

FACHREFERENT ODER DATENKURATOR?

DIE ZUKUNFT WISSENSCHAFTLICHER BIBLIOTHEKAR/INNEN VOR DEM HINTERGRUND DES FORSCHUNGSDATENMANAGEMENTS



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HAUTE ECOLE DE GESTION, GENÈVE

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ÜBERBLICK

- Was sind Daten und was sind Forschungsdaten?
- Modelle des Forschungsdatenmanagements
- Orte und Formen der Publikation von Forschungsdaten
- Diskussion

WAS SIND DATEN UND WAS SIND FORSCHUNGSDATEN?

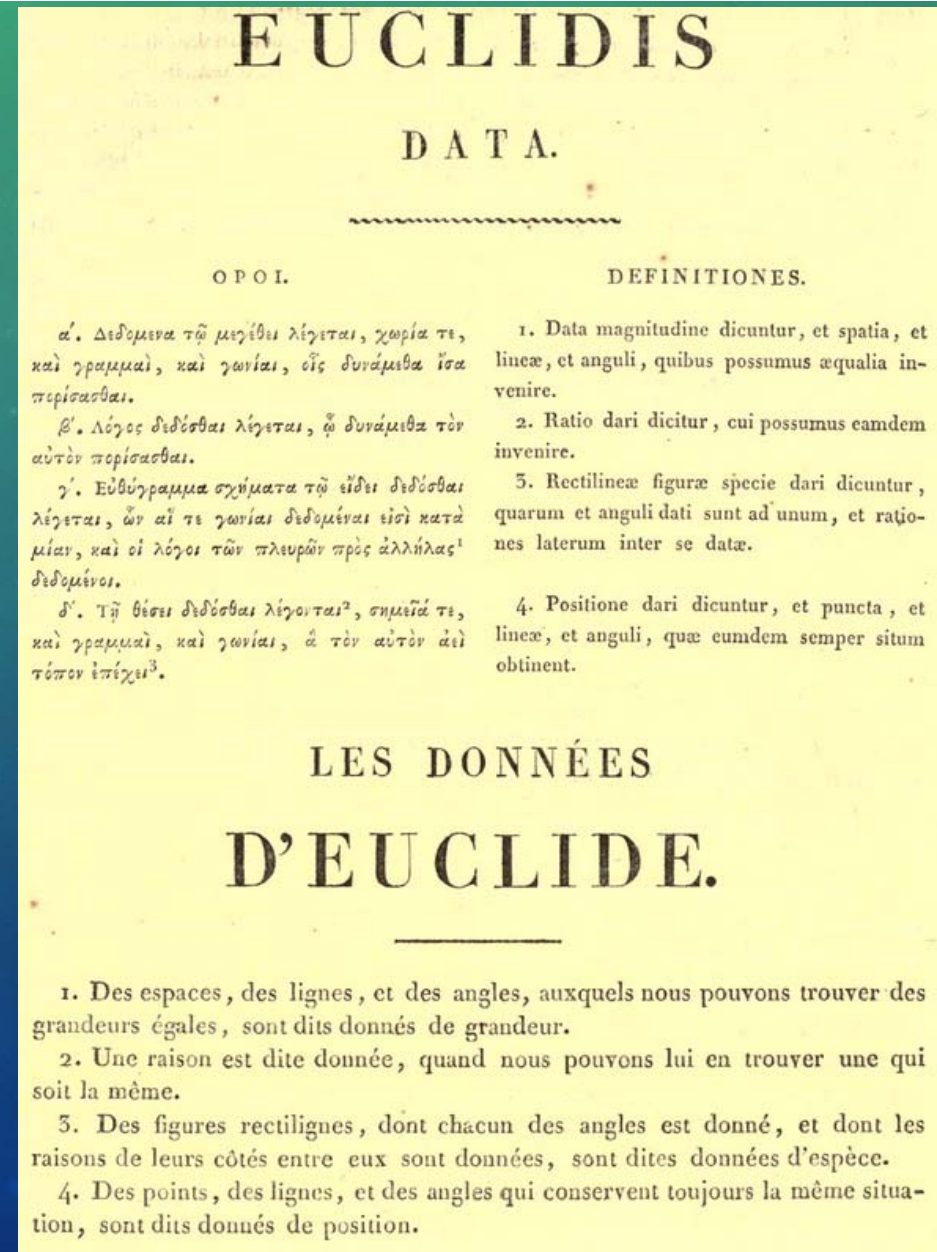


DATEN – ETYMOLOGISCHES

Daten: gr. Δεδομένα, *Dedomena*, das Gegebene

Von Euklid (3. Jhdt v. Chr.) in einem so betitelten Werk definiert, dann als Data (bspw. durch Boëthius, 5. Jhdt.) so übersetzt.

<https://archive.org/stream/lesuvresdeuclide03eucl#page/300/mode/2up>



DEFINITION FORSCHUNGSDATEN

« any information in binary digital form» - includes digital objects and data bases. (Harvey Ross. Digital Curation. 2010)

Forschungsdaten werden gesammelt, observiert oder erzeugt mit dem Ziel, originelle Forschungsergebnisse (Messungen, Umfragen, Börsenkurse, Kommentare zu einem historischen Manuskript usw.) zu gewinnen oder ihre Validierung zu ermöglichen.

FORSCHUNGSDATEN

Was Forschungsdaten konkret ausmacht oder was sie sind, hängt sehr stark vom Kontext ab, d.h. den Bedingungen der Erzeugung sowie der Perspektive und den Methoden der jeweiligen Wissenschaft.

DATA IN DATA SCIENCE

Data are values of qualitative or quantitative variables, belonging to a set of items.

Set of items are also called populations

Variables: Measurement or characteristic of an item

Qualitative: no order – no scaling

Quantitative: order – either ordinal or metric

Roger D. Peng: Coursera Mooc «Data Science», Johns Hopkins University

DATEN UND ROLLEN

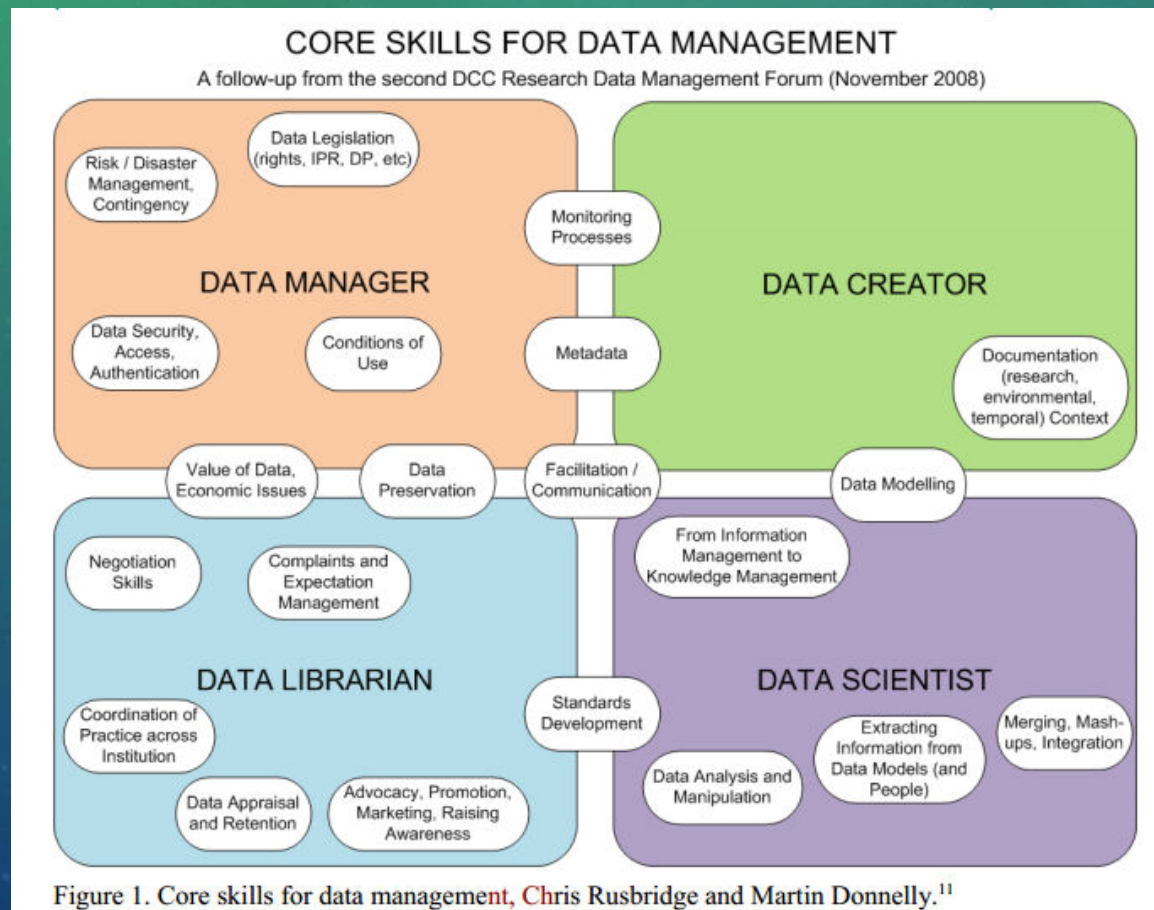
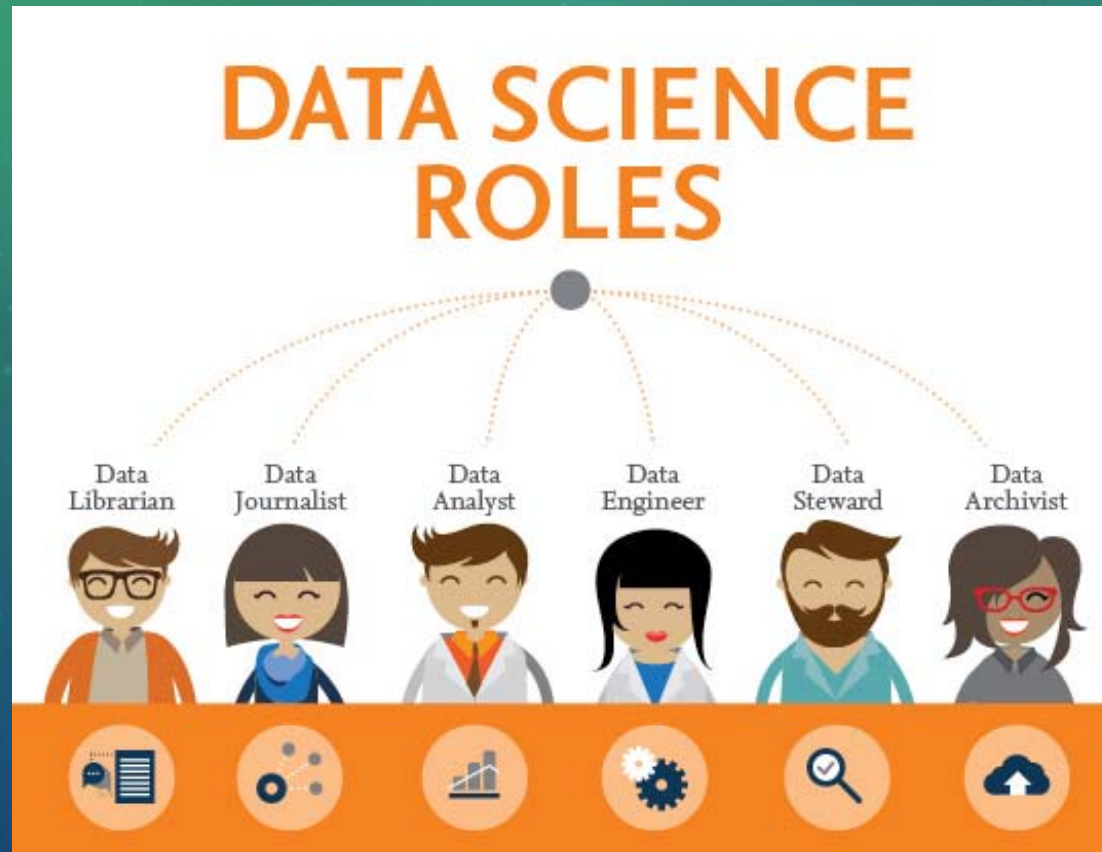


Figure 1. Core skills for data management, Chris Rusbridge and Martin Donnelly.¹¹

DATA SCIENCE ROLES



<http://libraryconnect.elsevier.com/articles/learning-about-research-data-lab-pitt-ischool>

FORSCHUNGSDATEN - BEISPIEL I

Journal of
open archaeology data

(3) Dataset description

Object name

- Archaeobotanical results from Ballynamona 2, Cork, Ireland (.csv file)
- Archaeobotanical results from Mitchelstown, County Cork, Ireland (.csv file)
- Archaeobotanical remains from Mitchelstown and Ballynamona, Middle/Late Bronze Age house sites in Cork, Ireland (.pdf file)

Data type

Primary data and final report.

Format names and versions

.csv, .pdf

Creation dates

This dataset was created between 1 December 2005 and 30 November 2011.

Dataset creators

Penny Johnston.

Language

English

License

CC-BY

Repository location

- DOI 10.5281/zenodo.8563
(<https://zenodo.org/record/8563#.UzgiT6hdWSo>)
- DOI 10.5281/zenodo.8564
(<https://zenodo.org/record/8564#.UzgiGahdWSo>)
- DOI 10.5281/zenodo.8565
(<https://zenodo.org/record/8565#.UzgiGahdWSo>)

Publication date

30 March 2014

Johnston, P 2014 Archaeobotanical Data from Two Middle and Later Bronze Age Round House Sites in Cork, Ireland. *Journal of Open Archaeology Data*, 3: e1, DOI: <http://dx.doi.org/10.5334/joad.ac>

FORSCHUNGSDATEN – BEISPIEL II

Earth System Science Data

The Data Publishing Journal

Earth Syst. Sci. Data, 7, 311-317, 2015
http://www.earth-syst-sci-data.net/7/311/2015/
doi:10.5194/essd-7-311-2015
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Volume 7, issue 2

Article

Peer review

Metrics

Related articles

Review article

16 Nov 2015

CO₂-flux measurements above the Baltic Sea at two heights: flux gradients in the surface layer?

A. Lammert and F. Ament


Meteorological Institute, University of Hamburg, Bundesstr. 55, 20146 Hamburg, Germany

Received: 19 Jun 2015 – Published in Earth Syst. Sci. Data Discuss.: 13 Jul 2015

Revised: 23 Oct 2015 – Accepted: 26 Oct 2015 – Published: 16 Nov 2015

Abstract. The estimation of CO₂ exchange between the ocean and the atmosphere is essential to understand the global carbon cycle. The eddy-covariance technique offers a very direct approach to observe these fluxes. The turbulent CO₂ flux is measured, as well as the sensible and latent heat flux and the momentum flux, a few meters above the ocean in the atmosphere. Assuming a constant-flux layer in the near-surface part of the atmospheric boundary layer, this flux equals the exchange flux between ocean and atmosphere. The purpose of this paper is the comparison of long-term flux measurements at two different heights above the Baltic Sea to investigate this assumption. The results are based

25 DATEIEN IM NETCDF-FORMAT, PUBLIZIERT AUF PANGAEA

1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/> 	6 <input type="checkbox"/>
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2008-07-01T00:00:00	2008-07-31T23:30:00	Link	fino2_flux_200807.nc	355	application/x-netcdf
2008-08-01T00:00:00	2008-08-31T23:30:00	Link	fino2_flux_200808.nc	355	application/x-netcdf
2008-09-01T00:00:00	2008-09-30T23:30:00	Link	fino2_flux_200809.nc	344	application/x-netcdf
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2011-11-10T00:00:00	2011-11-30T23:30:00	Link	fino2_flux_201111.nc	242	application/x-netcdf

FORSCHUNGSDATEN - BEISPIEL III



The image shows a screenshot of a web page from Biodiversity Data Journal. The page has a dark blue header with the journal's logo and navigation links. Below the header, there is a green button labeled 'Data Paper'. The main content area features the article title, authors, and a list of sections including 'Abstract' and 'Background'. The background of the entire image is a green-to-blue gradient with a starry pattern.

 Biodiversity Data Journal

About Browse Articles About Pensoft Books E-Books Blog Journals

Data Paper Biodiversity Data Journal 3: e5792 (02 Sep 2015)
doi: 10.3897/BDJ.3.e5792

Global Cicada Sound Collection I: Recordings from South Africa and Malawi by B. W. Price & M. H. Villet and harvesting of BioAcoustica data by GBIF

▼ Ed Baker, Benjamin Wills Price, Simon Rycroft, Martin H. Villet

Abstract

Background

Sound collections for singing insects provide important repositories that underpin existing research (e.g. Price et al. 2007 at <http://bio.acousti.ca/node/11801>; Price et al. 2010) and make bioacoustic

CA. 250 WAV DATEIEN, PUBLIZIERT AUF BIOACOUSTICA

bioacoustica

HOME BROWSE BY TAXON BROWSE MAP ANALYSES COLLECTIONS LITERATURE HELP DATA INTEGRITY CHECKS

Home » 847(2): Platypleura "sp. 10"

847(2): Platypleura "sp. 10"

<

Play / Pause

Download

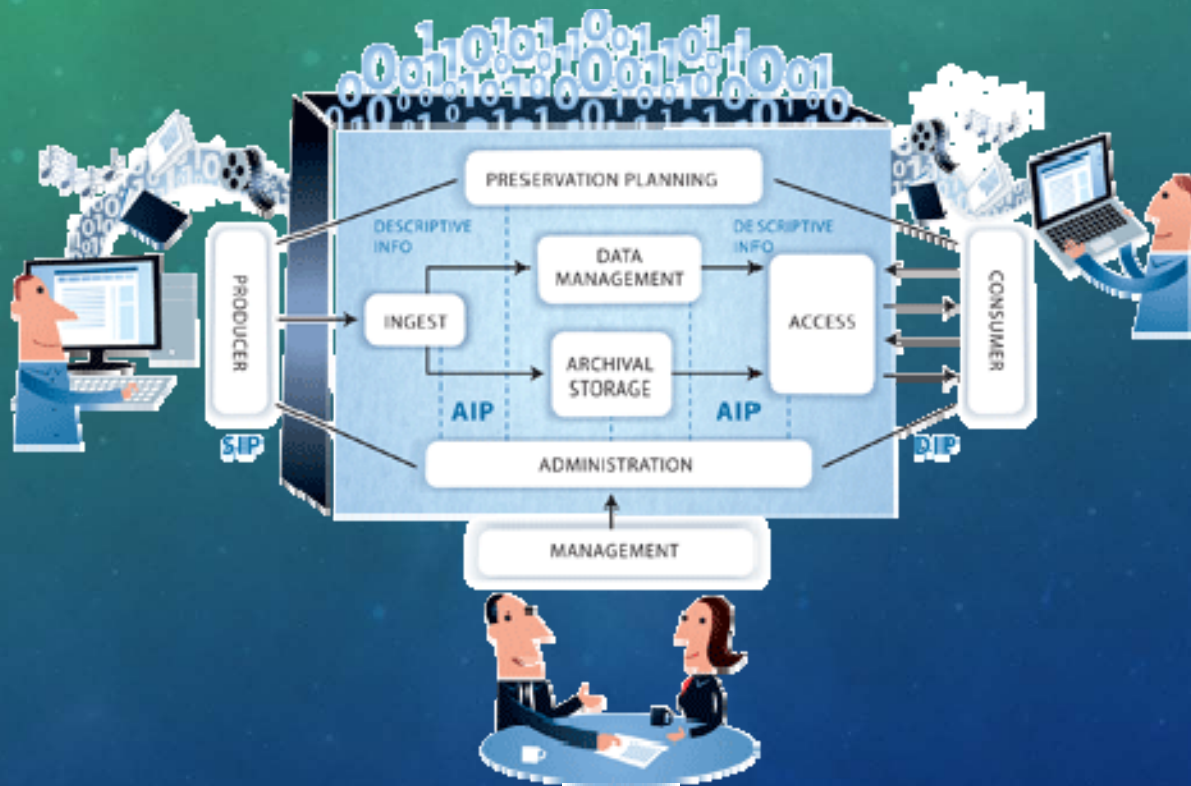
Basic	Project: GCSC 1: South Africa and Malawi
Source	Species: Platypleura "sp. 10"
Recording	Specimen: MHV - Audio - 847
Rights	

BEISPIEL: DATENJOURNALISMUS

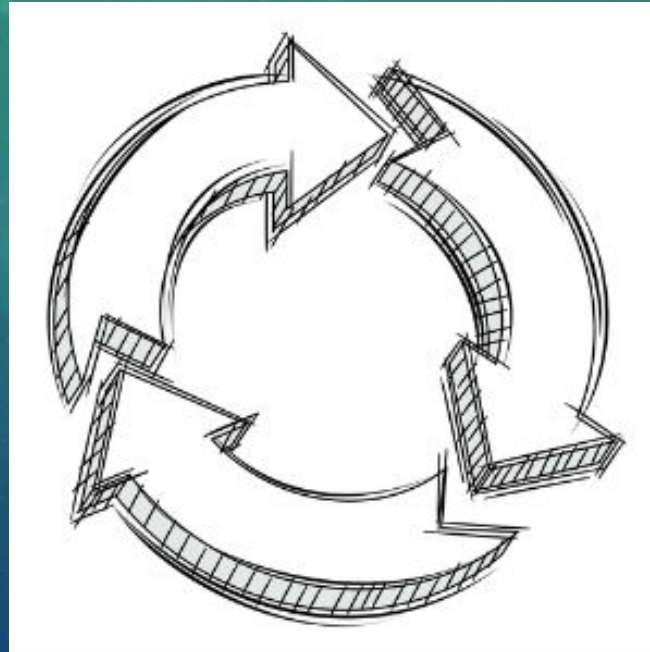
🏠 **Frankfurter Allgemeine** ☰ | Klangökologie: Die Symphonien der Natur

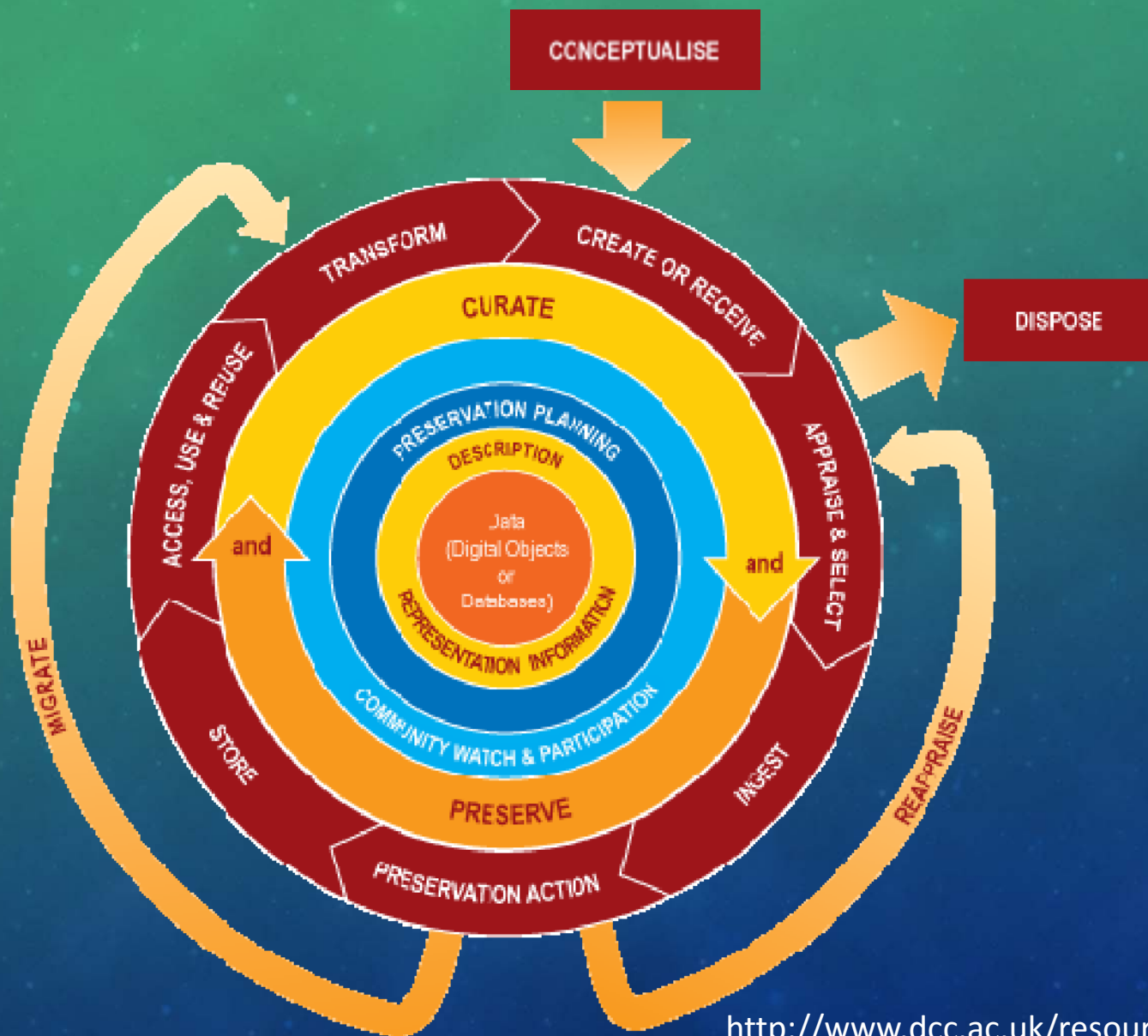


MODELLE DES FORSCHUNGSDATENMANAGEMENTS



LIFE CYCLE





<http://www.dcc.ac.uk/resources/curation-lifecycle-model>

DATA CONTINUUM



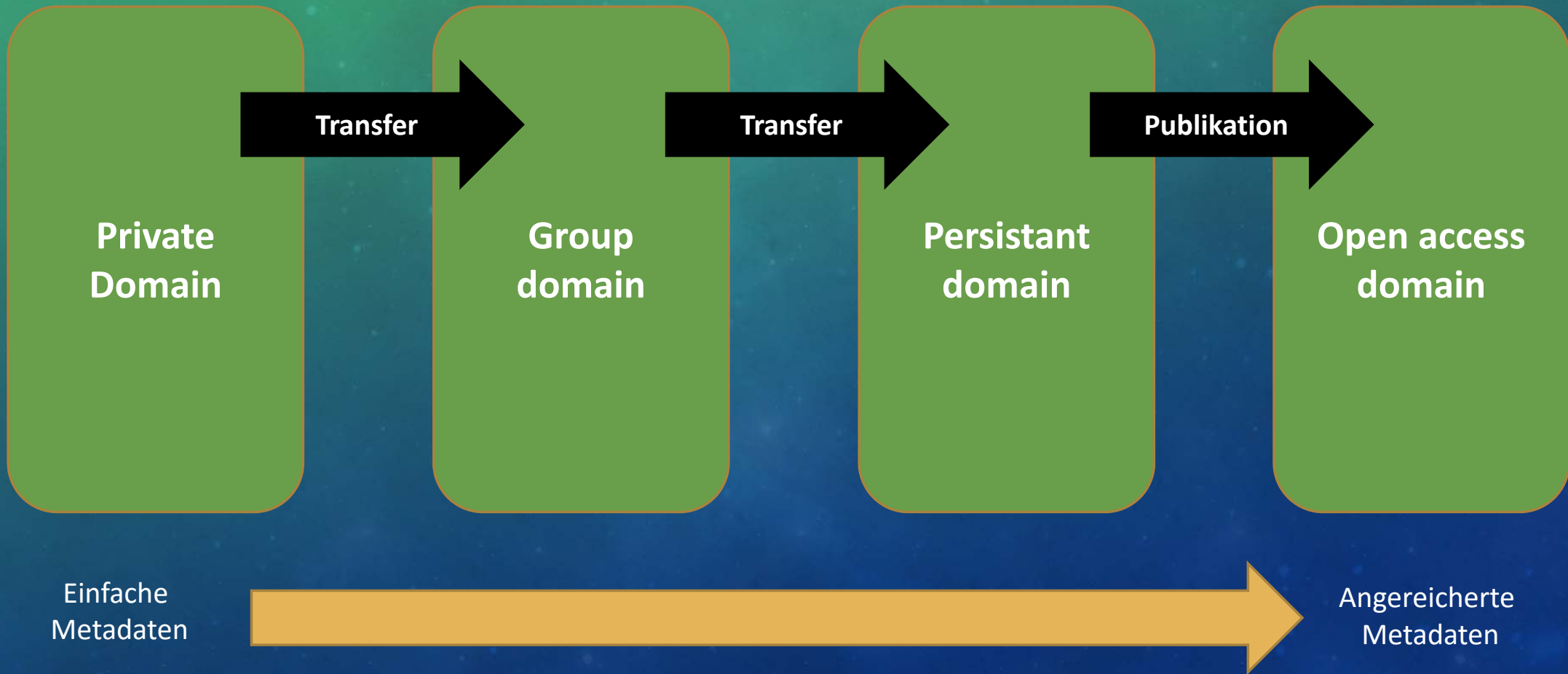
Credit: NASA

Einfache
Metadaten

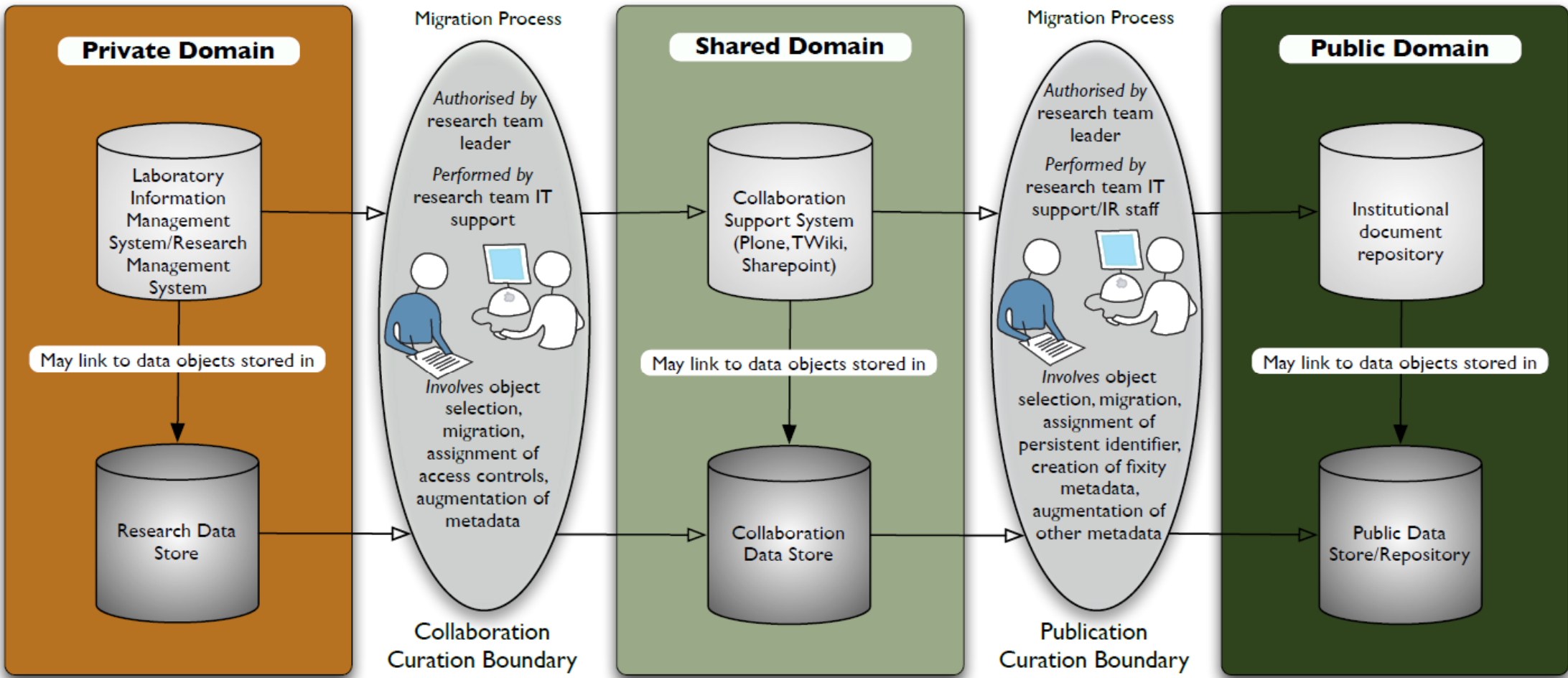


Angereicherte
Metadaten

DATA CONTINUUM MODEL



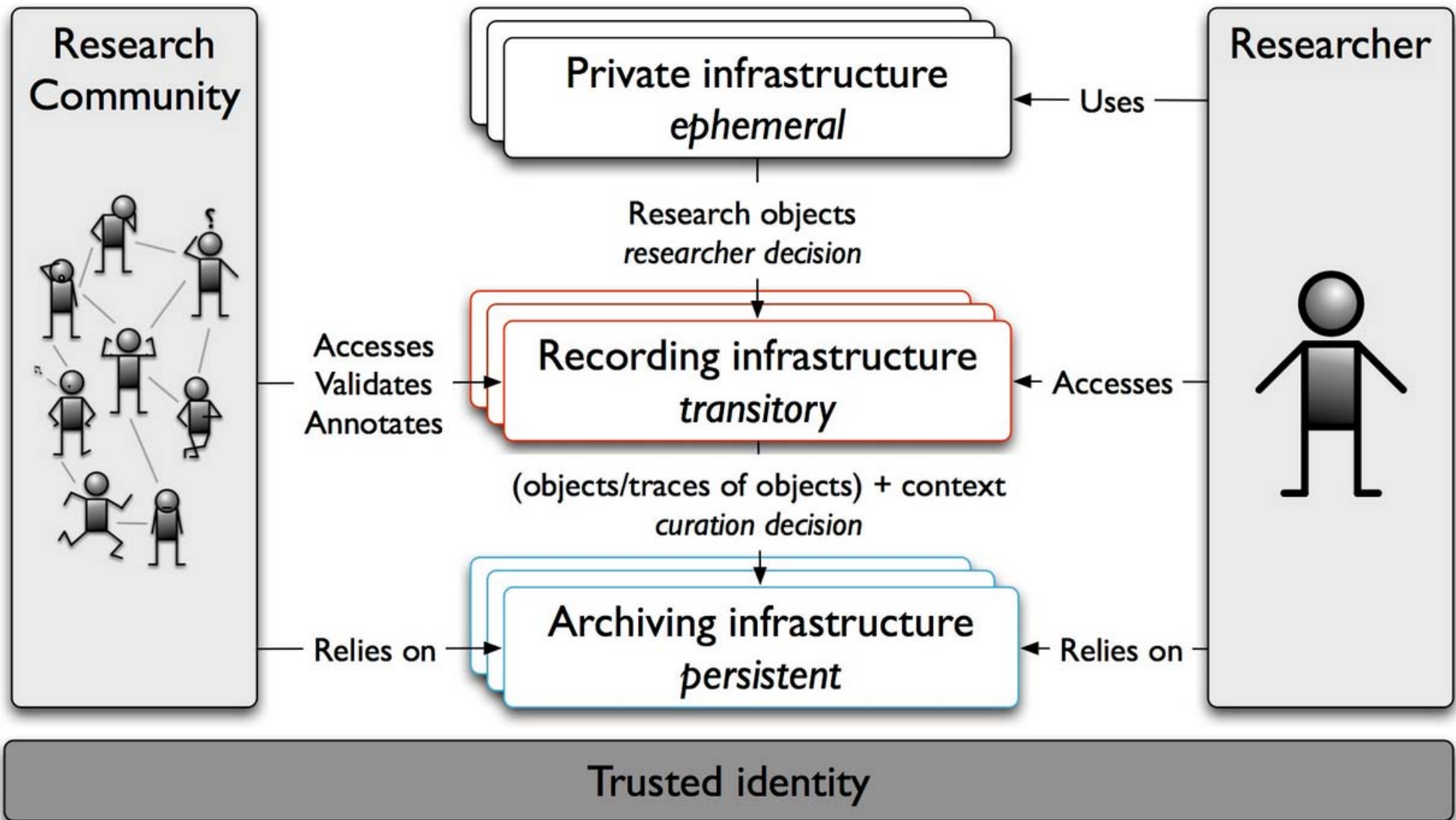
Private Research, Shared Research, Publication, and the Boundary Transitions



This domain involves the core research team as they undertake the research, usually within a single institution. Access is often tightly controlled as hypotheses and analyses are developed.

This domain involves researchers outside the core team as they collaborate with colleagues, often across institutions. Access is more open, but not everything is shared.

This domain involves the public sphere (publication in the sense of making public). Access usually open to all.



DATA CURATION



“active and on-going management of data through its lifecycle of interest and usefulness to scholarship, science, and education” through activities that “enable data discovery and retrieval, maintain quality, add value, and provide for re-use over time.”

<http://hdl.handle.net/2142/3493>

FRAGEN BIS HIERHIN?

ORTE UND FORMEN DER PUBLIKATION VON FORSCHUNGSDATEN



AUFGABE








Welches ist der beste Ort für Ihre Forschungsdaten?

<http://tinyurl.com/zfbqeyw>

LÖSUNG

Welches ist der beste Ort für
Ihre Forschungsdaten?

Ein Datenzentrum oder ein disziplinäres Repository	→	
Ein institutionelles Repository	→	
Selbstpublikation in einem Cloud-System (wie Figshare)	→	
Auf der Website eines Verlags, als Anhang zu einem wissenschaftlichen Artikel	→	
Auf der Webseite des Projekts oder der Institution	→	

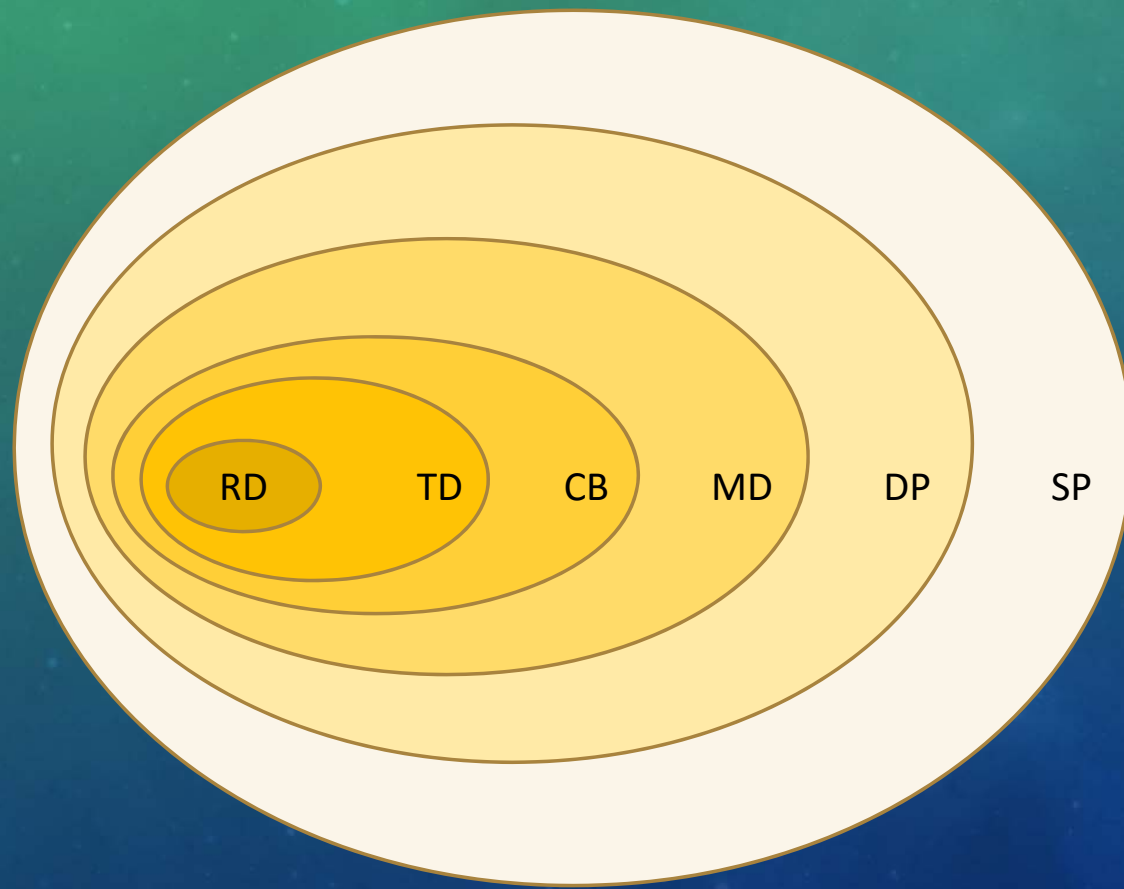
AUFGABE



Welches sind die möglichen Publikationsformen für Ihre Forschungsdaten?

<http://tinyurl.com/zodlld7>

ZWIEBELMODELL DATENPUBLIKATION



RD = Rohdaten

TD = Tidy Data

CB = Code Book & Recipe

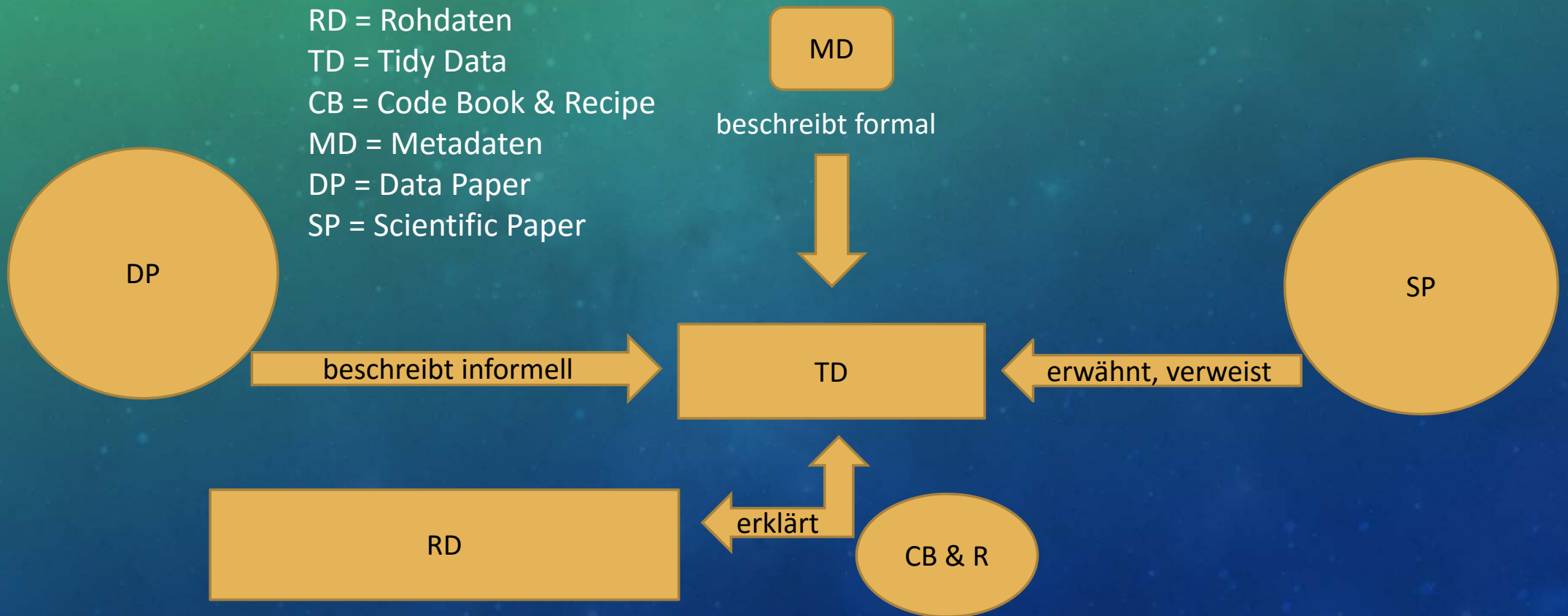
MD = Metadaten

DP = Data Paper

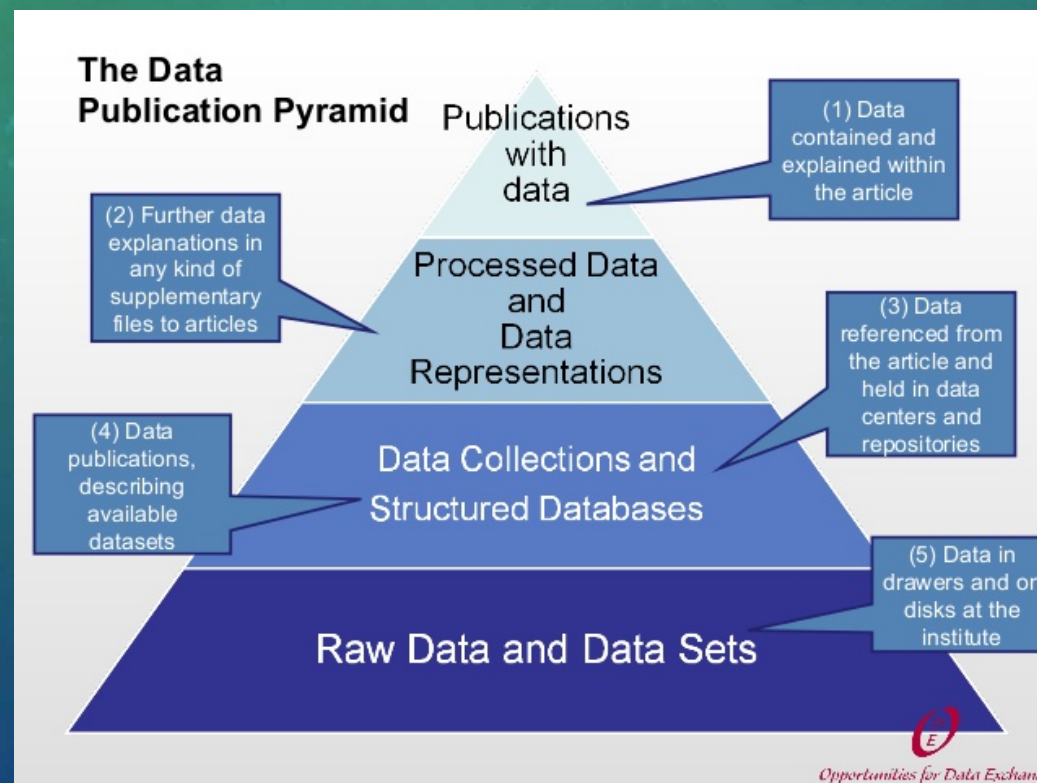
SP = Scientific Paper

DATENPUBLIKATION

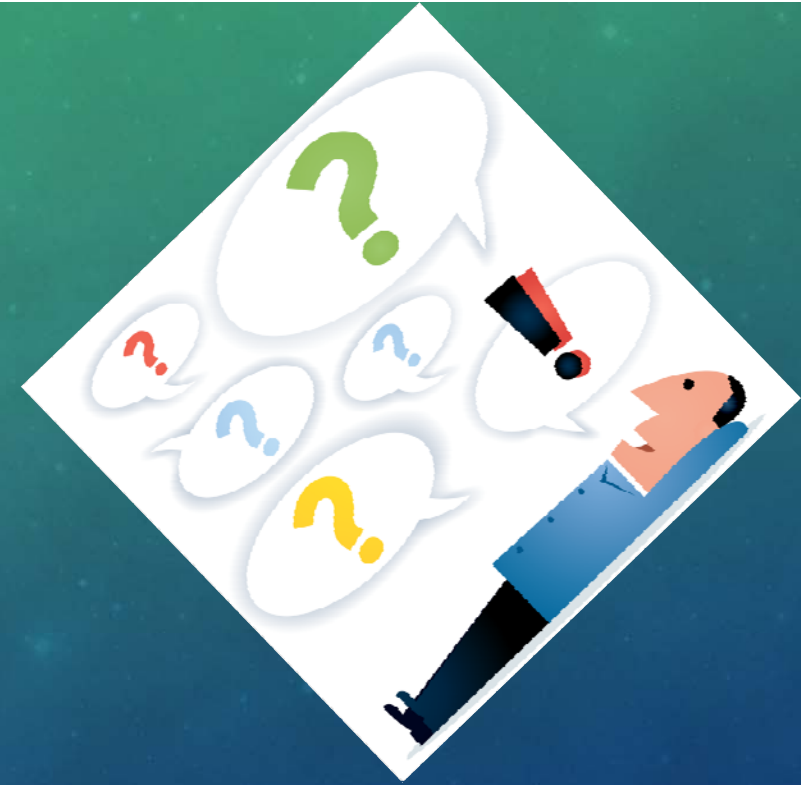
RD = Rohdaten
TD = Tidy Data
CB = Code Book & Recipe
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SP = Scientific Paper



DATA PUBLICATION PYRAMID

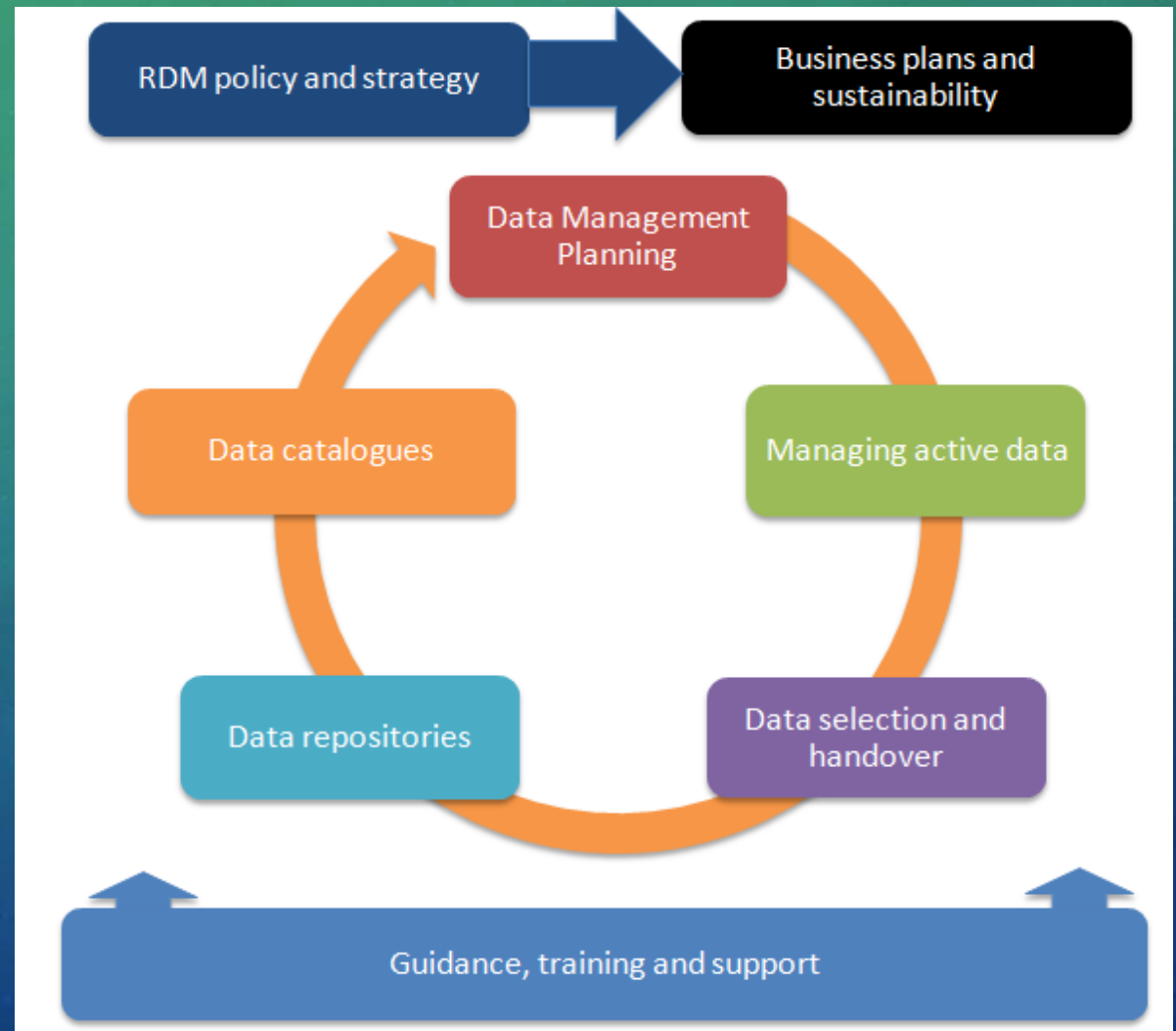


DISKUSSION



Was kann der Beitrag des wissenschaftlichen Bibliothekars für das Forschungsdatenmanagement sein?

DIENSTLEISTUNGEN



Jones, S., Pryor, G. & Whyte, A. (2013). 'How to Develop Research Data Management Services - a guide for HEIs'. DCC How-to Guides. Edinburgh: Digital Curation Centre. 2013, <http://www.dcc.ac.uk/resources/how-guides>.

DISCIPLINARY DATA DEEP DIVE



<http://cloud4good.com/wp-content/uploads/2015/08/data-dive.jpg>

OFFENE FRAGEN?

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