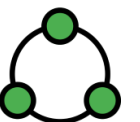


LifeWatch Italy: the Italian hub for open and FAIR research data

Andrea Tarallo, Ilaria Rosati, Alberto Basset

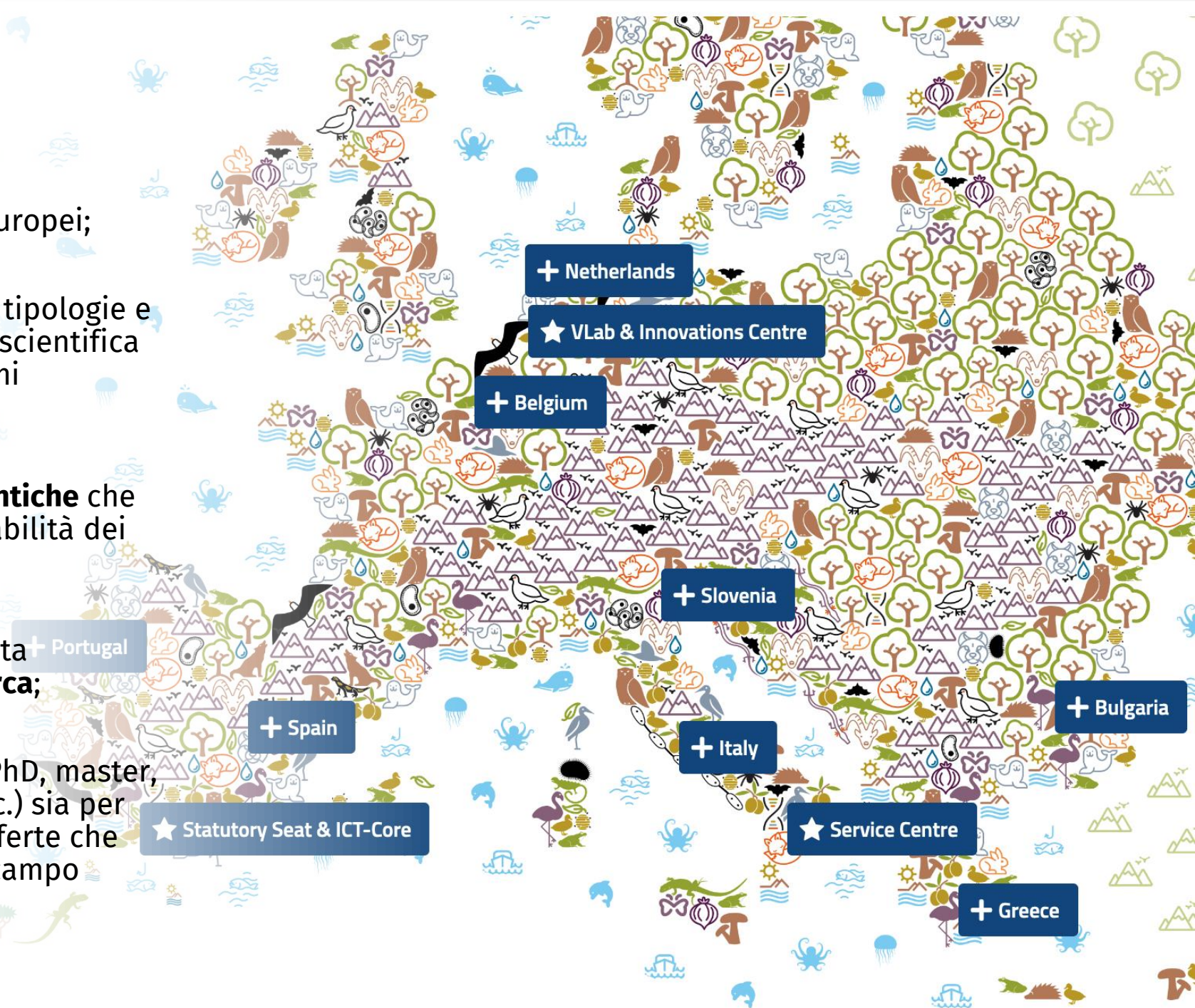


LifeWatch Italy è il nodo Italiano di LifeWatch ERIC

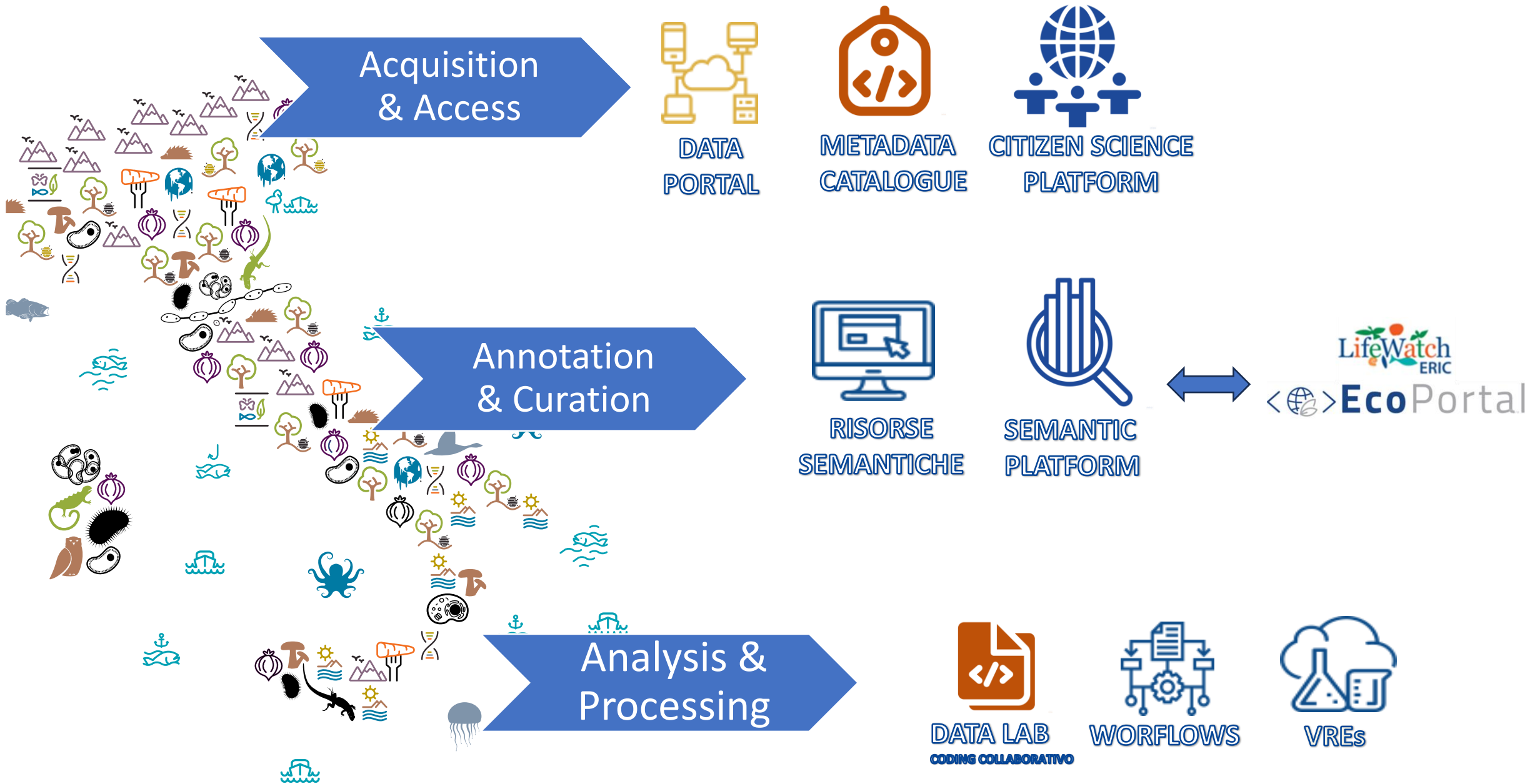
LifeWatch ERIC is a European Research Infrastructure Consortium providing e-Science research facilities to scientists investigating biodiversity and ecosystem functions

LifeWatch ERIC:

- È una **Infrastruttura di Ricerca Europea**;
- Ha una struttura **distribuita in 8 paesi** europei;
- Fornisce l'accesso a dati FAIR di diverse tipologie e a diversa scala prodotti dalla comunità scientifica che studia la biodiversità e gli ecosistemi attraverso il **catalogo di metadati**;
- Mantiene un **repository di risorse semantiche** che permettono l'integrazione e l'interoperabilità dei dati;
- Sviluppa e offre servizi di analisi avanzata attraverso dei **laboratori virtuali di ricerca**;
- Fornisce vari **strumenti di formazione** (PhD, master, summer school, webinar, e-learning, ecc.) sia per l'utilizzo delle soluzioni tecnologiche offerte che nell'ambito degli aspetti scientifici nel campo biodiversità ed ecosistemi.



LifeWatch Italy: Open & Interoperable Research





LifeWatch Italy Joint Research Unit

LifeWatch ITA has been established as a **Joint Research Unit (JRU)** in 2010 with 9 founding members **led by CNR**. It has now **35 members** including research institutes, universities, associations and private companies distributed, seeking to reinforce integrated scientific research on biodiversity and ecosystems.



Our projects

Data management



FAIRification and RI development



Our projects

Data management

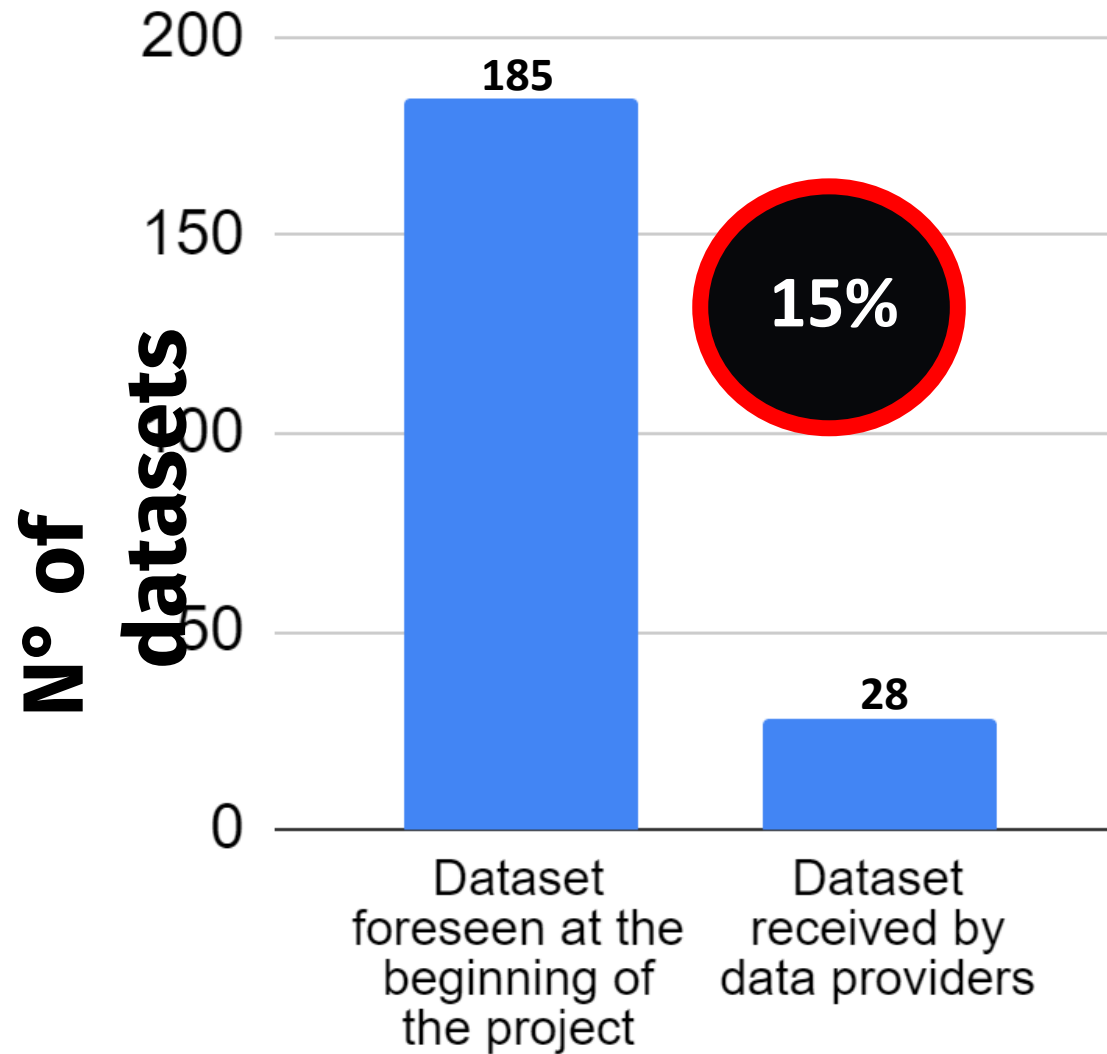


Nuovi dati + dati da articoli già pubblicati

- Digitise
- Clean
- Harmonise
- Validate
- Compile metadata
- Archive
- Give access



Dati prodotti vs dati disponibili



Dati prodotti vs dati disponibili



Tedersoo et al. 2021- cross-disciplinary, **5-30%** raw data upon request

Hussey 2023 – behaviour, **25%** upon request

Wicherts et al. 2006 – psychology, **27%** upon request

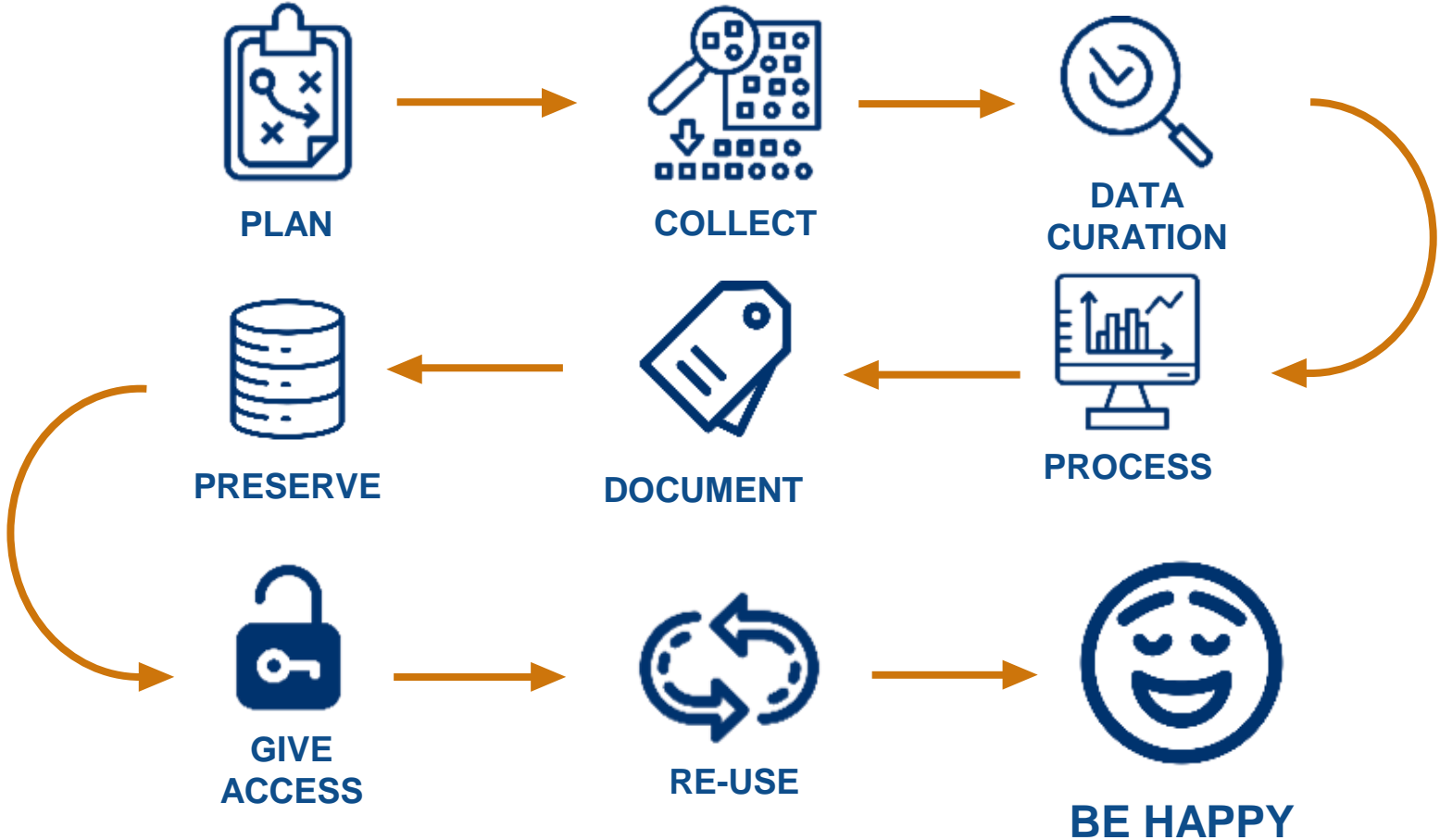
Krawczyk & Reuben 2012 - economic,s **44%** upon request

Savage & Vickers 2009 – Medicine and clinics, **60%** upon request

Stodden et al. 2018 - data and code from journal Science, **44%** upon request

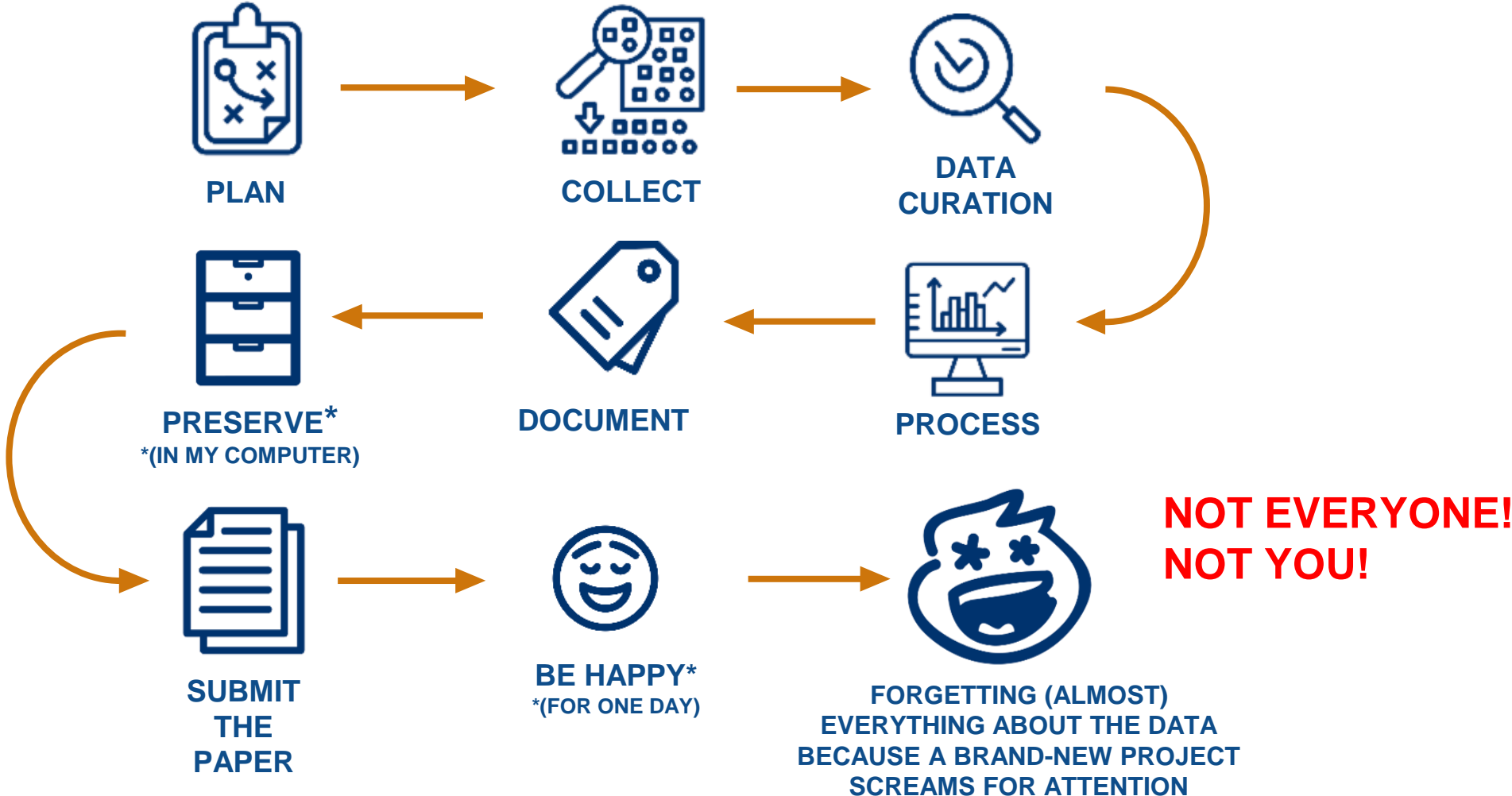
Gabelica et al., 2022 – BMC journals with data sharing statement, **6.8%** upon request

Data lifecycle: quando la ordini su wish



Data lifecycle: quando ti arriva a casa

Alsheikh-Ali et al. 2011 - cross-disciplinary **9%** deposited full primary raw data online.



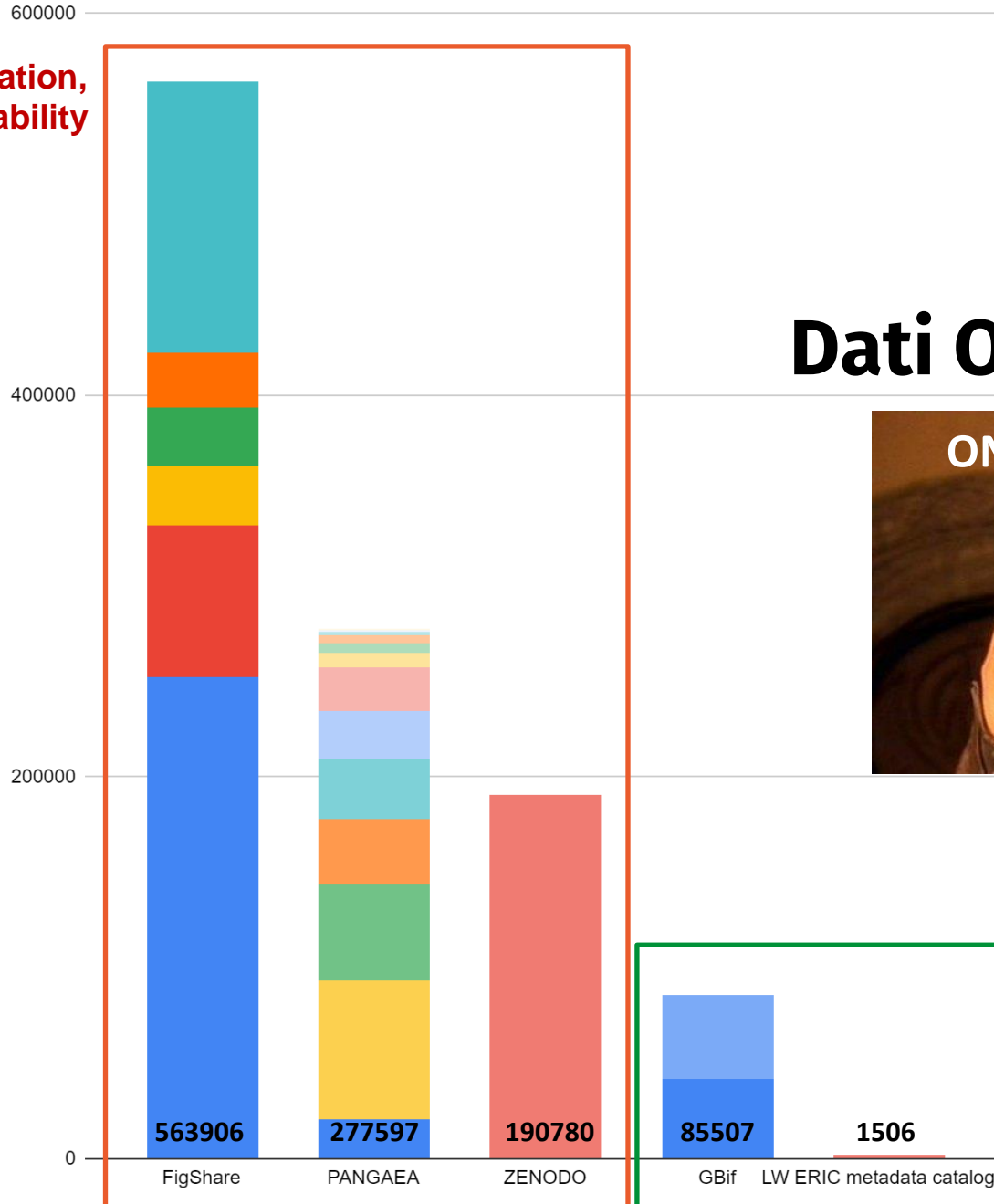
Data lifecycle: quando ti arriva a casa



- Agriculture
- Fisheries
- Human dimensions
- Lakes & Rivers
- Cryosphere
- Geophysics
- Biosphere
- Land surface
- Oceans
- Paleontology
- Atmosphere
- Biological classification
- Litosphere
- Chemistry
- All
- Plazi.org
- Plant biology
- Plant systematics and taxonomy
- Microbial ecology
- Mycology
- Marine Biology
- Ecology

**High level of mobilisation,
low interoperability**

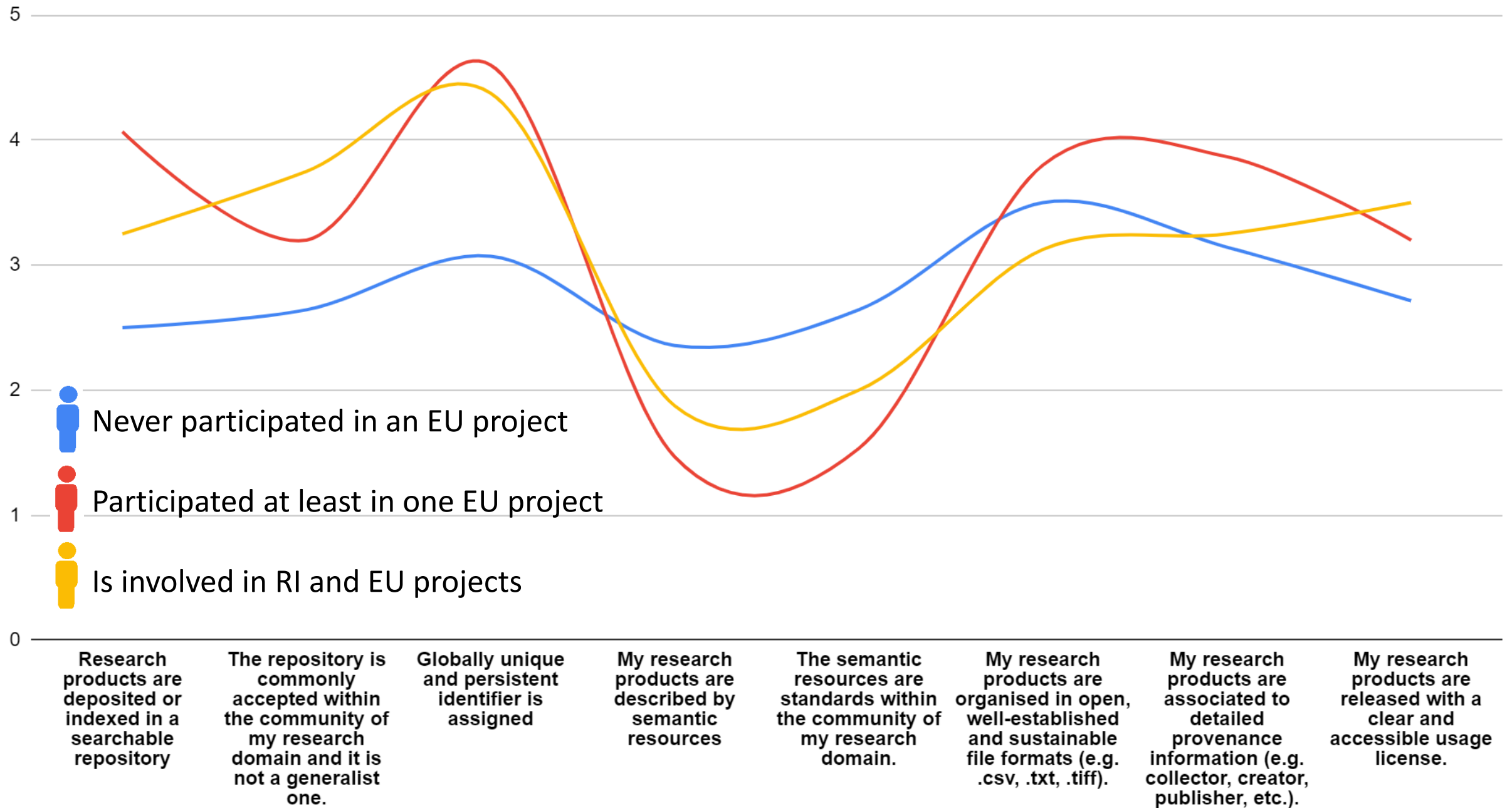
N of Research Digital Outputs

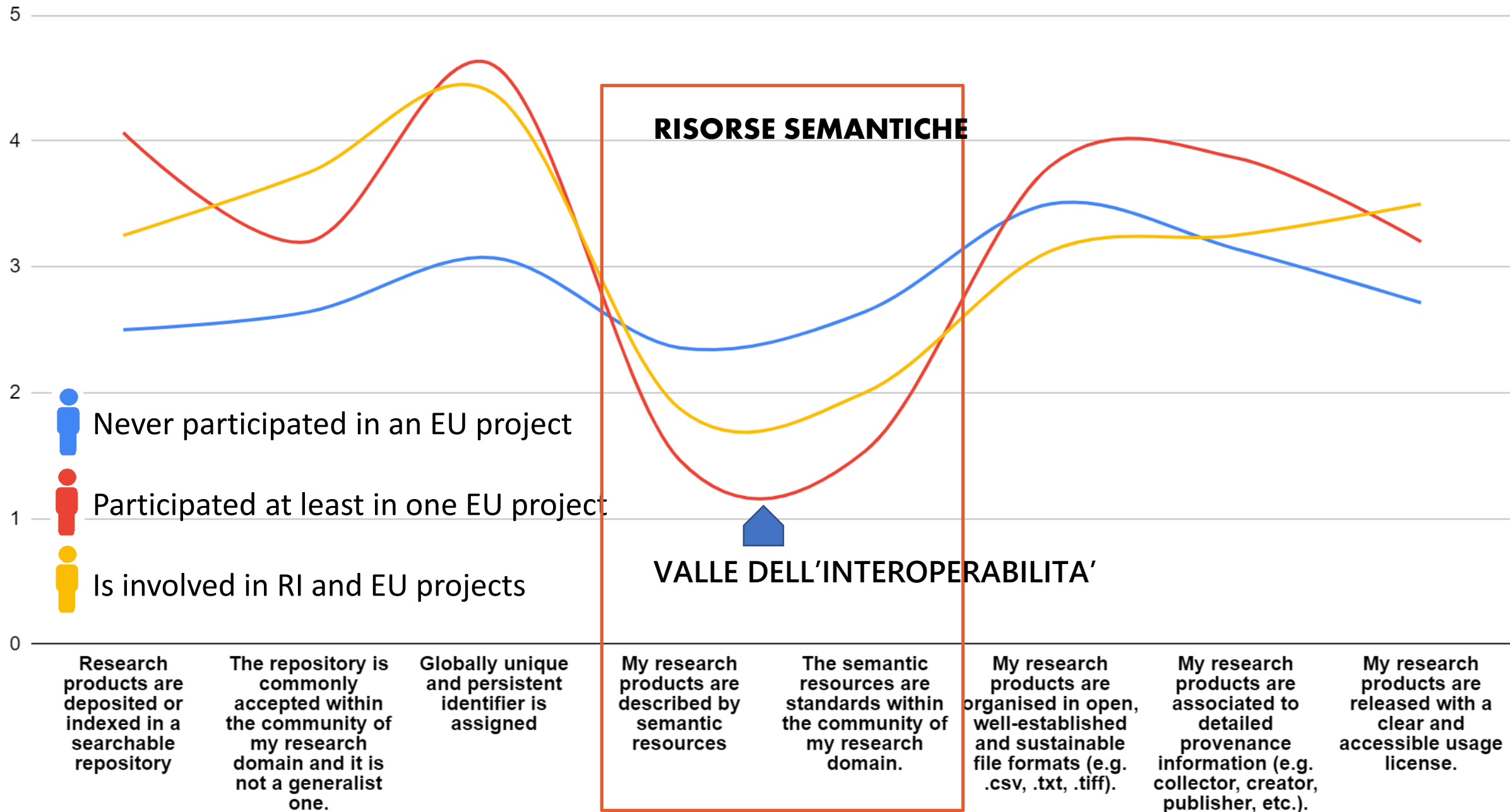


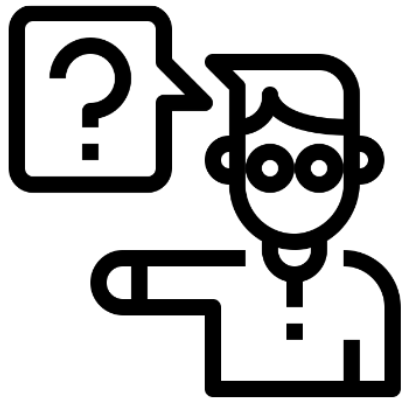
Dati OPEN e dati FAIR



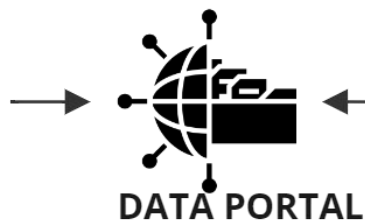
Low level of mobilisation
 (*if compared with the generalist repositories)
High interoperability







PRODUCE
DATA



AUTOMATIC
ANNOTATION

SEMANTIC PLATFORM
miro


 EcoPortal

FEED





PRODUCE
DATA



DATA PORTAL

AUTOMATIC
ANNOTATION

SEMANTIC PLATFORM


< > **EcoPortal**

FEED



AUTOMATIC
ANNOTATION



LIFEWATCH ITALY
METADATA
CATALOGUE

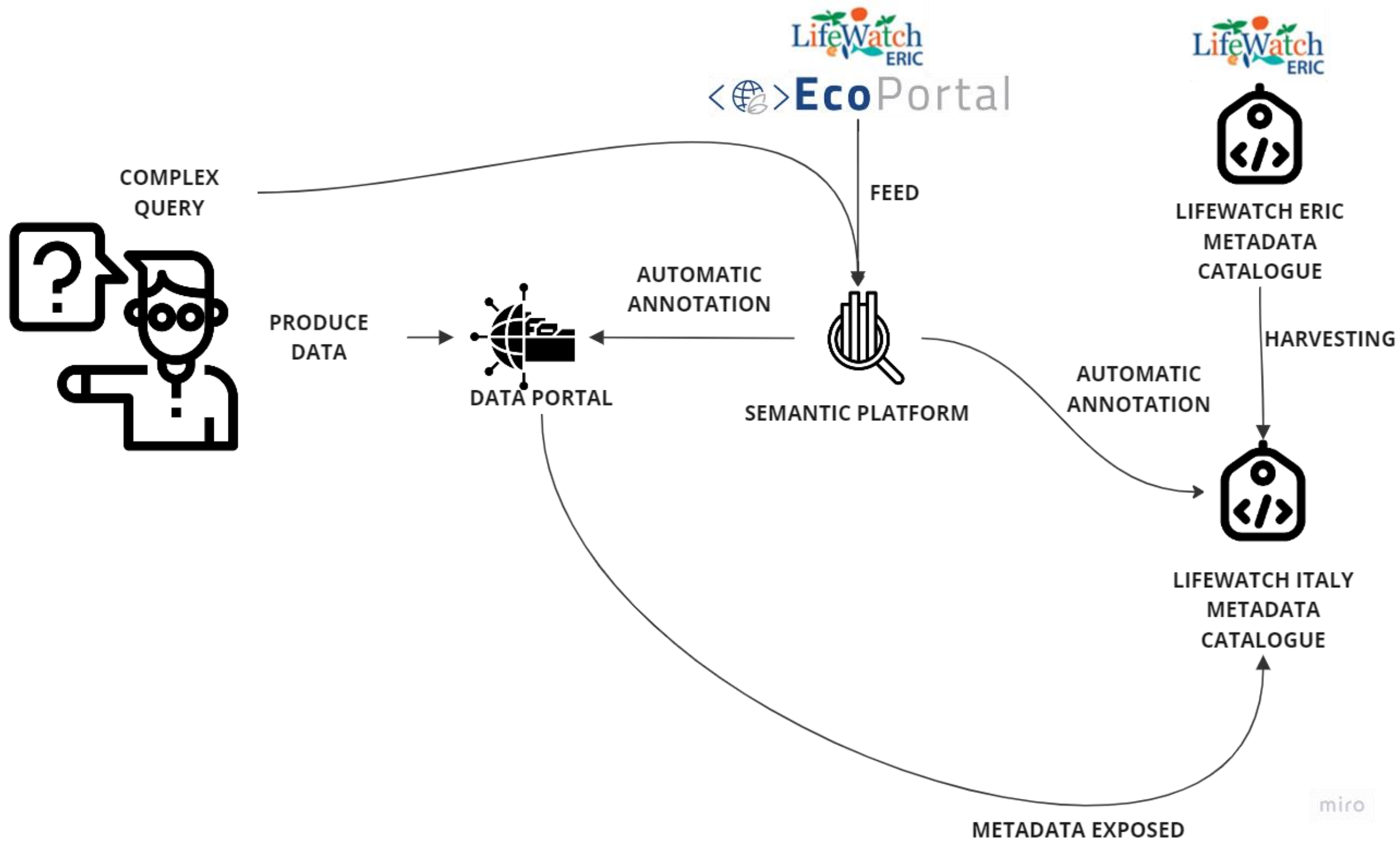
HARVESTING

LIFEWATCH ERIC
METADATA
CATALOGUE




Lifewatch
ERIC

METADATA EXPOSED



THANK YOU

Acknowledgements

Jessica Titocci and Martina Pulieri who kindly provided previous slides on LifeWatch and the semantic platforms, Jessica Titocci, Cristina Di Muri, Martina Pulieri, Enrica Nestola for the survey building and distribution Senem Onen Tarantini for data on mobilisation process in LifeWatchPLUS

Thanks for “the scream” by Soodam Elesti Lee, “drawer” by Worakamon Saykajarn, “excited” by Hadi, “Paper” by SITI NURHAYATI, “Happy” by Warunk Icon, “re use” by Worakamon Saykajarn, “Access” by andika, “label” by Larea, “finance” by Bachir Hamidi, “quality check” by KP Arts, “Random Sample” by Becris, “Science” by Kan Kingpetcharat, “dictionary” by LUTFI GANI AL ACHMAD, “Data” by Ria Fitriana, “Data” by twist.glyph, “social studies” by Studio 365, “coding” by Gregor Cresnar from Noun Project (CCBY3.0).

