

Research Data Management Competency Framework

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Introduction

NFDI4Objects Task Area 6, “Commons and Qualification,” aims to create a **Research Data Management Competency Framework (Kompetenzrahmen)** specifically for handling data related to studying the past through its material remains. The NFDI4Objects-RDMCF will be shared with practitioners, educators, and managers as a guide for shaping training programs and job descriptions.

The framework: present and future

We have developed a tentative framework structure by comparing **existing frameworks** and examining a selection of courses taught in Germany from winter 2014/15 to summer 2023 from the **IANUS (Lehrangebote) dataset (Schmidt 2024)**. This framework defines **competency cells** as the intersection of areas/domains, proficiency levels, and dimensions. These competency cells can be used to create **competency profiles** for courses, degrees, positions, and individuals (e.g., as a descriptor on a CV). We plan to further refine the competency cells and profiles with **feedback** from other activities and experts in the NFDI4Objects consortium.

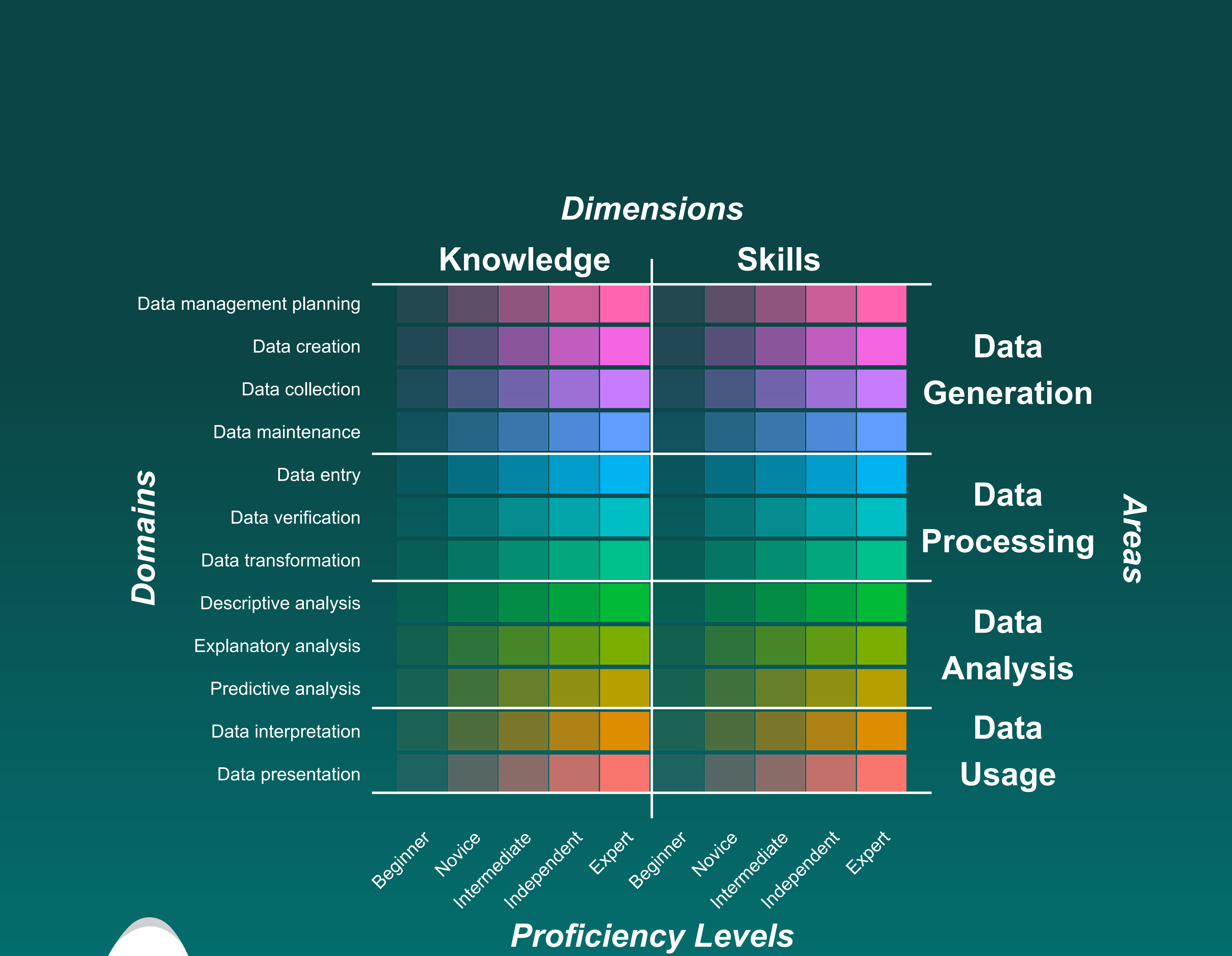
Open and reproducible document

The NFDI4Objects-RDMCF is kept as a **HTML Quarto Book** in *perpetual beta state*.

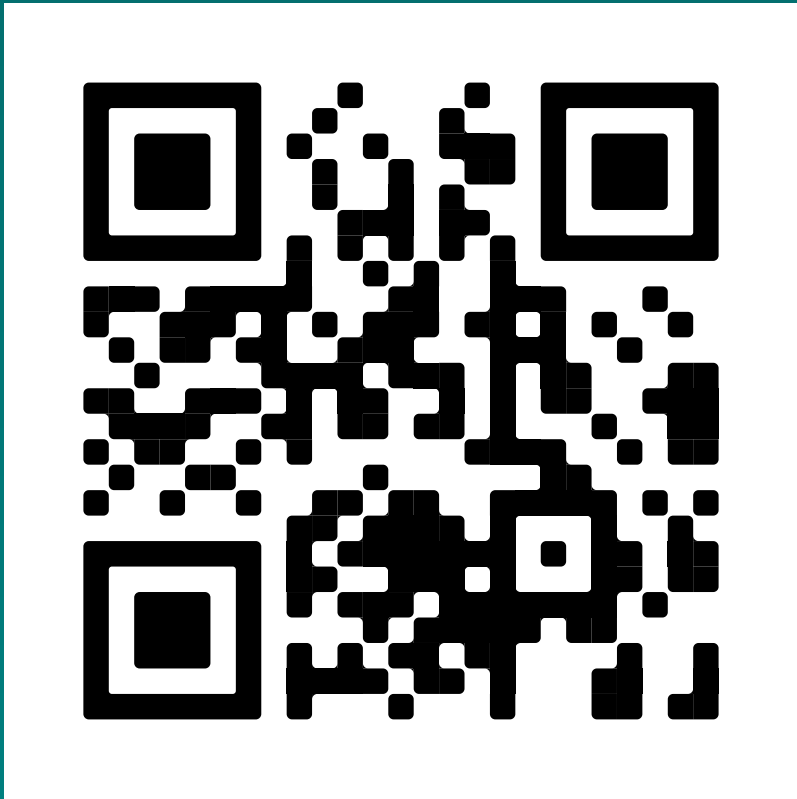
We call any NFDI4Objects participant or community member interested in contributing to access the repository, register and engage!

https://gitlab.rlp.net/n40/competence_framework

Towards a better qualification system based on NFDI4Objects community expertise



NFDI4Objects – TA6



Document structure

- Introduction
- Part A: Current state
 - Existing courses and trainee programmes

Institution <i>Einrichtung</i>	Title <i>Veranstaltungstitel</i>	Semester	Content keywords <i>Inhalt</i>	Data Lifecycle Management
Universität Augsburg	Digitales Publizieren für KulturwissenschaftlerInnen. Einführung in XML und seine praktische Anwendung (HTML, PEI, EPUB)	WiSe 2018/19	Programmierung Online-Ressourcen Internet Digitalisierung	Data creation Data processing an Data usage
Freie Universität Berlin	Prospektions- und Ausgrabungspraktikum	SoSe 2016		
Humboldt Universität Berlin	GIS und Gräberfelder - eine praktische Einführung	SoSe 2021	gis	Data creation Data usage
Ruhr- Universität Bochum	Digitalisierung im Museum: Praktische Anwendungen	WiSe 2020/21	3D-Modellierung Software und Tools Visualisierung 3D Scan Digitale Dokumentation Digitalisierung	Data creation Data processing an Data usage Data archiving Data destruction

- Analysis



- Part B: Derivation of the competence framework
 - Existing Frameworks
 - **US National Institute of Health NIH and Office of Human Resources (2017)**
 - **WHO Western Pacific (2023)**
 - **Schüller, Busch , and Hindinger (2019)**
 - **Petersen et al. (2023)**
 - Comparative synthesis of existing frameworks
- PART C: NFDI4Objects Competency Framework
 - Framework structure and components
 - ← **(chapters per Competency Area)**
 - Attitudes
- Recommendations

References

“IANUS - Forschungszentrum Archäologie & Altertumswissenschaften.” n.d. Accessed February 20, 2024. <https://ianus-fdz.de/lehrangebote/>.
Petersen, Britta, Claudia Engelhardt, Tanja Hörner, Juliane Jacob, Tatiana Kvetnaya, Andreas Mühlchen, Hermann Schranzhofer, et al. 2023. “Lernzielmatrix Zum Themenbereich Forschungsdatenmanagement (FDM) Für Die Zielgruppen Studierende, PhDs Und Data Stewards.” Zenodo. <https://doi.org/10.5281/zenodo.8010617>.
Schmidt, Sophie C. 2024. “SCSchmidt/ArchIT-LV_analysis: Preprint.” Zenodo. <https://doi.org/10.5281/zenodo.10498365>.
Schüller, Katharina, Paulina Busch , and Carina Hindinger. 2019. “Future Skills: Ein Framework Für Data Literacy.” Zenodo. <https://doi.org/10.5281/zenodo.3349865>.
US National Institute of Health NIH, and Office of Human Resources. 2017. “Competencies Proficiency Scale.” Text. *National Institutes of Health, Office of Human Resources*. <https://web.archive.org/web/20240425101205/https://hr.nih.gov/working-nih/competencies/competencies-proficiency-scale>.
WHO Western Pacific. 2023. *Data Management Competency Framework*. Manila: World Health Organization Regional Office for the Western Pacific. <https://www.who.int/publications-detail-redirect/9789290620099>.