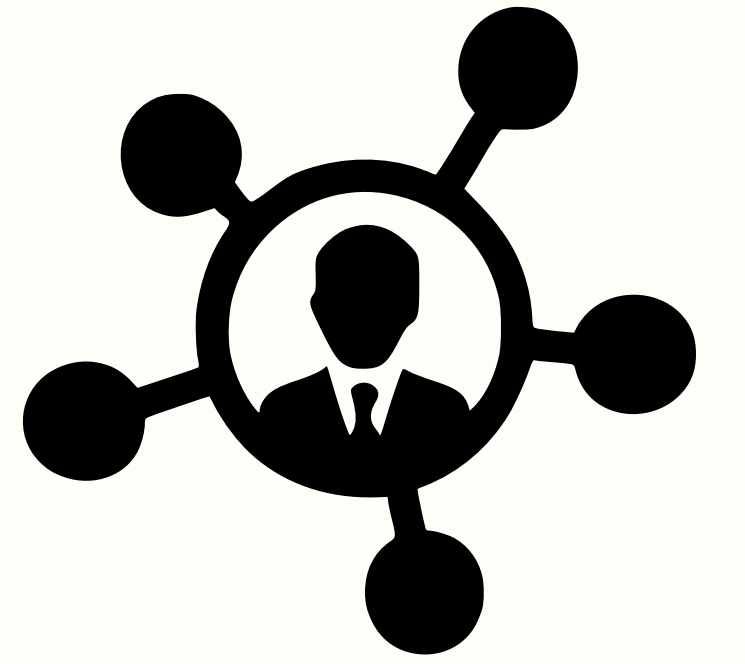
However, due to its generic approach, CeSGO's VRE is usable by any research community with minor adaptations.



## 1 COLLABORATION PLATFORM

The collaboration platform provides an environment to help scientists build and manage research projects.

The collaboration platform is powered by WordPress & BuddyPress plugin. BuddyPress adds **community** features and offers social **network functionalities**.



The main features of this platform are:

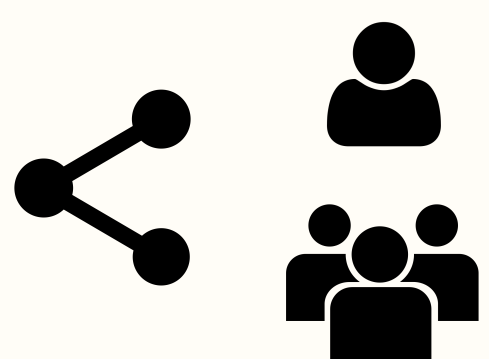
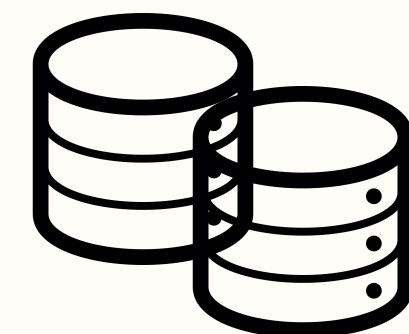
- private conversations
- connections between users
- groups
- collaborative documents
- forums
- live chat
- sites creation

## 2 DATA MANAGER



The data manager platform is a solution based on owncloud and provides storage access for CeSGO users through a web interface.

In addition, it allows importation of additional **external** storages (e.g. FTP) in order to centralize data.



Data can be shared with owncloud groups or users.

**Links** can be generated to share data with external users.

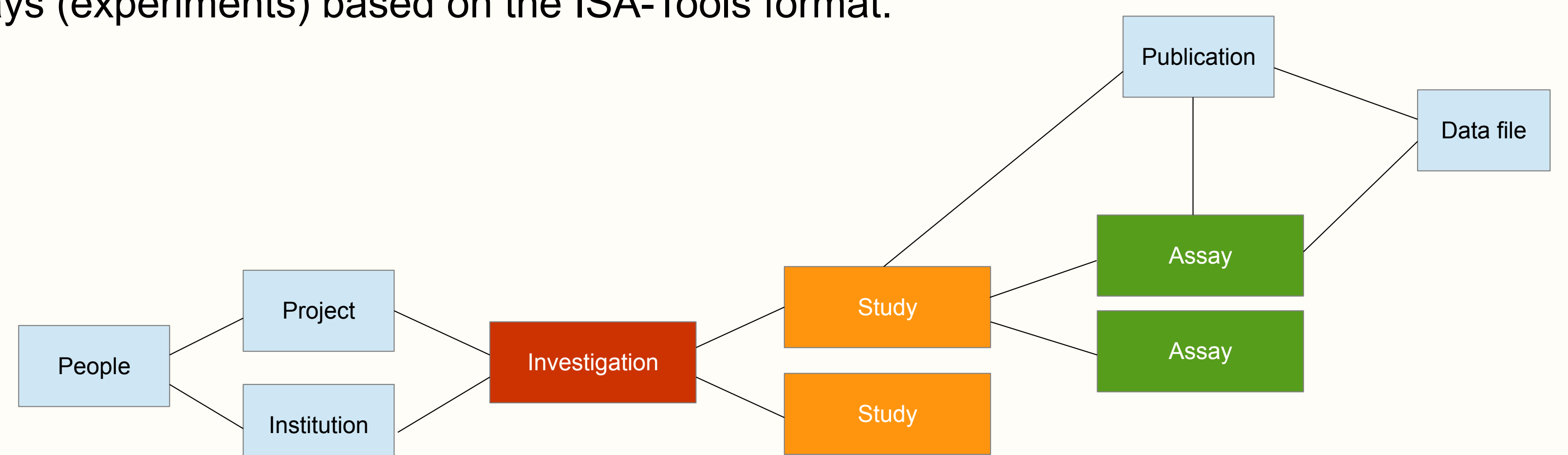


## 3 SCIENTIFIC RESEARCH DATA SHARING

The scientific research platform is powered by the SEEK web application.

Its purpose is to share heterogeneous scientific research datasets, models or simulations, processes and research outcomes.

It preserves associations between them, along with information about the people and organisations involved. The research can be organised into investigations, studies and assays (experiments) based on the ISA-Tools format.



Seek allows CeSGO to propose a FAIR **4** data and model management service.

## 4 FAIR DATA

### Findable



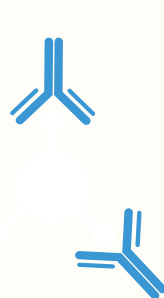
- **Describe** your data in a data repository
- Apply a persistent identifiers

### Accessible



- Consider what will be **shared**
- Obtain participant consent and perform risk management

### Interoperable



- Use open formats
- Consistent **vocabulary**
- Common metadata standards

### Reusable

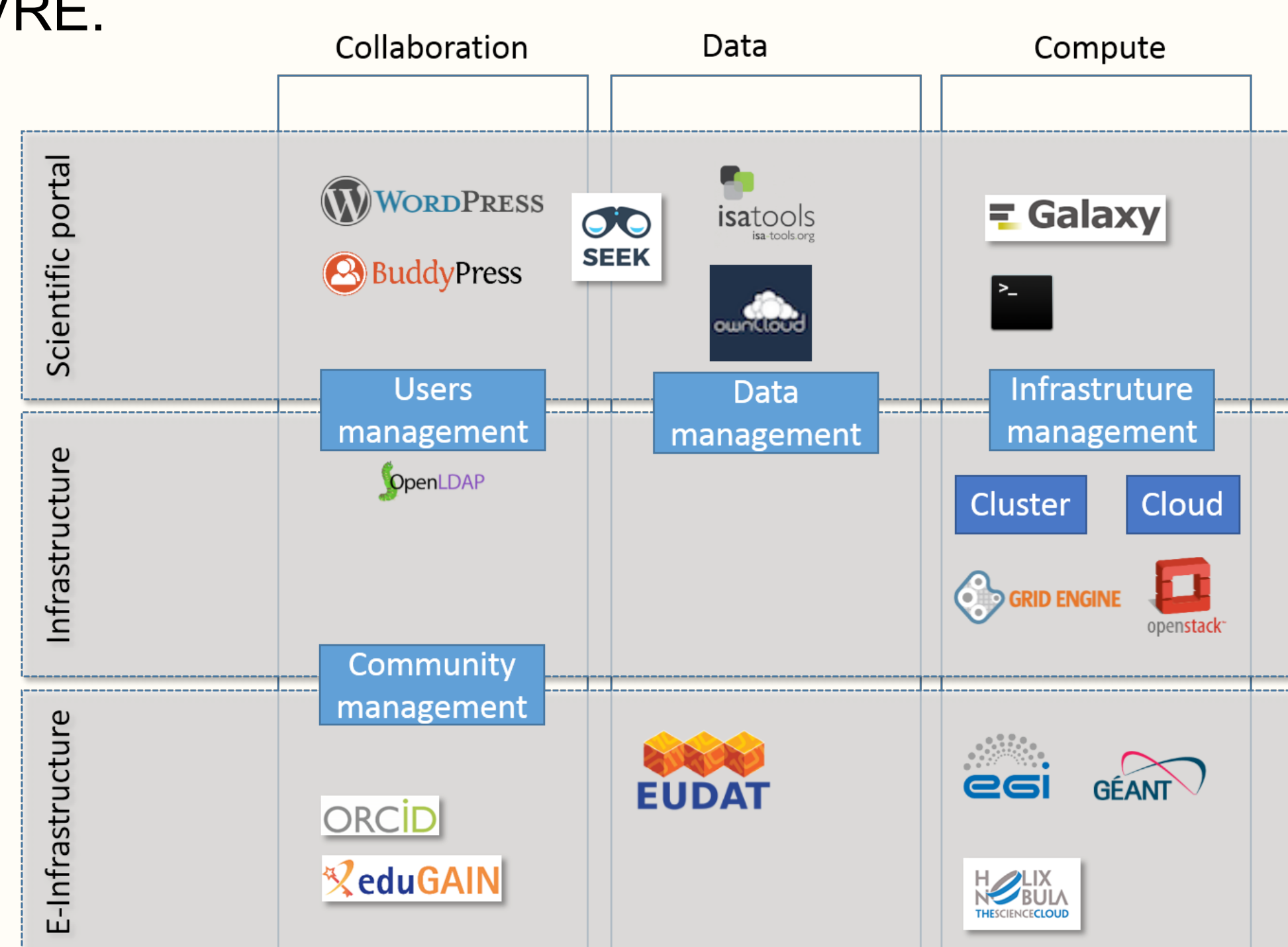


- Consider **granted** users
- Apply appropriate licence

## 5 CONCLUSION

The tryptic between Collaboration, Data and Computation can be considered at several levels. For the scientist, only the functionalities are seen. For the technical management, additional services must be provided.

These services can be integrated wider e-infrastructures, thus broadening the scope of CeSGO's VRE.



## LINKS

CeSGO portal:

<https://www.cesgo.org>

**1** Collaboration platform:

<https://www.cesgo.org/collaboration>

**2** Data manager:

<https://data-access.cesgo.org>

**3** Scientific research data sharing:

<https://seek.cesgo.org>

## ACCESS

A GenOuest account is required to access to all CeSGO services.

Ask for your account at

<https://my.genouest.org>