Guide to this work	
About this document	This document collects information related to the Vocabulary Development work of NSF Eager award # 2335827, primarily 1) a proposed glossary and 2) a proposed crosswalk of key terms related to usage and impact information of scholarly outputs, but also including background and related sources and notes.
Version date	Version 1, August 30, 2024
Purpose & audience	The final, shared output is intended for the spectrum of scholarly communications stakeholders with direct and indirect interest in or reliance on usage and impact of scholarly outputs, broadly defined. *Key terms* related to usage and impact information are collected here from existing, openly available sources that explicitly provide definitions, such as glossaries.
Scope and criteria	Glossary and crosswalk terms are focused on scholarly outputs and the contexts in which their use is counted and evaluated. The crosswalk has the majority of terms; common, key terms are often found in multiple sources. Including that variety is meant to help contextualize terms, even where definitions have only slight variations. Terms included in the glossary are those for which one definition was found; for terms without a common, accepted definition or that surely have varied understandings (e.g. open access) one definition is included as a starting point. It's possible terms could move from the glossary to the crosswalk, with additional definitions, or that terms could move from the crosswalk to the glossary with community agreement. New definitions are not created for this work nor are they adapted from existing ones. All terms use existing definitions, from open/public access sources that specifically provide definitions, with the exception of using organizations' own 'about' information which, in some cases, is edited for length. While the glossary and crosswalk include terms not directly about scholarly research, this resource is not meant to cover the span or history of terminology used in the broad categories of institutional and researcher assessment, web metrics or non-research data, nor is this meant to comprehensively cover or duplicate all usage-related vocabularies. Criteria for inclusion are: 1) basic and common, key usage terminology, 2) terms for contextualizing use cases, 3) general, industry and/or technical terms commonly used in conjunction with usage and impact, 4) variations of or conflicts among key or common terms, 5) recency, i.e. terms as they are currently defined, particularly for technological terms and 6) terms and definitions from sources with wide adoption, scale and/or influence. The scope of this work is limited to English language resources.
Index of worksheet tabs	**Guide to this document:** the current sheet, see above
	List of all terms: alphabetical list of glossary and crosswalk terms (without definitions) and which of the two resources they're included in. See also Organizations
	Glossary: single source definitions
	Crosswalk: definitions from multiple sources
	Organizations: organizations, initiatives and related services and terms, e.g. COUNTER and its Code of Practice
	Observations: feedback and observations of note from interviews and desk research presented as gaps, challenges and opportunities
	Sources used: 1) sources used in the glossary, crosswalk and organizations list, including links, categories and notes and 2) those that were used in the desk research, referenced in sources used or do not contribute terms directly to the glossary, crosswalk or organizations but that may be of interest to readers
	Term categories: what each category applied to terms in the glossary and crosswalk indicates (wholly or predominantly)
	Pivot_Summary: pivot table including all terms, the number of definitions for each, their categories, the count of terms in each category
	Pivot_Glossary terms by category: a pivot table of all Glossary terms, including the definition of each and its term category
	DefinitionCount: an alphabetical list of all terms with the term category and count of definitions for each

Key Usage and Impact Vocabulary Terms	*Alphabetical list of terms and organizations/initiatives and related service names only, without definitions or sources.*
Term(s)	**Found in**
Access denied, turnaway	Crosswalk
Access method	Crosswalk
Accuracy (of data)	Glossary
API (Application Programming Interface)	Crosswalk
Archive. *see also Repository*	Crosswalk
Authentication	Crosswalk
(Author) Accepted manuscript (AM, AAM)	Crosswalk
Aggregator	Crosswalk
Altmetrics	Crosswalk
Analytics. *See Web analytics*	Glossary
Author affiliation	Crosswalk
Bibliometrics	Crosswalk
CARE Principles	Glossary
Checksum	Glossary
Citation	Crosswalk
Citation analysis	Crosswalk
Completeness (of data)	Glossary
COUNTER Metrics	Organizations/initiatives
Crawler, Internet robot, spider, bot	Crosswalk
Crossref	Organizations/initiatives
DataCite	Organizations/initiatives
Data citation	Crosswalk
Data consumer, Report consumer	Crosswalk
Data dictionary	Crosswalk
Data harvesting, harvest, -er, -ing	Crosswalk
Data/metadata producer, provider	Crosswalk
Data quality, data integrity	Crosswalk
Data, security of	Crosswalk
Dataset, Data set	Crosswalk
Data sovereignty	Crosswalk
Data type, content type, output, resource type, document type	Crosswalk
De-identification	Crosswalk
Discovery layer	Glossary
Discovery service	Glossary
DOI (Digital Object Identifier)	Crosswalk
Download(s)	Crosswalk
DUL (Distributed Usage Logging)	Glossary
Eigenfactor (score)	Crosswalk
Element	Crosswalk
EOSC (European Open Science Cloud)	Organizations/initiatives
FAIR (data principles)	Crosswalk
Federated (data, search, identity, etc.), federation	Crosswalk
Harvest. *See data harvesting*	Crosswalk
h-index	Crosswalk
Impact	Crosswalk
(Journal) Impact Factor (IF)	Crosswalk
Ingest	Glossary
International Data Spaces (IDS)	Organizations/initiatives
IRUS (Institutional Repository Usage Statistics), Jisc	Organizations/initiatives
License	Crosswalk
Link resolver	Glossary
Machine actionable	Crosswalk
Machine readable	Crosswalk

Key Usage and Impact Vocabulary Terms	*Alphabetical list of terms and organizations/initiatives and related service names only, without definitions or sources.*
Term(s)	**Found in**
Make Data Count	Organizations/initiatives
Mentions	Crosswalk
Metadata	Crosswalk
Metric(s)	Crosswalk
NISO (National Information Standards Organization)	Organizations/initiatives
OAeBU Data Trust (OAeBUDT)	Organizations/initiatives
OCLC	Organizations/initiatives
ONIX, EDitEUR	Organizations/initiatives
Open access	Glossary
Open data	Crosswalk
ORCID	Organizations/initiatives
Output(s), research *See data type*	Crosswalk
Owner, -ship, data owner	Crosswalk
Paywall, loginwall	Crosswalk
Persistent identifier (PID)	Crosswalk
Platform *See service provider*	Crosswalk
Privacy (of data)	Glossary
Provenance: data, metadata	Crosswalk
Public access	Glossary
Publisher	Crosswalk
RDA (Research Data Alliance)	Organizations/initiatives
Repository, data, digital, institutional repository (IR)	Crosswalk
Request	Crosswalk
Response	Crosswalk
Reuse (of data)	Glossary
ROR (Research Organization Registry)	Organizations/initiatives
SCOSS (The Global Sustainability Coalition for Open Science Services)	Organizations/initiatives
Security (of data)	Crosswalk
Sensitive data	Crosswalk
Service Provider, broker, content host, hosting platform, vendor, report provider	Crosswalk
Session	Crosswalk
Standard	Crosswalk
SUSHI (Standardized Usage Statistics Harvesting Initiative)	Crosswalk
Tag	Crosswalk
Text / data mining, TDM	Crosswalk
Transparency (of data)	Glossary
Turnaway, access denied	Crosswalk
Usage (statistics)	Crosswalk
User agent	Glossary
Version of Record (VoR)	Crosswalk
View(s)	Crosswalk
W3C (World Wide Web Consortium)	Organizations/initiatives
Web analytics	Glossary

Glossary of Key Usage and Impact Vocabularies	*This is meant as a curated, community resources glossary, not a controlled set of terms as defined by the American Society for Indexing.* *Key terms included here have one definition. See the Sources Used tab for more source and related permissions information.* *Terms denoted with * are without glossary or consensus definitions. For these, one source was chosen as a starting point. See Notes.* ***See the Crosswalk for more terms.***				
Term	**Definition**	**Term category**	**Source**	**Source URL**	**Notes**
Accuracy (of data)	Accuracy describes the correspondence between a phenomenon in the world and its description as data. When comparing the data value with the empirically ascertainable value, the difference can be determined either in binary terms (equal or unequal) or the degree of difference can be determined by means of a similarity measure (e.g., as the similarity on a scale from 0 to 1). Accuracy plays a role especially for data whose factual correctness can be conclusively determined and whose meaning is not ambivalent. Related terms: Correctness, free of error	data, general	**Data Quality Glossary**	https://zenodo.org/records/10474880	
Analytics. *See Web analytics*		data, general			
CARE Principles	Set of principles for Indigenous data governance. CARE stands for Collective benefit, Authority to control, Responsibility and Ethics. These principles complement the existing FAIR principles.	industry/ scholcomm	**CODATA**	https://zenodo.org/records/10626170	see also the CARE Principles website: https://www.gida-global.org/care
Checksum	Alphanumeric signature (similar to a fingerprint) calculated from a digital object's content and structure using a mathematical algorithm. The algorithm will always produce the same checksum unless any change, no matter how small, is made to the file. Comparing checksums over time facilitates the management of integrity and authenticity of digital content.	technical	**CODATA**	https://zenodo.org/records/10626170	
Completeness (of data)	Completeness is the relationship between the amount of data represented and the amount of data to be represented. While the former can be counted (number of rows, number of non-null values), the latter can often only be estimated. A dataset (e.g., table) is complete with respect to a domain if every entity in the domain is represented in the dataset. A dataset (e.g., row) is complete if there is a value for each attribute (column). Related terms: Missing values	data, general	**Data Quality Glossary**	https://zenodo.org/records/10474880	
Discovery layer	A web-accessible interface for searching, browsing, filtering, and otherwise interacting with indexed metadata and content. The searches produce a single, relevancy-ranked results set, usually displayed as a list with links to full content, when available. Typically, discovery layers are customizable by subscribing libraries and may be personalized by individual users.	industry/ scholcomm	**COUNTER Metrics**	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	
Discovery service	A pre-harvested central index coupled with a fully featured discovery layer. A COUNTER Host_Type.	industry/ scholcomm	**COUNTER Metrics**	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	
DUL (Distributed Usage Logging)	A peer-to-peer channel for the secure exchange and processing of COUNTER-compliant private usage records from hosting platforms to publishers.	usage	**COUNTER Metrics**	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	
Ingest	The process by which a digital object or metadata package is absorbed by a different system than the one that produced it.	technical	California Digital Library (**CDL**)	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#I	
Link resolver	Software that brings together information about the cited resource, the user, and the library's many subscriptions, policies, and services. For the software to work, the content providers must be willing to participate as sources (databases or sites that can provide a link from a reference). The link resolver becomes activated when the user clicks on a link or button ("Search for full text") embedded in the user interface of PubMed (or other services). Using the OpenURL framework, information is bundled together from the source and sent to the resolver software that will process the data and compare it to the Knoweldgebase. The user is then presented with a range of options for locating the article, such as a link to the online article or journal, a listing for the library's print holding for that title, interlibrary loan, or document delivery options.	industry/ scholcomm	California Digital Library (**CDL**)	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#L	
Metric_type	A COUNTER report attribute that identifies the nature of the usage activity.	usage	**COUNTER Metrics**	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	see their glossary for all types
Open access*	UNESCO: Open Access means free access to scientific information and unrestricted use of electronic data for everyone. It also references the Berlin Declaration definition. *See note.*	industry/ scholcomm	**UNESCO**	https://www.unesco.org/en/open-access	Definitions are numerous, contentious and continue to evolve. The glossary limits to one description from a broad, international source as a starting point only. ISO provides definitions of open, free and closed access.

Glossary of Key Usage and Impact Vocabularies	*This is meant as a curated, community resources glossary, not a controlled set of terms as defined by the American Society for Indexing.* *Key terms included here have one definition. See the Sources Used tab for more source and related permissions information.* *Terms denoted with * are without glossary or consensus definitions. For these, one source was chosen as a starting point. See Notes.* ***See the Crosswalk for more terms.***				
Term	**Definition**	**Term category**	**Source**	**Source URL**	**Notes**
Privacy (of data)	Data are private if the persons described in the data have control over and access to that data. Private (also confidential) data protects the user's right to informational self-determination. The legal protection of privacy can be ensured organisationally and technically: organisational privacy can be established through consent declarations by users, which can prohibit the entire use of the data or contain instructions for use (partial deletion, processing, etc.). For the technical establishment of privacy, the data can for example be encrypted or physical access to the storage medium can be restricted. Related terms: Confidentiality, data protection	data, general	**Data Quality Glossary**	https://zenodo.org/records/10474880	
Public access*	OSTP and federal agencies draw distinctions between the terms public access and open access. Public access refers to the free availability of federally funded scholarly materials to the public (including publications, data, and other research outputs) and is a policy term; whereas, open access refers to a broad set of publication sharing principles and practices, including those required by public access, as adopted by the scientific and publishing communities.	industry/ scholcomm	U.S. White House Office of Science and Technology Policy (**OSTP**)	https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Congressional-Report.pdf	The two U.S. OSTP Memos with which the term public access is most closely associated do not explicitly define the term. A related document does and so is used as the source here. This document goes on to reference the UNESCO definition for open access, which is the source used for that term.
Reuse (of data)	Data Reuse, or Secondary Data Analysis, is the analysis of existing data collected by other individuals or institutions for a new research purpose. It can refer to statistical, quantitative data or descriptive, qualitative data.	data, general	(U.S.) National Library of Medicine (**NLM**)	https://www.nnlm.gov/guides/data-glossary/data-reuse	
Transparency (of data)	The dimension of transparency includes disclosure requirements about the origin of training data, information about quality checks performed on datasets, about who labelled the datasets, what the learning goals are, whether and to what extent source code can be viewed, and more. Transparency enables individuals impacted by technical systems to make informed decisions and renders infringements to be identifiable and correctable. Transparency also facilitates societal debates and the building of trust. Related terms: Interpretability, accessibility, documentation	data, general	**Data Quality Glossary**	https://zenodo.org/records/10474880	
User agent	An identifier that is part of the HTTP protocol that identifies the software (e.g. browser) being used to access the site. May be used by robots to identify themselves.	technical	**COUNTER Metrics**	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	
Web analytics*	The collection, measurement, analysis, and reporting of digital data to enhance insights concerning the behavior of website visitors	data, general	Jim Jansen, B.J. (2009). The Foundations of Web Analytics: Theory and Methods. In: Understanding User-Web Interactions via Web Analytics. Synthesis Lectures on Information Concepts, Retrieval, and Services. Springer, Cham.	https://doi.org/10.1007/978-3-031-02264-7_2	Referenced in Jansen BJ, Jung S-g, Salminen J (2022) Measuring user interactions with websites: A comparison of two industry standard analytics approaches using data of 86 websites. PLoS ONE 17(5): e0268212. https://doi.org/10.1371/journal.pone.0268212

Crosswalk of Key Usage and Impact Vocabularies			*Key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions. See the Sources Used tab for more source and related permissions information.* ***See the Glossary for more terms.*** *Use the filter in column B to view terms for select categories.*																			
Term(s)	**Term category**	**# of definitions**	**Definition Provider and Definition 1**	**Definition 1 Source URL(s)**	**Definition Provider and Definition 2**	**Definition 2 Source URL(s)**	**Definition Provider and Definition 3**	**Definition 3 Source URL(s)**	**Definition Provider and Definition 4**	**Definition 4 Source URL(s)**	**Definition Provider and Definition 5**	**Definition 5 Source URL(s)**	**Definition Provider and Definition 6**	**Definition 6 Source URL(s)**	**Definition Provider and Definition 7**	**Definition 7 Source URL(s)**	**Definition Provider and Definition 8**	**Definition 8 Source URL(s)**	**Definition and source 9**	**Definition 9 Source URL(s)**
Access denied, turnaway	usage	2	COUNTER: The user is denied access to a content item because their institution lacks a proper license or because simultaneous user limits specified in the license have been exceeded.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	SPARC: Turnaway: An attempt by a user to access content that was denied because their institution lacked a proper license or simultaneous user limits specified in the license were exceeded.	https://airtable.com/appr ME/98YWDNTx/shH2M ww3xAPuwwQw/tblVCHK rW1p1OYBqd															
Access method	technical	3	COUNTER: A COUNTER report attribute indicating whether the usage related to investigations and requests was generated by a human user browsing and searching a website (Regular) or by Text and Data Mining processes (TDM). Slight variation for research data.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html and, https://www.countermetrics.org/wp-content/uploads/2024/04/Research_Data_20190223.pdf	DataCite: track content usage by machines. The access method can be regular or machine.	https://support.datacite.org/docs/eventdata-guide	OCLC: Method used to log on to a service, download records or reports, or locate additional information. For example, a URL (Uniform Resource Locator) is used to find information on the Internet.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary#A													
API (Application Programming Interface)	technical	3	CDL: A set of instructions or rules that enable two operating systems or software applications to communicate.	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#A	EOSC: set of commands, functions and protocols that specify how software components should interact.	https://zenodo.org/records/4472643	W3C: An Application Programming Interface (API) is an abstraction implemented in software that defines how others should make use of a software package such as a library or other reusable program. APIs are used to provide developers access to data and functionality from a given system. Copyright © 2013 World Wide Web Consortium. https://www.w3.org/copyright/document-license-2023/	https://www.w3.org/TR/d-glossary/#api													
Archive. *see also Repository*	industry/ scholcomm	2	CODATA: (noun) Curated collection or repository containing physical or digital static records, objects, metadata and data deemed suitable for permanent retention, set up and managed to established standards and models, such as ISAD(G), CoreTrustSeal, and the OAIS reference model, that ensure long term integrity, security, authenticity and accessibility of the records, objects, metadata and data.	https://zenodo.org/records/10626170	COUNTER: Non-current collections of journals, books, articles, or other publications that are preserved because of their continuing value and which are frequently made available by publishers as separate acquisitions.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html															
Authentication	technical	2	ACRL: A security process that typically employs usernames and passwords to validate the identity of users before allowing them access to certain information.	https://docs.google.com/document/d/1xhATJO92-HkNgftwrkoyC7ZSgIq0-B_zXZ5LF24xXGs/edit#heading=h.lrk6orfxl4w	EOSC: process of verifying or disproving a claimed digital identity	https://zenodo.org/records/4472643															
(Author) Accepted manuscript (AM, AAM)	industry/ scholcomm	5	COAR: (AM) The version of a resource that has been accepted for publication. A second party takes permanent responsibility for the resource. Content and layout follow publisher's submission requirements. (adapted from NISO-JAV, https://www.niso.org/publications/niso-rp-8-2008-jav)	https://vocabularies.coar-repositories.org/version_types/c_ab4af688f83e57aa/ and https://www.niso.org/publications/niso-rp-8-2008-jav)	COUNTER: The version of a journal article that has been accepted for publication cation in a journal. This version includes any pre-publication revisions, but it does not include any formatting or copyediting changes or corrections.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	NISO: Accepted Manuscript: The version of a journal article that has been accepted for publication in a journal. A second party (the "publisher"—see "Version of Record" below for definition) takes permanent responsibility for the article. Content and layout follow publisher's submission requirements.	https://www.niso.org/sites/default/files/2017-08/RP-8-2008.pdf	Open Research Glossary: The version of a manuscript that has been accepted by a publisher for publication.	https://zenodo.org/records/20212	UKCORR: The version of a journal article that has been accepted for publication: cation in a journal. A second party (the 'publisher') takes permanent responsibility for the article. Content and layout follow publisher's submission requirements." *References a NISO PDF with a broken link* : https://groups.niso.org/publications/rp/RP-8-2008.pdf	https://www.ukcorr.org/glossary/								
Aggregator	industry/ scholcomm	2	EOSC: IT service that collects information about digital content from a variety of sources with the primary goal of increasing its discoverability, and possibly adding value to this information via processes like curation, abstraction, and classification, and linking.	https://zenodo.org/records/4472643	SPARC: Third-party platform that licenses journal content for subscription at a database level (e.g., EBSCO, ProQuest, Gale).	https://airtable.com/appr ME/98YWDNTx/shH2M ww3xAPuwwQw/tblVCHK rW1p1OYBqd															
Altmetrics	assessment/ metrics	3	Crossref: From Wikipedia: In scholarly and scientific publishing, altmetrics are non-traditional metrics proposed as an alternative to more traditional citation impact metrics, such as impact factor and h-index. Proposed as generalization of article level metrics.	https://www.eventdata.crossref.org/guide/app-gloss/ and, https://en.wikipedia.org/wiki/Altmetrics	Meaningful Metrics: A set of methods based in the social web used to measure, track, and analyze scholarly output. Originally "alt-metrics," altmetrics is one of the newest additions to the study of impact.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	Open Research Glossary: Altmetrics are alternative ways of recording and measuring the use and impact of scholarship. Rather than solely counting the number of times a work is cited in scholarly literature, alternative metrics also measure and analyze social media (e.g., Facebook, Twitter, blogs, wikis, etc.), document downloads, links to publishing and unpublished research, and other uses of research literature, in order to provide a more comprehensive measurement of scholarships reach and impact. *Cites a University of Pittsburgh source that is a broken link* : http://library.pitt.edu/oscp/glossary	https://zenodo.org/records/20212															
Author affiliation	industry/ scholcomm	3	ISO: 3.7.1.03 author affiliation: corporate body (3.1.1.57) to which an author (3.7.1.01) is attached ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	OCLC: Institution an author is affiliated with, as indicated on a title page or following an author name.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/FirstSearch_glossary#A	SPARC: Institutions (e.g., university, non-profit, think tanks) that an author is attached to.	https://airtable.com/appMEi98YWDNTx/shH2Mw3xAPuwwQw/tblVCHKrW1p1OYBqd													
Bibliometrics	assessment/ metrics	4	ISO: 3.1.3.07 bibliometrics: mathematical and statistical methods applied to the use of documents (3.1.1.38) and the patterns of publication (3.1.8.27) ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	Meaningful Metrics: A set of quantitative methods used to measure, track, and analyze print-based scholarly literature; a field of research concerning the application of mathematical and statistical analysis to print based scholarly literature. Sometimes defined as a branch of library and information science. The term bibliometrics was invented in the late 1960s as an update of statistical bibliography.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	NISO: A set of quantitative methods used to measure, track, and analyze scholarly literature; an established field of research concerning the application of mathematical and statistical analysis to print-based scholarly literature. Sometimes defined as a branch of library and information science.	https://groups.niso.org/higherlogic/ws/public/download/17091	Open Research Glossary: Bibliometrics is the branch of library and information science concerned with the application of mathematical and statistical analysis to bibliography. Bibliometrics involves the statistical analysis of books, articles, or other publications.	https://zenodo.org/records/20212													
Citation (metrics), Times cited *See also Data citation*	industry/ scholcomm	9	Clarivate: A citation is a reference to an earlier patent (both US patents and foreign patents) or to previously published articles.	https://webofscience.help.clarivate.com/en-us/Content/glossary.htm	COUNTER: A reference to a published or unpublished source.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	DataCite: A citation is a reference to supporting research outputs that underlie the content being published. In the same way researchers routinely provide a bibliographic reference to other scholarly resources- references to other research outputs like data, software, instruments and samples should also be included. These types of resources are often shared, but they are not often cited in the same way as journal articles or other publications. This is important because it facilitates access, transparency and reproducibility, reuse, credit for researchers and visibility for the repositories that share research outputs.	https://support.datacite.org/docs/glossary-of-commonly-used-terms&	FORCE11: A formal structured reference to another scholarly published or unpublished work (adapted from https://www.jstage.jst.go.jp/article/dsj/12/0/12_OSOM13-043/_pdf).	https://force11.org/info/data-citation-principles-glossary/ adapted from https://www.jstage.jst.go.jp/article/dsj/12/0/12_OSOM13-043/_pdf	ISO: 3.5.8.16 citation: reference in one document (3.1.1.38) to another document or to part of it Note 1 to entry: See also quotation (3.5.8.23) and ISO 24619:2011, definition 3.1.16. ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	Meaningful Metrics: Citation: A formal reference that makes clear the influence of another work on a researcher's new output. A citation should provide readers with all crucial information for identifying and locating the influencing work, often following a style guide's conventions. Times cited: An article-level bibliometric that measures the number of times an entity has been cited according to a given data source or sources. Times cited is classically applied to individually scholarly entities, such as journal articles, but can also refer to the number of times an author or a venue like an academic institution has been cited. Because it's impossible to accurately trace all the ways, places, and methods an entity can be cited, times cited metrics must be considered, at best, minimal estimates.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	Metrics Toolkit: Citations, Articles: The number of times that a journal article or preprint has appeared in the reference list of other articles and books. Citations, Books and Book Chapters: The number of times that a book or chapter has appeared in the reference list of other articles and books. Citations, Software: The number of times a piece of software or code (or a paper that describes software or code) has been cited as a resource in a journal article or book.	https://www.metrics-toolkit.org/metrics/	Plum Analytics: Citation metrics: Citation counts in PlumX measure how many times others have cited your research. Including citation counts alongside the other modern metrics categories allows for side-by-side analysis. In addition to citation indexes, there are new ways to demonstrate societal impact. These societal impact metrics include clinical, policy, and patent citations.	https://plumanalytics.com/learn/about-metrics/citation-metrics/	CiTO via W3C: A Citation may be either direct and explicit (as in the reference list of a journal article), indirect (e.g. a citation to a more recent paper by the same research group on the same topic), or implicit (e.g. as in artistic quotations or parodies, or in cases of plagiarism). Peroni, S., Shotton, D. (2012). FaBIO and CiTO: ontologies for describing bibliographic resources and citations. In Journal of Web Semantics, 17: 33-43. https://doi.org/10.1016/j.websem.2012.08.001. Open Access at: http://speroni.web.cs.unibo.it/publications/peroni-2012-fabio-cito-ontologies.pdf CC BY 3.0: http://creativecommons.org/licenses/by/3.0/	CiTO: http://www.sparontologies.net/ontologies/cito/source.html and W3C: https://www.w3.org/TR/dwbp/#glossary
Citation analysis	assessment/ metrics	2	Meaningful Metrics: A research method that examines a set of citations for frequency and patterns. Most citation analyses are performed on journal article citations because of historical practices in the production and collection of citation information. Citation analysis is represented in much of the research published within the bibliometrics field.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	SPARC: A bibliometric technique in which works cited in publications are examined to determine patterns of scholarly communication, including the relative importance of specific journals to an institution.	https://airtable.com/appr ME/98YWDNTx/shH2M ww3xAPuwwQw/tblVCHK rW1p1OYBqd															
Crawler, Internet robot, spider, bot	technical	3	CDL: Crawler: Also known as a spider or robot. Software that automatically traverses the web by downloading documents and following links from page to page.	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#C	COUNTER: Internet robot, crawler, spider: Any automated program or script that visits websites and systematically retrieves information from them, often to provide indexes for search engines. See Appendix H.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	ISO: 3.1.12.39 crawler: DEPRECATED: spider any automated software (3.1.12.14) programme or script which visits websites (3.3.3.24) and systematically retrieves (3.10.1.01)information (3.1.1.16) from them, often to provide indexes (3.5.1.08) for search engines (3.1.12.17) Note 1 to entry: See also ISO/TR 14873:2013, definition 2.12." ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en															
Data citation	industry/ scholcomm	4	CODATA: Process of citing a dataset in a similar manner to other research outputs. The dataset must be a standalone output that appears in a data repository, data paper or project website, and has a Persistent Identifier. Most current referencing systems provide a format for citing datasets.	https://zenodo.org/records/10626170	ISO: 3.1.11.20 data citation: practice of providing an identifying (3.2.1.26) reference to data (3.1.1.15) in a similar way that researchers routinely include a bibliographic reference to published (3.3.4.01) resources [SOURCE: http://smw-rda.esc.rzg.mpg.de/index.php/Data_Citation] Note 1 to entry: See also citation metadata (3.1.10.26.13) ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	Metrics Toolkit: The number of times a journal article or book has referenced a data set.	https://www.metrics-toolkit.org/metrics/citations_data/	NLM: Generally, a data citation refers to an entry for a dataset within the reference list of an article, book, conference proceeding, or other document. Datasets can also be cited when they are in a repository. Datasets are often not listed within the references, however, and may sometimes be noted in the methods section or the acknowledgements. While this can be considered a data citation, they will not be captured by standard citation counting methods, and so will not be included in databases that track citation counts.	https://www.nnlm.gov/guides/data-glossary/data-citation															

Crosswalk of Key Usage and Impact Vocabularies			*Key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions. See the Sources Used tab for more source and related permissions information.* ***See the Glossary for more terms.*** *Use the filter in column B to view terms for select categories.*																			
Term(s)	**Term category**	**# of definitions**	**Definition Provider and Definition 1**	**Definition 1 Source URL(s)**	**Definition Provider and Definition 2**	**Definition 2 Source URL(s)**	**Definition Provider and Definition 3**	**Definition 3 Source URL(s)**	**Definition Provider and Definition 4**	**Definition 4 Source URL(s)**	**Definition Provider and Definition 5**	**Definition 5 Source URL(s)**	**Definition Provider and Definition 6**	**Definition 6 Source URL(s)**	**Definition Provider and Definition 7**	**Definition 7 Source URL(s)**	**Definition Provider and Definition 8**	**Definition 8 Source URL(s)**	**Definition and source 9**	**Definition 9 Source URL(s)**
Data consumer, data user, Report consumer	data, general	4	COUNTER: Report consumer: An umbrella term referring to all those who make use of COUNTER reports, including librarians, consortia managers, publisher and aggregator staff, etc.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	IDS: Data Consumer: Core Participant in the International Data Spaces requesting and using data provided by a Data Provider.	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary#data-consumer	ISO: 3.13.4.04 data user: person or organization (3.1.1.55) authorized to exploit data (3.1.1.15) ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	W3C: Data consumer: For the purposes of this WG, a Data Consumer is a person or group accessing, using, and potentially performing post-processing steps on data. From: Strong, Diane M., Yang W. Lee, and Richard Y. Wang. "Data quality in context." Communications of the ACM 40.5 (1997): 103-110. Copyright © 1997 ACM.	https://www.w3.org/TR/dwbp/#glossary											
Data dictionary	data, general	2	CODATA: Collection of descriptions of the data objects or items in a data model. After each data object or item is given a descriptive name, its relationship is described (or it becomes part of some structure that implicitly describes relationship), the type of data (such as text or image or binary value) is described, possible predefined values are listed, and a brief textual description is provided. This collection can be organised for reference into a data dictionary.	https://zenodo.org/records/10626170	NLM: A data dictionary is a document that outlines the structure, content, and meaning of a given variable. This includes what type of data is being collected (e.g. free text, numerical, categorical or group data), the full wording of a question, what values are allowable (e.g. numeric ranges, multiple choice codes), and what those values mean (e.g. 0 = no high blood pressure diagnosis, 1 = borderline high blood pressure, 2 = high blood pressure). A data dictionary is a critical tool for data analysis and reproducibility. The term codebook is often used interchangeably with data dictionary, though the data dictionary can contain more information about the structure of a database. In the widely used data collection tool, REDCap, the data dictionary is a CSV file containing information on the variables and the structure of the REDCap database, while the codebook is a human readable document that provides information on each data element.	https://www.nnlm.gov/guides/data-glossary/data-dictionary																
Data harvesting, harvest, -er, -ing	technical	3	CDL: Harvest: The process by which software can collect metadata packages from remote locations that describe information resources available at those locations.	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#h	COUNTER: Data harvesting**:** Automated processes used for extracting data from websites.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	Meaningful Metrics: Harvester: A scholarly tool or service that collects metrics data from multiple online sources (e.g., ImpactStory and PlumX)	https://www.ala.org/sites/default/files/acrl/content/publications/booksandjdigitalresources/digital/9780838987568_metrics_OA.pdf													
Data/metadata producer, provider	data, general	3	COUNTER: Metadata provider: An organization, such as a publisher, that provides descriptive article/item-level metadata to an online search service.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	IDS: Broker service provider**:** Core Participant exposing Data Sources via a Connector; a Data Provider may be an enterprise or other organization, a data marketplace, an individual, or a "smart thing".	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary#broker-service-provider	W3C: Data Producer is a person or group responsible for generating and maintaining data. From: Strong, Diane M., Yang W. Lee, and Richard Y. Wang. "Data quality in context." Communications of the ACM 40.5 (1997): 103-110. Copyright © 1997 ACM.	https://www.w3.org/TR/dwbp/#glossary											
Data quality	data, general	4	CODATA: Data quality: Reliability and application efficiency of data. Perception or assessment of a dataset's fitness to serve its purpose in a given context. Aspects of data quality include: Accuracy, Completeness, Update status, Relevance, Consistency across data sources, Reliability, Appropriate presentation, Accessibility. Data quality is affected by the way data are entered, stored and managed. Maintaining data quality requires going through the data periodically and scrubbing it. Typically this involves updating, standardising, and de-duplicating records to create a single view of the data, even if it is stored in multiple disparate systems.	https://zenodo.org/records/10626170	EOSC: Data quality: Multi-dimensional construct perception and/or a judgment of data's fitness or trustworthiness to serve intended research uses in a given context. Data quality is often expressed along a continuum from low to high basedon a number of perceived attributes of data. This includes: Relevance to research issues and timeliness, Accuracy (the degree of congruity between data object and real world phenomena), Precision/accuracy (limit of all practical analytic and rational interpretations of a data object),Completeness (no gaps in coverage),Consistency (internal and external), and understandability (informativeness including via associated documentation and capturing provenance of changes).	https://zenodo.org/records/4472643	ISO: 3.1.12.23 data quality: quality (3.1.3.01) of data (3.1.1.15) lawfully acquired (3.6.2.2.01), validated, stored (1) <placement> (3.9.1.01) and kept up to date Note 1 to entry: See also ISO/IEC 2382:2015, definition 2126247; ISO 7498-2:1989; ISO/TS 19299:2015, definition 3.24; ISO/TS 21547:2010, definition 3.2.10; ISO/IEC 27000:2016, definition 2.40; ISO/TS 27790:2009, definition 3.36. ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	W3C: Data quality is commonly defined as "fitness for use" for a specific application or use case. Copyright © 2017 World Wide Web Consortium. https://www.w3.org/copyright/document-license-2023/	https://www.w3.org/TR/dwbp/#glossary											
Data, security of	technical	2	Data Quality Glossary: The security of data describes the protection that exists at all times against unauthorised access to the data and against their theft or damage. Systems must guarantee correct access management; to maintain this guarantee, the functional security of a system is therefore also relevant, so that in the event of a functional failure the system will still enter a defined state in which the security of the data is guaranteed. For example, a customer of an online store should have access only to the orders they have previously placed and not to the sales figures of all products. Data should always be protected from hacker attacks, in which attackers could steal or encrypt the data. Related terms: Privacy, integrity	https://zenodo.org/records/10474880	ISO: 3.13.5.02 data security: result of the data protection (3.13.5.01) measures taken to guarantee data integrity (3.1.11.15) ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en																
Dataset, Data set	data, general	7	COAR: Dataset: A collection of related facts and data encoded in a defined structure. [Source: Adapted from http://purl.org/spar/fabio/Dataset]	https://vocabularies.coar-repositories.org/resource_types/c_ddb1/	CODATA: Dataset: Organised collection of data or objects in a computational format, that are generated or collected by researchers in the course of their investigations, regardless of their form or method, that form the object on which researchers test a hypothesis. This includes the full range of data: raw, unprocessed datasets, proprietary generated and processed data and secondary data obtained from third parties. The presentation of the data in the application is enabled through metadata.	https://zenodo.org/records/10626170	COUNTER: Dataset: Data encoded in a defined structure, for example data associated with a research project. A COUNTER Data_Type.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	EOSC: Dataset: logically meaningful group of data	https://zenodo.org/records/4472643	FORCE11: Dataset: Recorded information, regardless of the form or medium on which it may be recorded including writings, films, sound recordings, pictorial reproductions, drawings, designs, or other graphic representations, procedural manuals, forms, diagrams, work flow, charts, equipment descriptions, data files, data processing or computer programs (software), statistical records, and other research data." (from the U.S. National Institutes of Health (NIH) Grants Policy Statement via DataCite's Best Practice Guide for Data Citation). – From DataCite Business Models Principles http://www.datacite.org/sites/default/files/Business_Models_Principles_v1.0.pdf	https://force11.org/info/data-citation-principles-glossary/ and http://www.datacite.org/sites/default/files/Business_Models_Principles_v1.0.pdf	NLM: A dataset is a collection of related data, however what constitutes a dataset is not clearly demarcated. One could consider all the data associated with a research project, regardless of the type of data, a single dataset. But a research project will often collect disparate types of data (e.g., physiological, survey, and genomic), and one could consider data collected through each method a separate dataset. Different people may argue about different ways to define a dataset, and all the perspectives could be legitimate.	https://www.nnlm.gov/guides/data-glossary/dataset	W3C: A dataset is defined as a collection of data, published or curated by a single agent, and available for access or download in one or more formats. A dataset does not have to be available as a downloadable file. From: Data Catalog Vocabulary (DCAT) [VOCAB-DCAT] Copyright 2024 World Wide Web Consortium.W3C liability, trademark and document use rules apply.https://www.w3.org/policies/#copyright	https://www.w3.org/TR/dwbp/#glossary					
Data sovereignty	data, general	2	IDS: The capability of an entity (natural person or corporate) of being entirely self-determined with regard to its data.	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary#data-sovereignty	NLM: Data sovereignty refers to a group or individual's right to control and maintain their own data, which includes the collection, storage, and interpretation of data. Indigenous data sovereignty refers to the ability for Indigenous peoples to control their data and includes autonomy regarding a variety of data types such as oral traditionals, DNA/genomics, community health data, etc. Within the context of transnational indigenous sovereignty and self-determination movements, indigenous data sovereignty can be a powerful tool for those whom the data represents, which claims the rights of Indigenous peoples to use and interpret the data in a way that is accurate and appropriate given their circumstances, customs, and communal way of life.	https://www.nnlm.gov/guides/data-glossary/data-sovereignty																
Data type, output, resource type, document type	data, general	6	Altmetric: Output: A research output, e.g. journal article, book or data set.	https://help.altmetric.com/support/solutions/articles/6000232842-altmetric-glossary	COAR: *defines multiple individual resource types*	https://vocabularies.coar-repositories.org/resource_types/	COUNTER: Data_Type: The element identifying the type of content. The COUNTER Code of Practice Release 5 reports scholarly information in many ways. These major groupings are referred to as Data Types. Only the Dataset Data Types are used by the Code of Practice for Research Data Usage Metrics. Reporting of collections is restricted to pre-set collections that are defined like databases.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	DDI: Data type: Identifies the type of data, which has a bearing on the acceptable data values, the operations that can be performed with the data, and the ways in which the data are stored. The present list is based on the W3C data types, and includes the terms relevant for documenting research data.	https://vocabularies.cessda.eu/vocabulary/DataType?lang=en	ISO 3.1.12.22 data type: class (3.8.5.03) of data (3.1.1.15), characterized by the members of the class and the operations that can be applied to them ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NISO: Scholarly output. A product created or executed by scholars and investigators in the course of their academic and/or research efforts. Scholarly output may include but is not limited to journal articles, conference proceedings, books and book chapters, reports, theses and dissertations, edited volumes, working papers, scholarly editions, oral presentations, performances, artifacts, exhibitions, online events, software and multimedia, composition, designs, online publications, and other forms of intellectual property. The term scholarly output is sometimes used synonymously with research outputs.	https://groups.niso.org/higherlogic/ws/public/download/17091										
De-identification	data, general	3	CODATA: Techniques designed to make the risk of identifying a particular individual in a dataset negligible, whilst retaining the re-usability of the dataset. The purpose is to protect the privacy of the individual and comply with legislation, whilst enabling data sharing. Methods include removing direct and indirect identifiers such as names, addresses, social insurance numbers, or dates of birth, or using obfuscation methods such as encryption, hashing, generalisation, pseudonymisation, and perturbation.	https://zenodo.org/records/10626170	NLM: De-identification is the process of removing personally identifiable information such as names, social security numbers, and street addresses from records or a dataset. De-identification is typically done when preparing data for sharing in order to help prevent others from identifying individuals based on their participation in a research study. Sharing health information publicly can cause harm to individuals, and patient information is protected by laws such as The Health Insurance Portability and Accountability Act (HIPAA), making de-identification a very important step in preparing data for sharing.	https://www.nnlm.gov/guides/data-glossary	RDA: The act of changing individual-level data to decrease the probability of disclosing an individual's identity. This can involve masking direct identifiers (e.g., name, phone number, address) as well as transforming (e.g., recoding, combining) or suppressing indirect identifiers that could be used alone or in combination to-identify an individual (e.g., birth dates, geographic details, dates of key events). If done correctly, de-identification minimizes the risk of re-identification of any data shared or released. It should be noted that this term should be used with caution - although the definition given here refers to actions taken to decrease the risk of re-identification, the term may be erroneously taken to mean that all risk of re-identification has been entirely removed (rarely the case)	https://docs.google.com/document/d/1p4DhuS8XwhYViNK-vSR5tSZEWywkTmATfRD4_Vm9TzQ/edit#heading=h.kobpcgewen3rm																

Crosswalk of Key Usage and Impact Vocabularies			*Key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions. See the Sources Used tab for more source and related permissions information.* ***See the Glossary for more terms.*** *Use the filter in column B to view terms for select categories.*																		
Term(s)	**Term category**	**# of definitions**	**Definition Provider and Definition 1**	**Definition 1 Source URL(s)**	**Definition Provider and Definition 2**	**Definition 2 Source URL(s)**	**Definition Provider and Definition 3**	**Definition 3 Source URL(s)**	**Definition Provider and Definition 4**	**Definition 4 Source URL(s)**	**Definition Provider and Definition 5**	**Definition 5 Source URL(s)**	**Definition Provider and Definition 6**	**Definition 6 Source URL(s)**	**Definition Provider and Definition 7**	**Definition 7 Source URL(s)**	**Definition Provider and Definition 8**	**Definition 8 Source URL(s)**	**Definition and source 9**	**Definition 9 Source URL(s)**	
DOI (Digital Object Identifier)	metadata	6	CDL: A stable identifier (URL). See the DOI web site for more information.	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#ID	Clarivate: The Digital Object Identifier (DOI®) is a system for permanently identifying and exchanging intellectual property in the digital environment. It can be associated with an article, a book, a book chapter, a data study document, and other document types.	https://webofscience.help.clarivate.com/en-us/Content/glossary.htm	CODATA: Type of digital Persistent Identifier (PID) issued by the International DOI Foundation. This permanent digital identifier is associated with an object that permits the object to be referenced reliably even if its location and metadata undergo change over time.	https://zenodo.org/records/10626170	DataCite: DOI is an acronym for "digital object identifier". A DOI is a type of persistent identifier (PID) that uniquely identifies an object. Most commonly these are research objects like publications, datasets and software, but can be many other things. DOIs are intended to be a permanent way of identifying and accessing a particular resource. They form a persistent link that points to the repository or other digital location by including the URL in the metadata. This provides a system for persistent and actionable identification and interoperable exchange. DOIs remain fixed, but the location and other metadata may change. DataCite DOIs come with a metadata schema that includes a controlled vocabulary of different resource types to describe the content being shared.	https://support.datacite.org/docs/glossary-of-commonly-used-terms	ISO: 3.2.5.17 Digital Object Identifier DOI : standardized (3.4.7.78)string (3.1.1.11) for identifying a physical, digital, or abstract object (3.1.1.01) and providing persistent resolution to the object or information (3.1.1.16) about it Note 1 to entry: DOI is specified in ISO 26324. ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	UKCORR: "Digital Object Identifier', is a unique persistent identification name for digital objects, used widely in academic publishing and research repositories. Initiated by the International DOI Foundation in 1998, the DOI system is an international standard as defined by ISO 26324.	https://www.ukcorr.org/glossary/									
Download(s)	usage	4	Meaningful Metrics: An online altmetric that refers to the number of times that an electronic item has been downloaded from a specific site. Most sites that provide download information do not provide identifying information about who has downloaded a work, although some sites limit downloads to affiliated users.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	Metrics Toolkit: Downloads, Articles and Downloads, Books and Book Chapters: A download is an event triggered by a user clicking on the download button, in contrast to simply viewing a web page. Downloads, Software: File downloads over a period of time.	https://www.metrics-toolkit.org/metrics/	SPARC: Successful full-text article request, generally measured according to the COUNTER Code of Practice.	https://airtable.com/appriMiE98YWDNTxl/shrH2Mwv3xAPuwwQwlfbfVCHKrW1p1OYBqd														
Eigenfactor (score)	assessment/ metrics	2	Meaningful Metrics: A journal-level bibliometric that measures a scientific journal's total importance. It is calculated by the number of times articles from a journal published in the past five years have been cited in a JCR year.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	SPARC: Bibliometric measurement of the influence of scholarly journals using network analysis of citation patterns.	https://airtable.com/appriMiE98YWDNTxl/shrH2Mwv3xAPuwwQwlfbfVCHKrW1p1OYBqd															
Element	metadata	4	CDL: A discrete component of metadata, or a discrete component of a data structure defined by a DTD or schema (often represented through markup in the form of a tag).	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#E	COUNTER: A piece of information to be reported on, displayed as a column heading (and/or in the report header) in a COUNTER report.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	ISO: 3.1.1.10 element: object (3.1.1.01) constituting part of a set (3.1.1.09) Note 1 to entry: elements may be concepts (3.1.1.02). ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en														
FAIR (data principles) see also FAIR Principles website: https://www.go-fair.org/fair-principles/	industry/ scholcomm	2	CODATA: Set of guiding principles to make data Findable, Accessible, Interoperable, and Reusable	https://zenodo.org/records/10626170	NLM: The FAIR Principles are findability (F), accessibility (A), interoperability (I), and reusability (R) and delineate requirements that allow for data sharing such that data reuse is possible, as put forth in a paper in Scientific Data in 2016 by members of the organization Force11. Findability requires rich published metadata that is both human and machine-readable and for the metadata to include a persistent unique identifier for the data. Accessibility requires that there is a clear protocol for accessing the data. This does not mean that all data must be freely downloadable, only that the process for gaining access to it is transparent. Interoperability requires that the data is represented in a format that is formally defined and able to be integrated with other data. The data should also be in a format that can be accessed and modified or analyzed by common analysis, storage, and processing tools. The ultimate goal of FAIR is to optimize the reuse of data. Reusability requires that the data are in a domain-relevant data standard, that the conditions for usage are clear, and that the metadata provides sufficient attributes for meaningful reuse. In addition, data should be well-described so that they can be replicated and/or combined in different settings. Building on the FAIR Principles are the CARE Principles for Indigenous Data Governance	and https://www.gida-global.org/care																		
Federated (data, search, identity, etc.), federation	data, general	2	COUNTER: A search conducted by a federated search application that allows users to simultaneously search multiple content sources, typically hosted by different vendors, with a single query from a single user interface. The federated search application typically presents the user with a single set of results collected from the content sources searched. The end user is not responsible for selecting the content sources being searched. The content sources being searched will report such activity as Searches_Federated.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	EOSC: ecosystem in which multiple actors, the federation members, jointly contribute to the delivery of resources to end-users. [SOURCE: FITSM. (2016). Part 0: Overview and vocabulary (2.4).https://www.fitsm.eu/download/280/, modified – reference to ecosystem; reference to actor; reference to end-users instead of customers; the organisation reference has been removed; reference to resources instead of services.] See multiple other examples of federated, federation	https://zenodo.org/records/4472643																		
Harvest. *See data harvesting*	technical	0																			
h-index	assessment/ metrics	3	Meaningful Metrics: An author-level bibliometric that measures a researcher's cumulative impact on his or her field based on the distribution of citations that he or she has received. It's formula considers both the number of articles a researcher has published to date and the number of citations received by each publication, and uses these to determine a citation threshold (h) that only a certain number of publications can be said to meet or pass over (also h). There are many variations of the h-index, each of which adjusts the citation count threshold in some way. Also known as the "Hirsch index."	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	Metrics Toolkit: An author-level metric (although it can also be calculated for any aggregation of publications, e.g. journals, institutions, etc.) calculated from the count of citations to an author's set of publications.	https://www.metrics-toolkit.org/metrics/h_index/	Open Research Glossary: a personal metric that relates the number of citations to the number of published papers for an academic. (Wikipedia)	https://zenodo.org/records/20212 and http://en.wikipedia.org/wiki/H-index														
Impact	assessment/ metrics	2	NISO: The subjective range, depth, and degree of influence generated by or around a person, output, or set of outputs, both within the scholarly world and in wider society. Interpretations of impact vary depending on its placement in the research ecosystem.	https://groups.niso.org/higherlogic/ws/public/download/17091	Open Research Glossary: the scale of use of research outputs both inside and outside of academia	https://zenodo.org/records/20212															
(Journal) Impact Factor (IF)	assessment/ metrics	4	ISO: 3.11.7.14 impact factor IF journal impact factor: measure of how often an article (3.5.8.06) published in a scientific journal (3.4.1.28.19) receives a citation (3.5.8.16) or quotation (3.5.8.23) in other scientific documents (3.1.1.38) Note 1 to entry: See also " citation index" (3.5.1.13). ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	Meaningful Metrics: A journal-level bibliometric calculated by dividing the number of citations that a journal has received in a given JCR year by the total number of citable items published by the journal in the two previous years. It is traditionally calculated based on the citations indexed by the Science Citation Index and Social Sciences Citation Index, both of which are part of Thomson Reuters' Web of Science.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	Metrics Toolkit: The Journal Impact Factor is a measure reflecting the annual average (mean) number of citations to recent articles published in that journal. An essay written by the Institute of Scientific Information (ISI) states "The JCR provides quantitative tools for ranking, evaluating, categorizing, and comparing journals. The impact factor is one of these; it is a measure of the frequency with which the "average article" in a journal has been cited in a particular year or period. The annual JCR impact factor is a ratio between citations and recent citable items published."	https://www.metrics-toolkit.org/metrics/journal_impact_factor/	SPARC: Impact Factor is commonly used to evaluate the relative importance of a journal within its field and to measure the frequency with which the "average article" in a journal has been cited in a particular time period.	https://airtable.com/appriMiE98YWDNTxl/shrH2Mwv3xAPuwwQwlfbfVCHKrW1p1OYBqd														
License	industry/ scholcomm	2	COUNTER: A contract or agreement that provides an organization or individual (licensee) with the right to access certain content.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	W3C: A license is a legal document giving official permission to do something with the data with which it is associated. From: DCTERMS [DCTERMS] Copyright © 1995-2024 DCMI. https://www.dublincore.org/about/copyright/#copyright CC BY 4.0	https://www.w3.org/TR/dwbp/#glossary and http://dublincore.org/documents/2010/10/11/dcmi-terms/															
Machine actionable	technical	3	CODATA: Machine-readable dataset or file format that is structured in such a way as to allow machines to take automated programmed actions as a result.	https://zenodo.org/records/10626170	EOSC: machine readable and also in a form that a computing system may process in some automated fashion. EXAMPLE Machine-actionable data, machine-actionable policy. [SOURCE: RDA DFT working group. (2019). DFT Vocabulary 4.0 Philadelphia.https://smw-rda.esc.rzg.mpg.de/dft-4.0.html, modified – reference to machine-readable.]	https://zenodo.org/records/4472643	FORCE11: Content that can be used and manipulated by computers (http://www.libraries.psu.edu/tas/jca/ccda/docs/tf-MRData3.pdf).	https://force11.org/info/data-citation-principles-glossary/ and http://www.libraries.psu.edu/tas/jca/ccda/docs/tf-MRData3.pdf (returns a 404 page not found error)														
Machine readable	technical	4	CODATA: In a form that can be used and understood by a computer.	https://zenodo.org/records/10626170	EOSC: in a form that can be identified, recognised and extracted by a computer. [SOURCE: CASRAI Research Data Management Glossary. https://casrai.org/rdm-glossary/, modified – reference to identified, recognised and extracted instead of used and understood.]	https://zenodo.org/records/4472643 and https://casrai.org/rdm-glossary/ *Returns a 404 page not found error*	Open Research Glossary: data or metadata in a format that can be understood by a computer.	https://zenodo.org/records/20212	W3C: Machine-readable data is data in a standard format that can be read and processed automatically by a computing system. Traditional word processing documents and portable document format (PDF) files are easily read by humans but typically are difficult for machines to interpret and manipulate. Formats such as XML, JSON, HDF5, RDF and CSV are machine-readable data formats. Adapted from Wikipedia.	https://www.w3.org/TR/dwbp/#glossary and https://en.wikipedia.org/wiki/Machine-readable_data Text is available under the Creative Commons Attribution-ShareAlike License 4.0; additional terms may apply.														

Crosswalk of Key Usage and Impact Vocabularies			*Key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions. See the Sources Used tab for more source and related permissions information.* ***See the Glossary for more terms.*** *Use the filter in column B to view terms for select categories.*																			
Term(s)	**Term category**	**# of definitions**	**Definition Provider and Definition 1**	**Definition 1 Source URL(s)**	**Definition Provider and Definition 2**	**Definition 2 Source URL(s)**	**Definition Provider and Definition 3**	**Definition 3 Source URL(s)**	**Definition Provider and Definition 4**	**Definition 4 Source URL(s)**	**Definition Provider and Definition 5**	**Definition 5 Source URL(s)**	**Definition Provider and Definition 6**	**Definition 6 Source URL(s)**	**Definition Provider and Definition 7**	**Definition 7 Source URL(s)**	**Definition Provider and Definition 8**	**Definition 8 Source URL(s)**	**Definition and source 9**	**Definition 9 Source URL(s)**		
Mention(s) (metrics)	assessment/ metrics	2	Altmetric: A post published in one of our attention sources that discusses a specific research output. All the mentions are then collected in the Explorer as well as on the research output details page.	https://help.altmetric.com/support/solutions/articles/6000232842-altmetric-glossary	Plum Analytics: Mention metrics: Measurement of activities such as news articles or blog posts about research. Mentions is a way to tell that people are truly engaging with the research. Examples: blog posts, comments, reviews, Wikipedia references, news media	https://plumanalytics.com/learn/about-metrics/																
Metadata	metadata	8	CODATA: Data about data. It is data (or information) that defines and describes the characteristics of other data. It is used to improve the understanding and use of the data.	https://zenodo.org/records/10626170	COUNTER: A series of textual elements that describes a content item but does not include the item itself. For example, metadata for a journal article would typically include publisher, journal title, volume, issue, page numbers, copyright information, a list of names and affiliations of the authors, author organization addresses, the article title and an abstract of the article, and keywords or other subject classifications.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	DataCite: Metadata is a specific set of information designed to provide a description of a resource. Metadata is essential so that research outputs can be discovered and reused.	https://support.datacite.org/docs/glossary-of-commonly-used-terms	EOSC: Data defining and describing other data. Metadata can be categorised as descriptive, structural, preservation and administrative metadata.	https://zenodo.org/records/4472643	FORCE11: Information about the data being tracked within a data system. Metadata typically conforms to a metadata information model. Metadata may include, for example, the name of the sensor used to collect the data or person who collected the data, where the data was collected, information about the units and dimensionality of the data, and other notes recorded by the investigator about how the data has been processed. Source: modified from http://vso1.nascom.nasa.gov/vso/misc/vocab_2p3.pdf. Metadata is information (data) about the object and its disposition, such as the name of the object's creator, the date of creation, the target URL, the version of the object, its title, and so on. (from: http://n2t.net/ezid/home/understanding).	https://force11.org/info/data-citation-principles-glossary/ and http://n2t.net/ezid/home/understanding *Returns a page not found 404 error*	ISO: data (3.1.1.15) about other data, documents (3.1.1.38), or records (2) <set of data> (3.1.13.22) that describes their content, context (3.1.2.05), structure, data format (3.1.13.12), provenance (3.6.2.1.09), and/or rights attached to them Note 1 to entry: See also ISO/TR 14873:2013, definition 2.29. ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NLM: Metadata is information that describes, explains, locates, classifies, contextualizes, or documents an information resource. It is what enables you to search for books in your local library catalog, videos on YouTube, or find journal articles through PubMed. It is also what can help manage data, by tracking attributes like data provenance and versioning. Metadata can be used to describe all types of information sources. Metadata in libraries is generally structured as a set of metadata elements. "Creator name," "Date created," and "Keyword" are all frequently employed metadata elements. A metadata schema is a formalized collection of required and optional metadata elements that can help standardize how people and institutions describe information resources. Employing a metadata schema can help ease the process of searching for resources and sharing information about resources.	https://www.nnlm.gov/guides/data-glossary/metadata	OCLC: Literally, data about data. It is descriptive information about a particular data set, object, or resource, including how it is formatted, and when and by whom it was collected. Originally metadata most commonly referred to digital resources, but now can refer to any physical or electronic resource. It may be created automatically using software or entered by hand.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary#M		
Metric(s)	assessment/ metrics	2	NISO: A method or set of methods for purposes of measurement.	https://groups.niso.org/higherlogic/ws/public/download/17091	Meaningful Metrics: A standard of measurement. Metrics can be used only when information is quantifiable and available.	https://www.ala.org/sites/default/files/acrl/content/publications/booksandpamphlets/digitalresources/digital/9780838987568_metrics_OA.pdf																
Open data	industry/ scholcomm	4	CODATA: Data that are accessible, machine-readable, usable, intelligible, and freely shared. Open data can be freely used, re-used, built on, and redistributed by anyone –subject only, at most, to the requirement to attribute and sharealike.	https://zenodo.org/records/10626170	EOSC: data in an open format that can be freely used, re-used and shared by anyone for any purpose. [SOURCE: DIRECTIVE (EU) 2019/1024 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on open data and the re-use of public sector information (recast).	https://zenodo.org/records/4472643	ISO: 3.1.10.13 open data: data (3.1.1.15)available (3.1.11.03)visible to others and that can be freely used, re-used, re-published (3.3.4.01) and redistributed by anyone [SOURCE: http://smw-rda.esc.rzg.mpg.de/index.php/ Open _data] ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NLM: Open Data is data that are freely available for reuse/secondary data analysis. The "openness" of data can be viewed and treated differently based on a spectrum of openness ranging from being highly restricted (as in the case of personal health information) to being freely available data that are usable. In general, open data follows the FAIR principles of being: Findable, Accessible, Interoperable and Reusable.	https://www.nnlm.gov/guides/data-glossary/open-data											
Output(s), research *See data type*	data, general	0																				
Owner, -ship, data owner	data, general	3	IDS: Data Owner: Core Participant having complete control over the data it makes available in the International Data Spaces; defines the terms and conditions of use of its data.	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary#data-owner	NLM: Data ownership refers to the legal control of and responsibility for data. Data can be owned by a person or organization. In a research setting, data is generally owned by the employing institution, even if that institution rarely exerts the powers associated with that ownership. Data ownership of research data should be outlined in an institution's policies. In certain situations, data can be owned by research participants. For example, data collected as a part of Canada's First Nations Regional Health Survey (FNRHS) is owned by the First Nations communities, as outlined in the First Nations Principles of Ownership, Control, Access, and Possession (OCAP). It should be noted that data ownership and copyright are not synonymous. Under American law, data cannot be copyrighted, although databases can be when they meet specific specifications. Data licenses (e.g., Creative Commons licenses) can be applied where copyright is not applicable.	https://www.nnlm.gov/guides/data-glossary/data-ownership	RDA: Ownership: The individual, business, or other entity that collects and/or generates the data from a Data Subject for statistical and administrative purposes, and that holds the right to use and publish that data. Note – this is not an exclusive right to use the data, as the License Agreement with the ADA will allow secondary use of the data to those who are permitted access to the data. (Aus Privacy Act 1988)	https://docs.google.com/document/d/1p4DhuS8XwhYViNK-uSf3SZEWxjwkTmATfRD4_Vm9TzQ/edit#heading=h.kqbpqewen3rm														
Paywall, loginwall	technical	2	COUNTER: Paywall: A term used to describe the fact that a user attempting to access a content item must be authorized by license or must pay a fee before the content can be accessed.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	Open Research Glossary: Loginwall - the requirement to log in to a system in order to access content. Paywall-restriction via a financial barrier to research, often implemented by legacy publishers. Can be removed by personal or institutional subscription.	https://zenodo.org/records/20212																
Persistent identifier (PID)	metadata	5	CODATA: Long-lasting digital reference to an object that gives information about that object regardless of what happens to that object. Developed to address link rot, a persistent identifier can be resolved to provide an appropriate representation of an object whether that object changes its online location or goes offline.	https://zenodo.org/records/10626170	DataCite: PIDs are unique, long-lasting identifiers assigned to specific entities like a researcher, publication or dataset. PIDs ensure that the entity can be reliably and persistently retrieved and cited over time. Examples of PIDs include Digital Object Identifiers (DOIs), ORCID iDs and ROR IDs.	https://support.datacite.org/docs/glossary-of-commonly-used-terms	EOSC: Unique identifier that ensures permanent access for a digital object by providing access to it independently of its physical location or current ownership. [SOURCE: ISO 5127:2017]	https://zenodo.org/records/4472643	FORCE11: Identifier and persistent identifier: An identifier is an association between a character string and an object. Objects can be files, parts of files, names of persons or organizations, abstractions, etc. Objects can be online or offline. Character strings include URLs, serial numbers, names addresses, etc. A "persistent identifier" is an identifier that is available and managed over time; it will not change if the item is moved or renamed. This means that an item can be reliably referenced for future access by humans and software (from http://n2t.net/ezid/home/understanding)	https://force11.org/info/data-citation-principles-glossary/ and http://n2t.net/ezid/home/understanding *URL not found*	ISO: 3.2.5.25 PID Persistent Identifier : unique identifier (3.1.12.19) that ensures permanent access (3.11.1.02) for a digital object (3.1.1.01) by providing access to it independently of its physical location or current ownership [SOURCE:ISO 24619:2011, definition 3.2.4] ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en											
Platform. *See Service provider*	industry/ scholcomm	0																				
Provenance: data, metadata	industry/ scholcomm	6	CODATA: A type of historical information or metadata about the origin, location or the source of something, or the history of the ownership or location of an object or resource including digital objects. For example, information about the Principal Investigator who recorded the data, and the information concerning its storage, handling, and migration. Provenance metadata: Information concerning the creation, attribution, or version history of managed data. Provenance metadata indicates the relationship between two versions of data objects and is generated whenever a new version of a dataset is created. Provenance information is gathered along the data lifecycle as part of curation processes. A finer level of provenance metadata would be concerned only with data flowing between various stores such as curated databases and managed repositories. Provenance metadata is designed to allow queries over the relationship between versions, and includes either or both fine-grained and coarse-grained provenance data. Different applications may store different provenance data.	https://zenodo.org/records/10626170	EOSC: Provenance metadata; context metadata: administrative metadata describing the lifecycle of a resource to a point, including the related entities and processes	https://zenodo.org/records/4472643	FORCE11: Verification, provenance and fixity: (First used in principle 7) Verification means to reliably establish the relationship between the cited object of a original citation and a current object — verification enables one to confirm that the data retrieved is the data cited. This is separate from persistence, which remains the responsibility of the archive, not the citation.. Types of verification information include fixity — which can be used directly to assess the integrity of specific content, and provenance, which provides information about parts of the chain of custody and/or processing to which the content was subject. Specific forms of citation verification include, but are not limited to: embedding fixity information in the citation itself; associating the citation with a surrogate (such as a landing page) where additional metadata, such as the data form, fixity, and final stage of provenance, are given explicitly; or associating such metadata with the DOI, handle, or other persistent identifier persistent identifier itself directly, through the persistent identifier's resolution or index service (adapted from CrData, 2013).	https://force11.org/info/data-citation-principles-glossary/	ISO: 3.6.2.1.09 provenance: provenance: relationships (3.1.1.12) between documents (3.1.1.38) and the organizations (3.1.1.55) or individuals that created, accumulated (3.2.1.37) and/or maintained and used them in the conduct of personal or corporate activity [SOURCE:ISAAR (CPF):2003, 3 Glossary of terms and definitions, modified] Note 1 to entry: See also "custody" (3.1.1.58); ISO 19115-1:2014, definition 4.16; ISO 19153:2014, definition 4.39; ISO/IEC 23000-15:2016, definition 3.4.1. ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NLM: The term "data provenance", sometimes called "data lineage," refers to a documented trail that accounts for the origin of a piece of data and where it has moved from to where it is presently. The purpose of data provenance is to tell researchers the origin, changes to, and details supporting the confidence or validity of research data. The concept of provenance guarantees that data creators are transparent about their work and where it came from and provides a chain of information where data can be tracked as researchers use other researchers' data and adapt it for their own purposes.	https://www.nnlm.gov/guides/data-glossary/data-provenance	W3C: Provenance originates from the French term "provenir" (to come from), which is used to describe the curation process of artwork as art is passed from owner to owner. Data provenance, in a similar way, is metadata that allows data providers to pass details about the data history to data users. Copyright © 2017 World Wide Web Consortium. https://www.w3.org/copyright/document-license-2023/	https://www.w3.org/TR/dwbp/#glossary										
Publisher	industry/ scholcomm	4	COUNTER: An organization whose function is to commission, create, collect, validate, host, distribute and trade information online and/or in printed form.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	ISO: 3.2.3.15 publisher publishing house: organization (3.1.1.55) or individual whose predominant activity is to commission, create, collect, validate, host and distribute information (3.1.1.16) in printed (1) <technical process> (3.3.5.1.01) and/or in electronic form [SOURCE:ISO 9707:2008, definition 2.32] Note 1 to entry: See also ISO 1086:1991, definition 3.15. Note 2 to entry: Publishers fulfill some functions of an information and documentation organization (3.2.3.37). ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	OCLC: An agent responsible for publishing, releasing, or issuing a manifestation.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary#P	SPARC: Creator and host of journal content.	https://airtable.com/appr4MEi98YWDNTxl/shrH2Mw3xAPuwwQw/tblVCHKiW1p1OYBqd											

Crosswalk of Key Usage and Impact Vocabularies

Key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions. See the Sources Used tab for more source and related permissions information.
See the Glossary for more terms.
Use the filter in column B to view terms for select categories.

Term(s)	Term category	# of definitions	Definition Provider and Definition 1	Definition 1 Source URL(s)	Definition Provider and Definition 2	Definition 2 Source URL(s)	Definition Provider and Definition 3	Definition 3 Source URL(s)	Definition Provider and Definition 4	Definition 4 Source URL(s)	Definition Provider and Definition 5	Definition 5 Source URL(s)	Definition Provider and Definition 6	Definition 6 Source URL(s)	Definition Provider and Definition 7	Definition 7 Source URL(s)	Definition Provider and Definition 8	Definition 8 Source URL(s)	Definition and source 9	Definition 9 Source URL(s)
Repository, data, digital, institutional repository (IR)	industry/ scholcomm	7	CODATA: Repository: Physical or digital storage location that can house, preserve, manage, and provide access to many types of digital and physical materials in a variety of formats. Materials in online repositories are curated to enable search, discovery, and reuse. There must be sufficient control for the physical and digital material to be authentic, reliable, accessible and usable on a continuing basis.	https://zenodo.org/records/10626170	COUNTER: Repository: A host who provides access to an institution's research output. Includes subject repositories, institution, department, etc. A COUNTER Host_Type.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	DataCite: Repositories play a key role in the DataCite membership model and are defined as a service operated by research organizations, where research materials are stored, managed and made accessible. A Repository is a single unit. A Repository account represents a store where all the DOIs for a group of resources are registered and will stay together. They have one unique prefix and are used exclusively for DOI registration. A Repository account may belong to a Direct Member or Consortium Organization.	https://support.datacite.org/docs/glossary-of-commonly-used-terms	EOSC: repository, data repository, digital repository: archive: IT service for managing and curating data, enabling their long-term preservation and reuse.	https://zenodo.org/records/4472643	ISO: 3.1.13.01 data repository data bank: set (3.1.1.09) of files (1) <document(s)> (3.1.12.02) or databases (3.1.13.03) combined with a storage (1) <placement> (3.9.1.01)system (3.1.1.13), a processing system and a retrieval system (3.10.1.05) ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NLM: A repository is a tool to share, preserve, and discover research outputs, including but not limited to data or datasets. While workflows and processes will vary across repositories, generally speaking, researchers submit and describe their own data which is then ingested into the repository for storage. Other researchers can then download, or request to download, the data directly from the repository. There are several types of repositories, including but not limited to institutional repositories, generalist repositories, and subject-specific repositories. Institutional repositories are generally managed and financed by an academic institution for use by its researchers and their colleagues. Subject-specific repositories are designed to fit the needs of specific research fields and the data they produce. Generalist repositories are intended to store and render findable any data from any field.	https://www.nnlm.gov/guides/data-glossary/repository	UKCORR: "A repository is a set of services that a research organisation offers to the members of its community for the management and dissemination of digital materials created by its community members." https://scholarlycommunications.jiscinvolve.org/wp/2016/10/14/in-the-context-of-open-access-policies-in-the-uk-what-is-a-repository/	https://www.ukcorr.org/glossary/				
Request, hit	technical	4	COUNTER: A category of COUNTER Metric_Types that represents a user accessing content (e.g. full text of an article).	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	ISO: 3.10.3.03 hit: result of a successful request (2) <user demand> (3.10.2.06) to an online service (3.1.1.59) [SOURCE:ISO 2789:2013, definition 2.2.1, modified] ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NISO: A SOAP message sent from a client to a server requesting usage statistics for a specified customer and a desired report type.	https://groups.niso.org/higherlogic/ws/public/download/29097/Z39-93-2014_SUSHI-1_7.pdf	W3C: Request refers to a stage in the HTTP protocol. A request message from a client to a server includes, within the first line of that message, the method to be applied to the resource, the identifier of the resource, and the protocol version in use. Copyright © 2013 World Wide Web Consortium. https://www.w3.org/copyright/document-license-2023/ Draft document	https://www.w3.org/TR/d-glossary/#request									
Response	technical	2	NISO: A SOAP message sent from a server to a client, containing the usage statistics for the customer specified in a request.	https://groups.niso.org/higherlogic/ws/public/download/29097/Z39-93-2014_SUSHI-1_7.pdf	W3C: An action by a server taken as the result of a request by a client. In HTTP, a response provides a resource representation to the calling client. See also [RFC2616] bis for an HTTP Response message. Copyright © 2013 World Wide Web Consortium. https://www.w3.org/copyright/document-license-2023/ Draft document	https://www.w3.org/TR/d-glossary/															
Sensitive data	data, general	3	ISO: 3.1.10.16 sensitive data: data (3.1.1.15) with potentially harmful effects in the event of disclosure (3.13.5.03) or misuse ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	RDA: Information that has potential risk for plants, animals, individuals and/or communities and for public and private organisations. Sensitive personal data include information related to racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership and data concerning the health or sex life of an individual. These data that could be identifiable and potentially cause harm through their disclosure. For local and government authorities, sensitive data is related to security (political, diplomatic, military data, biohazard concerns, etc.), environmental risks (nuclear or other sensitive installations, for example) or environmental preservation (habitats, protected fauna or flora, in particular). The sensitive data of a private body concerns in particular strategic elements or elements likely to jeopardise its competitiveness. Knowledge, information, and data held by and on First Nations peoples may constitute sensitive data.	https://docs.google.com/document/d/1p4Dhu58XwhYVINK-u5f3SZEWpjwkTmATfRD4_Vm9TzQ/edit#heading=h.kqbpgewen3rm	W3C: Sensitive data is any designated data or metadata that is used in: limited ways and/or intended for limited audiences. Sensitive data may include personal data, corporate or government data, and mishandling of published sensitive data may lead to damages to individuals or organizations. Copyright © 2017 World Wide Web Consortium. https://www.w3.org/copyright/document-license-2023/	https://www.w3.org/TR/dwbp/#glossary													
Service Provider, access provider, broker, content host, (hosting, internet) content platform provider, platform, vendor, report provider	industry/ scholcomm	7	COUNTER: Vendor: A publisher or other online information provider who delivers licensed content to the customer and with whom the customer has a contractual relationship. Content host: A website that provides access to content typically accessed by patrons of libraries and other research institutions. Platform: he content host of an aggregator, publisher, or other online service that delivers the content to the user and that counts and provides the COUNTER usage reports. Individual titles or groups of content might have their own branded user experience but reside on a common host. A COUNTER Data_Type. Report provider: An umbrella term. Includes publishers, aggregators and others who directly provide access to content, as well as organizations that provide specialist reporting services on behalf of one or more organizations.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	EOSC: service provider: provider that manages and delivers a service or services to end-users	https://zenodo.org/records/4472643	Ex Libris: Access provider: The party that provides access to electronic goods or services; may or may not be the vendor that sells the access. Vendor: The supplier of physical or electronic goods or services. For physical goods, the vendor is a material supplier. For electronic goods or services, the vendor is the access provider, or there may be a third-party access provider.	https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/010Getting_Started/085_Alma_Glossary	IDS: Broker Service Provider: Intermediary managing a metadata repository that provides information about the Data Sources available in the International Data Spaces; multiple Broker Service Providers may be around at the same time, maintaining references to different, domain-specific subsets of Data Endpoints.	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary#broker-service-provider	IRUS: Platform: An interface from an aggregator, publisher, or other online service that delivers the content to the user and that counts and provides the COUNTER usage reports. (COUNTER Release 5 definition). In IRUS, 'platform' refers to repository.	https://irus.jisc.ac.uk/r5/support/glossary/	ISO: 3.1.9.10 internet platform: web page (3.3.3.25) on which a number of internet (3.1.9.01) content providers (3.2.3.22) are exhibiting their content and which thus assembles information (3.1.1.16) on one or more subjects assumed of interest for user searches ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NISO: Content platform provider. Any digital platform that hosts and enables discovery of scholarly/research outputs, such as library services, abstract and indexing databases, and institutional repositories.	https://groups.niso.org/higherlogic/ws/public/download/17091				
Session	technical	3	COUNTER: A successful use of an online service. A single user connects to the service or database and ends by terminating activity that is either explicit (by leaving the service through exit or logout) or implicit (timeout due to user inactivity). [NISO]	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	EBSCO: A user Visit to an EBSCO interface (EBSCOhost, Consumer Health Complete, Student Research Center, etc.) Each unique Visit to these interfaces is counted as a Session. When a user visits one of these interfaces a Session ID is generated. This ID becomes active for 24 hours and multiple users may access the interface using this Session ID thus incrementing the Session count for this one SessionID. [URL: https://connect.ebsco.com/s/article/EBSCOadmin-Reports-Glossary-of-Terms?language=en_US]	https://connect.ebsco.com/s/article/EBSCOadmin-Reports-Glossary-of-Terms?language=en_US	OCLC: Time between logon and logoff when an OCLC library is logged on to the OCLC system to use a product or service.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary#S													
Standard	technical	4	CODATA: Set of agreed-upon and documented guidelines, specifications, accepted practices, technical requirements, or terminologies that have been prepared by a standards developing organisation or group, and published in accordance with established procedures. These can be mandatory or voluntary and are distinct from Acts, regulations, and codes, although standards can be referenced in those legal instruments.	https://zenodo.org/records/10626170	COUNTER: A document outlining processes agreed and established by authority or by general consent (e.g. materials from NISO). A COUNTER Data_Type.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	ISO: 3.4.7.78 standard: document (3.1.1.38), established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics (3.1.1.04) for material objects (3.1.1.60), activities or their results, aimed at the achievement of the optimum degree of order in a given context (3.1.2.05) [SOURCE:ISO/IEC Guide 2:2004, definition 3.2, modified] ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	W3C: A technical standard is an established norm or requirement in regard to technical systems. It is usually a formal document that establishes uniform engineering or technical criteria, methods, processes and practices. In contrast, a custom, convention, company product, corporate standard, etc. that becomes generally accepted and dominant is often called a de facto standard. From: Wikipedia Text is available under the Creative Commons Attribution-ShareAlike License 4.0; additional terms may apply.	https://www.w3.org/TR/dwbp/#glossary and https://en.wikipedia.org/wiki/Technical_standard													
SUSHI (Standardized Usage Statistics Harvesting Initiative)	usage	2	COUNTER: Short form for the COUNTER_SUSHI API used in COUNTER R5 for harvesting COUNTER reports. COUNTER compliance requires content hosts to implement the COUNTER_SUSHI API.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	IRUS: An automated protocol for harvesting electronic resource usage data	https://irus.jisc.ac.uk/r5/support/glossary/															
Tag	metadata	4	CDL: A short, formal name used to indicate data structure or metadata elements, such as (title) in HTML or (unititle) in EAD.	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#T	Google: A tag is a snippet of code that you add to your website to send data to a third party, such as Google.	https://support.google.com/analytics/answer/9355865?hl=en&ref_topic=9355633	ISO: 3.1.12.25 tag: character string (3.1.12.18) in a directory (3.5.5.12)entry (3.2.1.32) used to identify a data field (3.1.13.08) or an associated data description (3.1.13.07) field [SOURCE:ISO/IEC 8211:1994, definition 4.1.53] Note 1 to entry: See also tag (2) <user-assigned keyword> (3.1.12.35). ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	OCLC: A 3-character string used to identify or label an associated MARC field. Tags are grouped numerically by function.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary#T													
Text / data mining, TDM	usage	4	COUNTER: Text and data mining (TDM) is a computational process whereby text or datasets are crawled by software that recognizes entities, relationships, and actions. [STM Publishers] A COUNTER Access_Method used to separate regular usage from usage that represents access to content for the purposes of text and data mining.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	ISO: 3.10.2.05 data mining: computational search and retrieval (3.10.2.01) process that identifies (3.2.1.26) patterns by analysing quantitative data (3.1.1.15) from different perspectives and dimensions, categorizing (3.8.5.13) it, and summarizing potential relationships (3.1.1.12) and impacts [SOURCE:ISO 16439:2014, definition 3.13, modified] Note 1 to entry: See also ISO/TR 14873:2013, definition 2.15. ©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	NLM: Text mining is the process of extracting meaning from unstructured text data. Examples of this type of data are documents, websites, and social media, as well as semi-structured text formats like JSON, XML, and HTML. Natural Language Processing (NLP) techniques, including topic modeling and sentiment analysis, and Machine Learning (ML) techniques can be employed to explore text and better understand hard to see relationships in the data.	https://www.nnlm.gov/guides/data-thesaurus/text-mining	Open Research Glossary: Data mining: an analytic process designed to explore data in search of consistent patterns and/or systematic relationships between variables, and then to transform this information into content for future use. Cites Wikipedia, data mining: http://en.wikipedia.org/wiki/Data_mining	https://zenodo.org/records/20212									
Turnaway. *See access denied*	usage	0																		
Usage (statistics) (metrics)	usage	3	Meaningful Metrics: The way(s) that something is used or instances of something being used. Within the altmetrics community, there is disagreement over what constitutes the valid "use" of a scholarly entity and how to differentiate constitutes the valid "use" of a scholarly entity and how to differentiate between different types of usage captured by certain online tools.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/978083898756 8_metrics_OA.pdf	NISO: Reports detailing the use of a customer's electronic resources over a given period of time. NISO: Usage. A specific subset of activity based upon user access to one or more scholarly outputs, often in an online environment, and measured by organizations such as COUNTER. Common examples include HTML accesses and PDF downloads.	https://groups.niso.org/higherlogic/ws/public/download/29097/Z39-93-2014_SUSHI-1_7.pdf and, https://groups.niso.org/higherlogic/ws/public/download/17091	Plum Analytics: Usage metrics: Plumx tracks all metric categories at the article level. Article-level usage metrics are the number one statistic that researchers want to know after their citation counts. Usage is knowing how many times a particular article or artifact is downloaded, viewed, or played, if it's a video.	https://plumanalytics.com/learn/about-metrics/													

Crosswalk of Key Usage and Impact Vocabularies			*Key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions. See the Sources Used tab for more source and related permissions information.* ***See the Glossary for more terms.*** *Use the filter in column B to view terms for select categories.*																			
Term(s)	**Term category**	**# of definitions**	**Definition Provider and Definition 1**	**Definition 1 Source URL(s)**	**Definition Provider and Definition 2**	**Definition 2 Source URL(s)**	**Definition Provider and Definition 3**	**Definition 3 Source URL(s)**	**Definition Provider and Definition 4**	**Definition 4 Source URL(s)**	**Definition Provider and Definition 5**	**Definition 5 Source URL(s)**	**Definition Provider and Definition 6**	**Definition 6 Source URL(s)**	**Definition Provider and Definition 7**	**Definition 7 Source URL(s)**	**Definition Provider and Definition 8**	**Definition 8 Source URL(s)**	**Definition and source 9**	**Definition 9 Source URL(s)**
Version of Record (VoR)	industry/ scholcomm	3	COAR: A fixed version of a resource that has been made available by any organization that acts as a publisher by formally and exclusively declaring the resource "published". This includes any "early release" resource that is formally identified as being published even before the compilation of a volume issue and assignment of associated metadata, as long as it is citable via some permanent identifier(s). This does not include any "early release" resource that has not yet been "fixed" by processes that are still to be applied, such as copy-editing, proof corrections, layout, and typesetting. (adapted from NISO-JAV, https://www.niso.org/publications/niso-rp-8-2008-jav)	https://vocabularies.coar-repositories.org/version_types/c_970fb48d4fbd8a85/ and, https://www.niso.org/publications/niso-rp-8-2008-jav	NISO: A fixed version of a journal article that has been made available by any organization that acts as a publisher by formally and exclusively declaring the article "published". This includes any "early release" article that is formally identified as being published even before the compilation of a volume issue and assignment of associated metadata, as long as it is citable via some permanent identifier(s). This does not include any "early release" article that has not yet been "fixed" by processes that are still to be applied, such as copy-editing, proof corrections, layout, and typesetting.	https://www.niso.org/sites/default/files/2017-08/RP-8-2008.pdf	Open Research Glossary: the final version of a manuscript, after peer review and processing by publishers.	https://zenodo.org/record/20212													
View(s)	usage	3	Meaningful Metrics: An online altmetric that counts the number of times users have viewed a specific entity's online record; it generally represents the minimal threshold for online interaction. Because viewing an entity takes little commitment on the part of users, particularly if viewed only briefly, the views metric is most useful as an indicator of interest within a certain population or by the general public if not limited in access to one population.	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/978083987568_metrics_OA.pdf	SPARC: Successful full-text article request, generally measured according to the COUNTER Code of Practice.	https://airtable.com/appr MiEi98YWDNTxl/shrH2M ww3xAPywwQwf/tblVCHK rW1q1OYBqd															

Organizations and Initiatives Related to Usage and Impact Vocabularies					*Select organizations, initiatives and related services and terms.* *Scholarly content platforms and other service providers are a crucial part of this ecosystem but are too numerous to include here.* *As organizations don't often provide glossary definitions of themselves, their About and/or Mission statements are generally used here, with occasional editing for length.*													
Name	**Term category**	**Year started**	**Country of incorporation** (if applicable)	**Notes**	**Org Definition Provider and Definition 1**	**Org Definition 1 Source URL(s)**	**Org Definition Provider and Definition 2**	**Org Definition 2 Source URL(s)**	**Org Definition Provider and Definition 3**	**Org Definition 3 Source URL(s)**	**Org Definition Provider and Definition 4**	**Org Definition 4 Source URL(s)**	**Org Definition Provider and Definition 5**	**Org Definition 5 Source URL(s)**	**Org Definition Provider and Definition 6**	**Org Definition 6 Source URL(s)**
COUNTER Metrics	usage	2003	UK	organization and associated Code of Practice	About COUNTER: We were founded in 2003 to resolve a problem: every publishing platform was reporting usage differently. For 21 years we've remained true to our mission to bring the knowledge community together to agree and adopt a global standard for measuring and reporting content usage through normalised metrics. Over that time the Code has evolved significantly to address the changing nature of digital content and to meet the needs of librarians, consortia, publishers, aggregators and other stakeholders who rely on COUNTER metrics. We are a not-for-profit organisation financially sustained by our global community of members, including libraries, consortia, publishers, aggregators, and technology providers. Many of our members also help COUNTER through their efforts as volunteers, contributing to our governance, development of the Code of Practice, and our outreach and education activities.	https://www.countermetrics.org/about/	Book Analytics Dashboard Project: COUNTER provides the standard that enables the knowledge community to count the use of electronic resources. To have their usage statistics and reports designated COUNTER compliant, report providers MUST provide usage statistics that conform to the current Code of Practice	https://the-academic-observatory.gitbook.io/bad-workflows/dashboard-overview/more-information-and-contact-us/glossary	EBSCO: Launched in March 2002, COUNTER (Counting Online Usage of Networked Electronic Resources) is an international initiative designed to serve librarians, publishers and intermediaries by facilitating the recording and exchange of online usage statistics. Statistics run using this area of the EBSCOadmin Reporting & Statistics module comply with the current COUNTER 5 standards. For more information please go here: http://www.projectcounter.org/about.html [URL: https://connect.ebsco.com/s/article/EBSCOadmin-Reports-Glossary-of-Terms?language=en_US]	https://connect.ebsco.com/s/article/EBSCOadmin-Reports-Glossary-of-Terms?language=en_US	IRUS: COUNTER Code of Practice Release 5 (R5)The Code of Practice that allows the usage of online information products and services to be measured in a credible, consistent and compatible way using vendor-generated data. COUNTER Code of Practice for Research Data (RD)The Code of Practice for Research Data Usage Metrics standardizes the generation and distribution of usage metrics for research data, enabling for the first time the consistent and credible reporting of research data usage. COUNTER-conformant usage statistics Usage statistics which conform to the criteria laid down in the latest COUNTER Code of Practice.	https://irus.jisc.ac.uk/r5/support/glossary/	NISO (SUSHI): (Counting Online Usage of Networked Electronic Resources) An international initiative to facilitate the recording andexchange of online usage statistics. As used in this standard, refers to the reports defined by the initiative.	https://groups.niso.org/higherlogic/ws/public/download/29097/Z39-93-2014_SUSHI-1_7.pdf	SPARC: This Code of Practice enables publishers and vendors to report usage of their electronic resources in a consistent way.	https://airtable.com/apprMIEi98YWDNTxl/shrH2MwvGxAPuwwQw/tblVCHKrW1p1OYBqd
Crossref	metadata	2000	US	see DOI, PID in Crosswalk	About Crossref (mission): Crossref makes research objects easy to find, cite, link, assess, and reuse. We're a not-for-profit membership organisation that exists to make scholarly communications better. We rally the community; tag and share metadata; run an open infrastructure; play with technology; and make tools and services—all to help put research in context. It's as simple—and as complicated—as that.	https://www.crossref.org/about/	Book Analytics Dashboard Project:Crossref is a Digital Object Identifier (DOI) Registration Agency of the International DOI Foundation, that makes metadata available for all DOIs registered with them	https://the-academic-observatory.gitbook.io/bad-workflows/dashboard-overview/more-information-and-contact-us/glossary	CDL: A collaborative reference linking service. See the CrossRef web site for more information	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/#C	COUNTER: A not-for-profit membership organization for publishers.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	Open Research Glossary: an association of scholarly publishers that develops shared infrastructure to support more effective scholarly communication. (Source)	https://zenodo.org/records/20212 and http://www.crossref.org/		
DataCite	metadata	2009	Germany	see DOI, PID in Crosswalk	DataCite: We are a global community that shares a common interest: to ensure that research outputs and resources are openly available and connected so that their reuse can advance knowledge across and between disciplines, now and in the future. As a community, we make research more effective with metadata that connects research outputs and resources–from samples and images to data and preprints. We enable the creation and management of persistent identifiers (PIDs), integrate services to improve research workflows, and facilitate the discovery and reuse of research outputs and resources.	https://datacite.org/what-we-do/												
EOSC (European Open Science Cloud)	technical	2020	Belgium		EOSC: the federation of systems, regulated by the Rules of Participation, resulting from the activities and initiatives promoted by the European Commission to support its policies on open science and open innovation 2.0 Note 1 to entry: It is a trusted system providing seamless access to data and interoperable services. It supports the whole research data life-cycle, from discovery and mining to storage, management, analysis and re-use across borders and disciplines. Note 2 to entry: It consists of a set of interacting components (actors, services, data, policies, processes and infrastructures) that are distinguished between low variety (EOSC-Core) and high variety (EOSC-Exchange). [SOURCE: Candela, L., Mangione, D. (2020). Towards a Coherent and Shared Glossary for the European Open Science Cloud. https://docs.google.com/document/d/1wj9u8QWuCING1O3Lf_yWQJWftXhQwkN_4LzCz48feSQ/edit?usp=sharing, modified – reference to federation of systems.]	https://zenodo.org/records/4472643												
IDSA (International Data Spaces Association)	technical	2017	Germany		IDS: Association for the development and maintenance of the IDS-RAM and associated standards, see Executive Summary and IDSA Homepage.	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary#international-data-spaces										
IRUS (Institutional Repository Usage Statistics), Jisc	usage	2012	UK		What is IRUS: IRUS (Institutional Repository Usage Statistics) is a standards-based statistics service that enables participating institutions to share and compare information about usage of items in their institutional and research data repositories. How IRUS works IRUS collects raw usage data from IRs and processes into COUNTER-conformant usage statistics. This provides repositories with comparable, authoritative, standards-based usage data. We make the statistics openly available through our website. Participating organisations also have access via the API and widget. For a more detailed outline see the Service description.	https://irus.jisc.ac.uk/r5/about/what_is_irus/ and https://irus.jisc.ac.uk/r5/about/service_description/	Book Analytics Dashboard Project: A service for capturing and processing institutional repository usage data, making it possible for institutional repositories and platforms to generate COUNTER compliant usage data	https://the-academic-observatory.gitbook.io/bad-workflows/dashboard-overview/more-information-and-contact-us/glossary								
Make Data Count	assessment/ metrics	2014	n/a - hosted initiative	see also DataCite	About Make Data Count: Make Data Count is an initiative that promotes open data metrics to enable the evaluation and reward of research data reuse and impact. Our vision: Research data are valued research outputs across scholarly activities, evaluation, and communications. While there has been an increasing interest in research data and the importance of data sharing in recent years, we lack standardized, adopted ways to evaluate the impact of open data across the research ecosystem. We are thus lacking the means to complete meaningful evaluations that can lead to credit for individual researchers, incentives for data sharing, and an understanding of how open data advances discoveries. To enable the evaluation of data usage, Make Data Count drives the development of community-led transparent and meaningful open data metrics. The initiative has three main areas of focus: 1. Open infrastructure to enable the evaluation of data reuse 2. Outreach to drive awareness and adoption of open data metrics 3. Evidence on the reuse and impact of open data through collaboration with bibliometricians	https://makedatacount.org/about-us/												
NISO (National Information Standards Organization)	industry/ scholcomm	1939	US		What is NISO: We are the National Information Standards Organization, a nonprofit membership organization that identifies, develops, maintains, and publishes technical standards to manage information.	https://www.niso.org/welcome-to-niso and https://www.niso.org/welcome-to-niso	Crossref: National Information Standards Organization. A standards body who have created a Code of Conduct for altmetrics.	https://www.eventdata.crossref.org/guide/app-gloss/	COUNTER: The National Information Standards Organization is a United States non-profit standards organization that develops, maintains and publishes technical standards related to publishing, bibliographic and library applications. [Wikipedia]	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html and https://en.wikipedia.org/wiki/National_Information_Standards_Organizati	OCLC: National Information Standards Organization. Accredited by ANSI (American National Standards Institute) to develop voluntary technical standards for the library, information sciences, and publishing communities.	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary				

Organizations and Initiatives Related to Usage and Impact Vocabularies

Select organizations, initiatives and related services and terms.
Scholarly content platforms and other service providers are a crucial part of this ecosystem but are too numerous to include here.
As organizations don't often provide glossary definitions of themselves, their About and/or Mission statements are generally used here, with occasional editing for length.

Name	Term category	Year started	Country of incorporation (if applicable)	Notes	Org Definition Provider and Definition 1	Org Definition 1 Source URL(s)	Org Definition Provider and Definition 2	Org Definition 2 Source URL(s)	Org Definition Provider and Definition 3	Org Definition 3 Source URL(s)	Org Definition Provider and Definition 4	Org Definition 4 Source URL(s)	Org Definition Provider and Definition 5	Org Definition 5 Source URL(s)	Org Definition Provider and Definition 6	Org Definition 6 Source URL(s)
OAEBUDT (OA Book Usage Data Trust)	technical	2018	n/a - hosted initiative		What is OAeBUDT: Since 2015, global stakeholders have been collaborating via OA Book Usage Data Trust (OAEBUDT) related research projects to facilitate the direct data exchange and benchmarking of open and proprietary usage data about Open Access (OA) books. In 2021, they began focused research and development to launch an International Data Space (IDS) for the community-governed sharing of quality, interoperable, OA book usage data.	https://www.oabookusage.org/faq	Book Analytics Dashboard Project:Open Access eBook Usage (2020 - 2022) - a term used to refer to the Mellon Foundation funded pilot project Developing a Pilot Data Trust for Open Access Ebook Usage	https://the-academic-observatory.gitbook.io/bad-workflows/dashboard-overview/more-information-and-contact-us/glossary									
OCLC (Online Computer Library Center, Inc.)	metadata	1967	US		OCLC: A nonprofit global library cooperative providing shared technology services, original research, and community programs for its membership and the library community at large. Originally "Ohio College Library Center," later "Online Computer Library Center, Inc." or "OCLC, Inc.".	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary										
ONIX, EDItEUR	metadata	1991 (EDItEUR), 2000 (ONIX)	UK	organization and associated standard	About EDItEUR: EDItEUR is the international group coordinating development of the standards infrastructure for electronic commerce in the book, e-book and serials sectors. EDItEUR provides its membership with research, standards and guidance in such diverse areas as: Bibliographic and product information for the book, e-book and serials sectors EDI and other e-commerce transaction standards The standards infrastructure for digital publishing Rights management and trading About ONIX: The ONIX family includes standards for Books, Serials and Licensing Terms & Rights Information (including RROs). All ONIX standards are designed to support computer-to-computer communication between parties involved in creating, distributing, licensing or otherwise making available intellectual property in published form, whether physical or digital. All are expressed in XML. ONIX for Books was the first, and is the most widely-adopted, member of EDItEUR's ONIX family of standards. It was initially developed by EDItEUR jointly with Book Industry Communication (UK) and the Book Industry Study Group (US), and is now maintained under the guidance of an International Steering Committee including not only BIC and BISG but also national user groups in Australia, Belgium, Canada, China, Egypt, Finland, France, Germany, Italy, Japan, Korea, The Netherlands, Norway, Russia, Spain, and Sweden. The ONIX for Books Product Information Message is the international standard for representing and communicating book industry product information in electronic form. Other ONIX standards include ONIX for Serials, and ONIX for Publications Licenses aimed at communication of rights and repertoire data between RROs (Reproduction Rights Organizations), as well as more specialised formats for metadata associated with the registration of identifiers (DOIs, ISTCs, etc).	https://www.editeur.org/2/About/ and https://www.editeur.org/8/ONIX/	Book Analytics Service: ONIX for Books (ONline Information eXchange) is a standard format that book publishers use to share information about the books that they have published	https://the-academic-observatory.gitbook.io/bas/dashboard-overview/more-information-and-contact-us/glossary									
ORCID (Open Research & Contributor Identification)	metadata	2012	US	see PID in Crosswalk	About ORCID: ORCID, which stands for Open Researcher and Contributor ID, is a global, not-for-profit organization sustained by fees from our member organizations. We are community-built and governed by a Board of Directors representative of our membership with wide stakeholder representation. ORCID is supported by a dedicated and knowledgeable professional staff.	https://info.orcid.org/what-is-orcid/	Crossref: Open researcher and contributor ID. A system for assigning identifiers to authors.	https://www.eventdata.crossref.org/guide/app-gloss/	COUNTER: An international standard identifier for individuals (i.e. authors) to use with their name as they engage in research, scholarship, and innovation activities. See https://orcid.org/. A COUNTER identifier type for item contributors.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	IRUS (Jisc) : ORCID (Open Researcher and Contributor ID) is a persistent identifier for humans, similar in many ways to a Digital Object Identifier or DOI, which uniquely identifies objects.	https://irus.jisc.ac.uk/r5/support/glossary/	Open Research Glossary: a persistent digital identifier that distinguishes individual researchers. Also supports integration in research workflows.	https://zenodo.org/records/20212 and https://zenodo.org/records/20212		
RDA (Research Data Alliance)	data, general	2013	UK (RDA Foundation)	see also Resource Description and Access (RDA) via OCLC: https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary	About the RDA: The Research Data Alliance (RDA) was launched as a community-driven initiative in 2013 with the vision that researchers and innovators can openly share and re-use data across technologies, disciplines, and countries to address the grand challenges of society. The RDA's mission is to build the social and technical bridges that enable that vision, accomplished through the creation, adoption and use of the social, organisational, and technical infrastructure needed to reduce barriers to data sharing and exchange. Scientists & researchers join forces with technical experts in focused Working Groups, exploratory Interest Groups and Communities of Practice. Individual membership is free and open to all.	https://www.rd-alliance.org/about-the-rda/										
ROR (Research Organization Registry)	metadata	2019	n/a - hosted initiative	see PID in Crosswalk	What is ROR: The Research Organization Registry (ROR) is a global, community-led registry of open persistent identifiers for research organizations. ROR makes it easy for anyone or any system to disambiguate institution names and connect research organizations to researchers and research outputs. Organizations are not static entities. They change their names, merge, split, shut down, and re-emerge, and this makes it difficult to connect research organizations to research outputs and researchers. A persistent identifier for research organizations makes this easier. ROR is the first and only organization identifier that is openly available (CC0 data available via an open REST API and public data dump), specifically focused on identifying affiliations in scholarly metadata, developed as a community initiative to meet community use cases, and designed to be integrated into open scholarly infrastructure. It is the default identifier supported in Crossref DOI metadata, DataCite DOI metadata, and ORCID. ROR is used in journal publishing systems, data repositories, funder and grant management platforms, open access workflows, and other research infrastructure components to disambiguate institutional affiliations, improve discovery and tracking of research outputs by affiliation, and facilitate OA publishing workflows, among other use cases.	https://ror.org/about/	CODATA: Community-led registry of open, sustainable, usable, and unique identifiers for every research organisation in the world.	https://zenodo.org/records/10626170	COUNTER: ROR is a community-led registry of open, sustainable, usable, and unique identifiers for every research organization in the world. [ROR]. In COUNTER reports ROR IDs can be used as identifiers for institutions and publishers.	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html and https://ror.org/						

Organizations and Initiatives Related to Usage and Impact Vocabularies					*Select organizations, initiatives and related services and terms.* *Scholarly content platforms and other service providers are a crucial part of this ecosystem but are too numerous to include here.* *As organizations don't often provide glossary definitions of themselves, their About and/or Mission statements are generally used here, with occasional editing for length.*													
Name	**Term category**	**Year started**	**Country of incorporation** (if applicable)	**Notes**	**Org Definition Provider and Definition 1**	**Org Definition 1 Source URL(s)**	**Org Definition Provider and Definition 2**	**Org Definition 2 Source URL(s)**	**Org Definition Provider and Definition 3**	**Org Definition 3 Source URL(s)**	**Org Definition Provider and Definition 4**	**Org Definition 4 Source URL(s)**	**Org Definition Provider and Definition 5**	**Org Definition 5 Source URL(s)**	**Org Definition Provider and Definition 6**	**Org Definition 6 Source URL(s)**
SCOSS (The Global Sustainability Coalition for Open Science Services)	industry/ scholcomm	2017	n/a - hosted initiative		SCOSS: The Global Sustainability Coalition for Open Science Services (SCOSS) is a network of influential organisations committed to helping secure OA and OS infrastructure well into the future. Officially formed in early 2017, SCOSS's purpose is to provide a new co-ordinated cost-sharing framework that will ultimately enable the broader OA and OS community to support the non-commercial services on which it depends.	https://scoss.org/											
W3C (World Wide Web Consortium)	technical	1994	US		About the W3C: The World Wide Web Consortium (W3C) is an international public-interest non-profit organization where Member organizations, a full-time staff, and the public work together to develop Web standards. Founded by Web inventor Tim Berners-Lee and led by President & CEO Seth Dobbs and a Board of Directors, the Web Consortium's mission is to lead the web to its full potential.	https://www.w3.org/about/	COUNTER: The World Wide Web Consortium is the main international standards organization for the World Wide Web. [Wikipedia]	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html and https://en.wikipedia.org/wiki/XML									

Observations and feedback of note from interviews and desk research	***Reflects:*** *(primarily, but in some cases more than one category)*
Hard to know who/what uses usage (or COUNTER) without asking in many cases	Challenge
Librarians are focused on discrepancies in stats	Challenge
Sources may have information publicly available only to customers	Challenge
Definitions and other support documentation may not be sufficiently specific or clear or may be highly product- or context- specific	Challenge
URLs of sources are often not persistent. Several have broken or changed during this project	Challenge
The single source nature of glossary definitions may imply they are authoritative, broadly applicable and/or commonly accepted even if they are simply the only available definition within the scope of this resource	Challenge
Monographs have a long tail and metrics aren't geared toward long-term impact	Challenge
Usage is generally by platform and there isn't a good way to distinguish among them or acquisition methods used	Challenge
Context and needs can be very stakeholder-specific, resulting in significant differences of what is 'key'	Challenge
Analytics are more about clicks than content	For future research
A functional pipeline is ideal, i.e. having a publication come with a ready payload that can be tracked along the way with PIDs	For future research
Proprietary sources don't share a lot of details (metrics or non-COUNTER usage)	Gap/unknown
Informal or unofficial terminology or jargon is often not documented	Gap/unknown
Some basic, common terms lack definitions or commonly accepted understanding, e.g. *indicator*, which was initially included in the Glossary but removed based on feedback that it was too stakeholder-specific to include only one definition and *syndication, syndicated content* is described in reliable sources but not defined per se	Gap/unknown
Data dictionary is a need	Opportunity
Links between outputs and policy are of growing interest	Opportunity
Metadata 2020: Include definitions with (meta)data: https://metadata2020.org/resources/metadata-practices/	Recommendation/best practice
Don't reinvent the wheel	Recommendation/best practice
Transparency is key	Recommendation/best practice

References used to create this workbook								
Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
Alma glossary (Ex Libris)	https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/010Alma_Online_Help_(English)/010Getting_Started/085_Alma_Glossary		Ex Libris/ProQuest, 2024 Ex Libris, © 2022 Clarivate	Glossary	Metadata	Research outputs, general	Librarians	
Altmetric glossary	https://help.altmetric.com/support/solutions/articles/6000232842-altmetric-glossary	9/15/2020	Altmetric, © 2024 Digital Science & Research Solutions Ltd.	Glossary	Multiple, non usage	Research outputs, general	Multiple	
Book Analytics Service (BAS) glossary	https://the-academic-observatory.gitbook.io/bad-workflows/dashboard-overview/more-information-and-contact-us/glossary	Last updated 4 month ago	COKI (Curtin Open Knowledge Initiative)	Glossary	Multiple, usage	Books	Multiple	
California Digital Library (CDL) Glossary of Digital Library Terms	https://cdlib.org/resources/technologists/glossary-of-digital-library-terms/	Last updated July 14, 2021	California Digital Library (CDL), Copyright © 2024 The Regents of The University of California, CC BY 4.0: https://creativecommons.org/licenses/by/4.0/	Glossary	General/technical	Industry or technical terms	General	
COAR Controlled Vocabularies for Repositories (multiple, see note)	https://vocabularies.coar-repositories.org/		Confederation of Open Access Repositories (COAR), CC0: https://creativecommons.org/publicdomain/zero/1.0/	Vocabulary	General/technical	Repositories, general	Librarians	Access Rights 1.1, Version Types 1.1, Resource Types 3.1
CODATA RDM Terminology (2023 version)	https://zenodo.org/records/10626170	1/30/2024	CODATA RDM Terminology Working Group. (2024). CODATA RDM Terminology (2023 version): overview (Version 2023). Zenodo. https://doi.org/10.5281/zenodo.10626170, CC BY 4.0: https://creativecommons.org/licenses/by/4.0/legalcode	Glossary	General/technical	Research data	Multiple	source uses 'terminology'
COUNTER 5.1*	https://cop5.projectcounter.org/en/5.1/appendices/a-glossary-of-terms.html	5/5/2023	COUNTER Metrics © Copyright 2017-2023, COUNTER	Glossary	COUNTER usage	Multi: Traditional research outputs	Multiple	
COUNTER: Research data*	https://www.countermetrics.org/wp-content/uploads/2024/04/Research_Data_20190227.pdf	9/1/2018	COUNTER Metrics © Copyright 2017-2023, COUNTER	Glossary	COUNTER usage	Research data	Multiple	Aligned as much as possible with the COUNTER Code of Practice Release 5 glossary
Crossref Event Data glossary	https://www.eventdata.crossref.org/guide/app-gloss/		Crossref, CC BY 4.0: https://creativecommons.org/licenses/by/4.0/	Glossary	Multiple, non usage	Research outputs, general	Multiple	
DataCite glossary	https://support.datacite.org/docs/glossary-of-commonly-used-terms	Last updated 4 month ago	DataCite, CC BY 4.0: https://creativecommons.org/licenses/by/4.0/	Glossary	Multiple, non usage	Industry or technical terms	Multiple	
A Data Quality Glossary	https://zenodo.org/records/10474880	1/9/2024	Mohammed, S., Brandner, L. T., Burtscher, F., Hallensleben, S., Harmouch, H., Hauschke, A., Heesen, J., Hildebrandt, S., Hirsbrunner, S. D., Keselj, J., Mahlow, P., Massow, M., Naumann, F., Rostalski, F., Wilken, A., & Wölke, A. (2024). A Data Quality Glossary (1.0). Zenodo. https://doi.org/10.5281/zenodo.10474880. CC BY 4.0: https://creativecommons.org/licenses/by/4.0/legalcode	Glossary	General/technical	Data, general/technical	General	
Data Documentation Initiative Alliance (DDI Alliance) Controlled Vocabularies	https://ddialliance.org/controlled-vocabularies		DDI Alliance. (2019). Data Type (Version 1.1.2) [Controlled vocabulary]. CESSDA. urn:ddi:int.ddi.cv:DataType:1.1.2. CC BY 4.0: https://creativecommons.org/licenses/by/4.0/	Vocabulary	Multiple, non usage	Research data	Multiple	social sciences

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
EOSC (European Open Science Cloud) glossary	https://zenodo.org/records/4472643	12/31/2020	EOSC Glossary Interest Group. (2020). EOSC Glossary (December 2020). Zenodo. https://doi.org/10.5281/zenodo.4472643 CC BY 4.0: https://creativecommons.org/licenses/by/4.0/legalcode	Glossary	General/technical	Industry or technical terms	General	
FORCE11 Data Citation Principles Glossary	https://force11.org/info/data-citation-principles-glossary/		FORCE11. ⓒ 2011-2021 FORCE11 and the authors. CC BY-SA 4.0: https://creativecommons.org/licenses/by-sa/4.0/	Glossary	Multiple, non usage	Research data	Multiple	
Google Analytics glossary	https://support.google.com/analytics/topic/9355633?hl=en&ref_topic=14090456		Google, ©2024 Google	Glossary	Web analytics	Website information	Multiple	
International Data Space (IDS) glossary	https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/glossary	Last updated 8 months ago	International Data Spaces, CC 4.0: https://docs.internationaldataspaces.org/ids-knowledgebase/v/ids-g/license	Glossary	General/technical	Data, general/technical	Multiple	
IRUS (Institutional Repository Usage Statistics) glossary*	https://irus.jisc.ac.uk/r5/support/glossary/		Jisc, CC-BY-NC-SA: https://www.jisc.ac.uk/website/copyright	Glossary	COUNTER usage	Repositories - multiple types	Librarians	
ISO 5127:2017 Information and documentation — Foundation and vocabulary	https://www.iso.org/obp/ui/#iso:std:iso:5127:ed-2:v1:en	2017	©ISO. This material is reproduced from ISO 5127:2017, with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization. All rights reserved.	Vocabulary	Multiple, non usage	Industry or technical terms	Multiple	
Jansen, B. J., Jung, S., & Salminen, J. (2022). Measuring user interactions with websites: A comparison of two industry standard analytics approaches using data of 86 websites. PLOS ONE, 17(5), e0268212. https://doi.org/10.1371/journal.pone.0268212	https://doi.org/10.1371/journal.pone.0268212	5/27/22	Copyright: © 2022 Jansen et al., CC BY 4.0: https://creativecommons.org/licenses/by/4.0/	Non-definition source	Web analytics	Data, general/technical	Multiple	
Meaningful Metrics: A 21st-Century Librarian's Guide to Bibliometrics, Altmetrics, and Research Impact	https://www.ala.org/sites/default/files/acrl/content/publications/booksanddigitalresources/digital/9780838987568_metrics_OA.pdf	2015	Robin Chin Roemer & Rachel Borchardt. Copyright ©2015 by The Association of College & Research Libraries, a division of the American Library Association. Creative Commons license CC BY-NC 4.0: https://www.creativecommons.org/licenses/by-nc/4.0/deed.en	Glossary	Research(er) assessment	Research outputs, general	Librarians	
Metrics Toolkit	https://www.metrics-toolkit.org/metrics/	8/10/2020	Metrics Toolkit Editorial Board. CC BY 4.0: https://creativecommons.org/licenses/by/4.0/	Glossary	Research(er) assessment	Industry or technical terms	Multiple	Not labeled a glossary but does include explicit definitions, among other information
Multilingual Glossary for Today's Library Users	https://docs.google.com/document/d/1HZH3lmElRTw41vG5_tUWPQhwwgfXJeMoHe-EeKOxrq0/edit#heading=h.lrrkfprfxj4w	6/8/2018	ACRL-IS: https://acrl.ala.org/IS/instruction-tools-resources-2/pedagogy/multilingual-glossary-for-todays-library-users/ CC BY-NC 4.0: https://creativecommons.org/licenses/by-nc/4.0/	Glossary	n/a	Libraries	End users	
(U.S.) National Library of Medicine (NLM) data glossary	https://www.nnlm.gov/guides/data-glossary	6/13/2022	NLM National Center for Data Services	Glossary	General/technical	Data, general/technical	Librarians	
NISO RP-8-2008, Journal Article Versions (JAV): Recommendations of the NISO/ALPSP JAV Technical Working Group	https://www.niso.org/sites/default/files/2017-08/RP-8-2008.pdf	2008	(n.d.). NISO RP-8-2008, Journal Article Versions (JAV): Recommendations of the NISO/ALPSP JAV Technical Working Group. https://doi.org/10.3789/niso-rp-8-2008. Copyright © 2008 by the National Information Standards Organization	Recommendation	General/technical	Journals	Multiple	page 3
NISO RP-25-2016 Outputs of the NISO Alternative Assessment Metrics Project	https://groups.niso.org/higherlogic/ws/public/download/17091	2016	(n.d.). NISO RP-25-2016, Outputs of the NISO Alternative Assessment Metrics Project. https://doi.org/10.3789/niso-rp-25-2016. Copyright © 2016 by the National Information Standards Organization	Recommendation	General/technical	Research outputs, general	Multiple	

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
OCLC, two sources: glossary and data sync glossary	https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary and https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/Data_sync_processing_glossary	May, 2024 and July, 2023 respectively	OCLC Glossary www.oclc.org. © 2024 OCLC, Inc. August 28, 2024. https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/OCLC_glossary and OCLC Data sync processing glossary. www.oclc.org. © 2024 OCLC, Inc. August 28, 2024. https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/Data_sync_processing_glossary	Glossary	Multiple, usage	Data, general/technical	Librarians	
Open Research Glossary	https://zenodo.org/records/20212	7/14/2015	Tennant, J., & Mounce, R. (2015). Open Research Glossary. Zenodo. https://doi.org/10.6084/m9.figshare.1482094. CC0 1.0: https://creativecommons.org/publicdomain/zero/1.0/legalcode	Glossary	n/a	Industry or technical terms	General	
Plum Analytics categories	https://plumanalytics.com/learn/about-metrics/		Elsevier	Glossary	Multiple, usage	Research outputs, general	End users	
RDA: Cross walking sensitive data terms: A glossary of terms for the Research Data Alliance Sensitive Data Interest Group	https://archive.rd-alliance.org/group/sensitive-data-interest-group/post/call-feedback-ig-glossary-terms	5/10/2023	RDA Sensitive Data Interest Group: Call for feedback on the IG Glossary of Terms. 2023. Chair(s): Kristal Spreadborough, Aleksandra Michalewicz, Nichola Burton, Steven McEachern, Romain DAVID, Dharma Akmon, Kristan Kang, Sarah Davidson, Frankie Stevens, Kylie Black. Terms: https://archive.rd-alliance.org/disclaimer-terms-use.html	Glossary	n/a	Research data	Authors/researchers	the RDA website is in transition; some URLs may change. Google doc link: https://docs.google.com/document/d/1p4Dhu58XwhYVINK-uSf3SZEWxjwkTmATfRD4_Vm9TzQ/edit?usp=sharing
SPARC data analysis glossary	https://airtable.com/aprMlEi98YWDNTxl/shrH2Mwv3xAPuwwQw/tblVCHKrW1p1OYBqd		SPARC: The Data Analysis Working Group of SPARC's Negotiation Community of Practice. © 2007 - 2024 SPARC, CC BY 4.0: http://creativecommons.org/licenses/by/4.0/	Glossary	General/technical	Industry or technical terms	Multiple	see also: https://sparcopen.org/our-work/negotiation-resources/data-analysis/usage-statistics/
The Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol (NISO)	https://groups.niso.org/higherlogic/ws/public/download/29097/Z39-93-2014_SUSHI-1_7.pdf	2014	(n.d.). ANSI/NISO Z39.93-2014, The Standardized Usage Statistics Harvesting Initiative (SUSHI) Protocol. https://doi.org/10.3789/ansi.niso.z39.93-2014 Copyright © 2014 by the National Information Standards Organization	Glossary	COUNTER usage	Research outputs, general	Multiple	definitions section
UNESCO	https://www.unesco.org/en/open-access		UNESCO	Non-definition source	n/a	Research outputs, general	Multiple	
UKCORR: Glossary	https://www.ukcorr.org/glossary/		United Kingdom Council of Open Research and Repositories (UKCORR) Glossary	Glossary	n/a	Industry or technical terms	General	
US OSTP: Economic Landscape of Federal Public Access Policy	https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Congressional-Report.pdf	8/2022	U.S. White House Office of Science and Technology Policy (OSTP)	Non-definition source	General/technical	Research outputs, general	Multiple	page 5
W3C: Data on the Web glossary	https://www.w3.org/TR/dwbp/#glossary	1/31/2017	The World Wide Web Consortium (W3C) Data on the Web Best Practices Working Group. Editors: Bernadette Farias Lóscio, CIn - UFPE, Brazil, Caroline Burle, NIC.br, Brazil, Newton Calegari, NIC.br, Brazil. Copyright © 2017. See other, original sources referenced in specific W3C definitions. Copyright W3C® (MIT,ERCIM,Keio, Beihang).W3C liability, trademark and document use rules apply. https://www.w3.org/copyright/document-license-2023/	Glossary	General/technical	Industry or technical terms	General	See also vocabularies: https://www.w3.org/TR/dwbp/#dataVocabularies

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
W3C: Linked Data Glossary	https://www.w3.org/TR/ld-glossary/	6/27/2013	The World Wide Web Consortium (W3C) Government Linked Data Working Group. Editors: Bernadette Hyland, 3 Round Stones, Ghislain Atemezing, EURECOM, Michael Pendleton, US Environmental Protection Agency, Biplav Srivastava, IBM. Copyright © 2013 W3C® (MIT, ERCIM, Keio, Beihang), All Rights Reserved. W3C liability, trademark and document use rules apply. https://www.w3.org/Consortium/Legal/ipr-notice#Copyright	Glossary	General/technical	Data, general/technical	Multiple	
Web of Science glossary	https://webofscience.help.clarivate.com/en-us/Content/glossary.htm		Clarivate, © 2022 Clarivate	Glossary	Research(er) assessment	Research outputs, general	Multiple	

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
Related resources: This second list of sources that are 1) not reflected in the glossary, crosswalk or organizations list or 2) were used in background research 3) cited in a definition and/or 4) may be useful for specific use cases and audiences or for individual readers.	**URL(s)**							
(n.d.). ANSI/NISO Z39.7-2013, Information Services and Use: Metrics and Statistics for Libraries and Information Providers Data Dictionary. https://doi.org/10.3789/ansi.niso.z39.7-2013	https://doi.org/10.3789/ansi.niso.z39.7-2013							
Aryani, A. (2018). Data Description Registry Interoperability WG: Interlinking Method and Specification of Cross-Platform Discovery. Zenodo. https://doi.org/10.15497/RDA00003	https://doi.org/10.15497/RDA00003							
Candela, L., Mangione, D. (2020). Towards a Coherent and Shared Glossary for the European Open Science Cloud.	https://docs.google.com/document/d/1wj9u8QWuCING1O3Lf_yWQJWftXhQwkN_4LzCz48feSQ/edit?usp=sharing							
CARE Principles for Indigenous Data Governance	https://www.gida-global.org/care							
CASRAI Research Data Management Glossary	https://casrai.org/rdm-glossary/							
Celus Support Portal. CELUS support portal. (n.d.). https://support.celus.net/support/solutions/folders/103000394714. Non-COUNTER compliant platforms	https://support.celus.net/support/solutions/folders/103000394714.							
CiTO, the Citation Typing Ontology. Peroni, S., Shotton, D. (2012). FaBiO and CiTO: ontologies for describing bibliographic resources and citations. In Journal of Web Semantics, 17: 33-43. https://doi.org/10.1016/j.websem.2012.08.001	http://purl.org/spar/cito and https://doi.org/10.1016/j.websem.2012.08.001							
Cox, A., Gadd, E., Petersohn, S., & Sbaffi, L. (2019). Competencies for bibliometrics. Journal of Librarianship and Information Science, 51(3), 746-762. https://doi.org/10.1177/0961000617728111	https://doi.org/10.1177/0961000617728111							
DataCite Business Practices Working Group. DataCite Business Practices Working Group. (2012). Business Models Principles. https://doi.org/10.5438/0007	https://doi.org/10.5438/0007							
EBSCO: Reports glossary	https://connect.ebsco.com/s/article/EBSCOadmin-Reports-Glossary-of-Terms?language=en_US							
Echeverria, M., & Bustamante, Y. (2023). Scope and limitations of library metrics for the assessment of ebook usage: COUNTER R5 and link resolver. Quantitative Science Studies, 4(4), 997–1017. https://doi.org/10.1162/qss_a_00279	https://doi.org/10.1162/qss_a_00279							
FITSM. Part 0: Overview and vocabulary. Edition 2016 – Version 2.4	https://www.fitsm.eu/fitsm-parts/							

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
Godby, Carol Jean. 2010. Mapping ONIX to MARC. Report and crosswalk produced by OCLC Research. Available online at http://www.oclc.org/research/publications/library/2010/2010-14.pdf (report) and http://www.oclc.org/research/publications/library/2010/2010-14a.xls (crosswalk).	http://www.oclc.org/research/publications/library/2010/2010-14.pdf and http://www.oclc.org/research/publications/library/2010/2010-14a.xls and https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics/090Digital_Collections							
Google Books: Preview traffic reports	https://support.google.com/books/partner/answer/3323499?hl=en&ref_topic=3324029&sjid=12290667050578327175-NA							
Interoperable Europe: Core Vocabularies (multiple)	https://joinup.ec.europa.eu/interoperable-europe/core-vocabularies							
Jansen BJ, Jung S-g, Salminen J (2022) Measuring user interactions with websites: A comparison of two industry standard analytics approaches using data of 86 websites. PLoS ONE 17(5): e0268212. https://doi.org/10.1371/journal.pone.0268212	https://doi.org/10.1371/journal.pone.0268212							
JSTOR: Books and engagement reports	https://support.jstor.org/hc/en-us/articles/360040981054-Books-at-JSTOR-Reports and https://support.jstor.org/hc/en-us/articles/22658286789783-JSTOR-Engagement-Report							
The Lens: Glossary	https://support.lens.org/glossary/							
LibGuides: These often have glossaries. There are too many to include here; this is just one example. Others are also found in this list.	https://guides.temple.edu/toolkit/glossary							
Library of Congress : Linked Data	https://id.loc.gov/							
Mowry, Amelia, "Library Link Resolvers and Analytics: Using Analytics Tools to Identify Usage Trends and Access Problems with Electronic Resources in Libraries" (2015). Library Scholarly Publications. Paper 92. http://digitalcommons.wayne.edu/libsp/92	http://digitalcommons.wayne.edu/libsp/92							
National Archives (US): Glossary	https://www.archives.gov/research/alic/reference/archives-resources/terminology.html							

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
OCLC (multiple sources): Usage statistics, WorldCat, COUNTER, Publisher reports, Assessment tools, Link resolver, Digital collections, FirstSearch, Data Sync Processing	https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics_and_https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics/030WorldCat_Discovery_and_https://help.oclc.org/Librarian_Toolbox/_and_https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics/100PublisherOCLC_Usage_Statistics/080COUNTER_and_https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics/140Assessment_Tools_and_https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics/110Link_Resolver_and_https://help.oclc.org/Librarian_Toolbox/OCLC_Usage_Statistics/020FirstSearch_and_https://help.oclc.org/Librarian_Toolbox/OCLC_glossaries/Data_sync_processing_glossary							
ONIX: Glossary (aka Codelist) 3 and 3.1	https://www.editeur.org/files/ONIX%20for%20books%20-%20code%20lists/ONIX_BookProduct_Codelists_Issue_65.html							
Peroni, S., Shotton, D. (2012). FaBiO and CiTO: ontologies for describing bibliographic resources and citations. In Journal of Web Semantics, 17: 33-43. https://doi.org/10.1016/j.websem.2012.08.001. Open Access at: http://speroni.web.cs.unibo.it/publications/peroni-2012-fabio-cito-ontologies.pdf	https://doi.org/10.1016/j.websem.2012.08.001_and_http://speroni.web.cs.unibo.it/publications/peroni-2012-fabio-cito-ontologies.pdf							
(2013). Out of Cite, Out of Mind: The Current State of Practice, Policy, and Technology for the Citation of Data. Data Science Journal, 12(0), CIDCR1–CIDCR75. https://doi.org/10.2481/dsj.osom13-043	https://www.jstage.jst.go.jp/article/dsj/12/0/12_OSOM13-043/_pdf							
RDA DFT working group. (2019). DFT Vocabulary 4.0 Philadelphia.	https://smw-rda.esc.rzg.mpg.de/dft-4.0							
RDA: Best Practices for Vocabulary-based Projects	https://archive.rd-alliance.org/system/files/documents/Best%20Practices%20for%20Vocabulary-based%20Projects.pdf							
RDA: Data Foundation and Terminology Interest Group (DFT IG). Term Definitions Version 1.0 "Montreal"	https://smw-rda.esc.rzg.mpg.de/dft-1.0.html#Open_data							

Definition sources: The first list of sources provided the definitions in the glossary, crosswalk and organizations list. Bold=includes usage, *=usage specific.	**URL(s)**	**Publication Date** *if known*	**Organization, author, and/or citation**	**Resource Type** *Taken from the source, if provided*	**Data Category**	**Output(s)/what is being described/analyzed**	**Audience(s)**	**Notes**
RDA: Maps	https://www.rdaregistry.info/Maps/							
RDA: Registry	https://www.rdaregistry.info/							
RDA: Schema crosswalks	https://archive.rd-alliance.org/group/research-metadata-schemas-wg/outcomes/collection-crosswalks-fifteen-research-data-schemas							
Scaccia, N., Günther, T., Lopez de Abechuco, E., & Filter, M. (2021). The Glossaryfication Web Service: an automated glossary creation tool to support the One Health community. Research Ideas and Outcomes, 7, e70183. https://doi.org/10.3897/rio.7.e70183	https://doi.org/10.3897/rio.7.e70183							
UCLA: Semantic web vocabularies (libguide)	https://guides.library.ucla.edu/semantic-web/semantic_web_vocabularies							
Society of American Archivists (SAA): Dictionary of Archives Terminology	https://dictionary.archivists.org/							
SPARC: Usage statisics resource	https://sparcopen.org/our-work/negotiation-resources/data-analysis/usage-statistics/							
Strong, Diane M., Yang W. Lee, and Richard Y. Wang. "Data quality in context." Communications of the ACM 40.5 (1997): 103-110.	https://dl.acm.org/doi/10.1145/253769.253804							
Taxonomies & Controlled Vocabularies SIG: Special Interest Group of the American Society for Indexing: About Taxonomies & Controlled Vocabularies	https://www.taxonomies-sig.org/about.htm							
Univeristy of Texas: Metadata crosswalks (libguide)	https://guides.lib.utexas.edu/metadata-basics/crosswalks							
W3C: Accessibilty Crosswalk and Best Practice template (which includes their glossary)	https://w3c.github.io/publ-a11y/drafts/a11y-crosswalk-MARC/index.html and https://www.w3.org/TR/dwbp/							
W3C: Data Catalog Vocabulary (DCAT). Version 3 22 August 2024. Editors: Riccardo Albertoni (Invited Expert / CNR - Consiglio Nazionale delle Ricerche, Italy) , David Browning (Invited Expert) (Previously at Refinitiv.com), Simon J D Cox (Invited Expert) (Previously at CSIRO), Alejandra Gonzalez Beltran (Invited Expert / Scientific Computing Department, Science and Technology Facilities Council, UK) (Previously at the University of Oxford), Andrea Perego (Invited Expert), Peter Winstanley (Invited Expert)	https://www.w3.org/TR/vocab-dcat/							
Wikipedia: Multiple definitions use or adapt Wikipedia. More information is provided in each individual definition.	varies							

Term Categories	*Terms categories used within the glossary and crosswalk.* *Listed in alphabetical order.*
Category	**What each term indicates (wholly or predominantly)**
assessment/ metrics	Specific to the broad range of research(er) evaluation. May or may not include scholarly content usage.
data, general	Specific to data broadly defined, potentially including metadata as well.
industry/ scholcomm	Specific to the scholarly and research communications landscape and/or context.
metadata	Specific to data that describes the broad range of scholarly outputs and related information, including Persistent Identifiers (PIDs).
technical	Specific to underlying code, functions, principles and/or processses of systems and services involved in scholarly data, including metadata.
usage	Specific to use of the broad range of scholarly outputs.

Pivot Table Report | Count of Key Terms and Definitions by Term Category

Term category	Term(s)	Count of Term(s)	Count of definitions
assessment/ metrics	(Journal) Impact Factor (IF)	1	4
	Altmetrics	1	3
	Bibliometrics	1	4
	Citation analysis	1	2
	Eigenfactor (score)	1	2
	h-index	1	3
	Impact	1	2
	Mentions	1	2
	Metric(s)	1	2
assessment/ metrics Total		9	24
data, general	Accuracy (of data)	1	1
	Analytics. See Web analytics	1	0
	Completeness (of data)	1	1
	Data consumer, data user, Report consumer	1	4
	Data dictionary	1	2
	Data quality	1	4
	Data sovereignty	1	2
	Data type, content type, output, resource type, document type	1	6
	Data/metadata producer, provider	1	3
	Dataset, Data set	1	7
	De-identification	1	3
	Federated (data, search, identity, etc.), federation	1	2
	Output(s), research See data type	1	0
	Owner, -ship, data owner	1	3
	Privacy (of data)	1	1
	Reuse (of data)	1	1
	Sensitive data	1	3
	Transparency (of data)	1	1
	Web analytics	1	1
data, general Total		19	45

Pivot Table Report | Count of Key Terms and Definitions by Term Category

Term category	Term(s)	Count of Term(s)	Count of definitions
industry/ scholcomm	(Author) Accepted manuscript (AM, AAM)	1	5
	Aggregator	1	2
	Archive. see also Repository	1	2
	Author affiliation	1	3
	CARE Principles	1	1
	Citation, Times cited See also Data citation	1	9
	Data citation	1	4
	Discovery layer	1	1
	Discovery service	1	1
	FAIR (data principles) see also FAIR Principles website	1	2
	License	1	2
	Link resolver	1	1
	Open access	1	1
	Open data	1	4
	Platform. See Service provider	1	0
	Provenance: data, metadata	1	6
	Public access	1	1
	Publisher	1	4
	Repository, data, digital, instititutional repository (IR)	1	7
	Service Provider, access provider, broker, content host, (hosting, inte	1	7
	Version of Record (VoR)	1	3
industry/ scholcomm Total		21	66
metadata	DOI (Digital Object Identifier)	1	6
	Element	1	4
	Metadata	1	8
	Persistent identifier (PID)	1	5
	Tag	1	4
metadata Total		5	27

Pivot Table Report | Count of Key Terms and Definitions by Term Category

Term category	Term(s)	Count of Term(s)	Count of definitions
technical	Access method	1	3
	API (Application Programming Interface)	1	3
	Authentication	1	2
	Checksum	1	1
	Crawler, Internet robot, spider, bot	1	3
	Data harvesting, harvest, -er, -ing	1	3
	Data, security of	1	2
	Harvest. See data harvesting	1	0
	Ingest	1	1
	Machine actionable	1	3
	Machine readable	1	4
	Paywall, loginwall	1	2
	Request, hit	1	4
	Response	1	2
	Session	1	3
	Standard	1	4
	User agent	1	1
technical Total		17	41
usage	Access denied, turnaway	1	2
	Download(s)	1	4
	DUL (Distributed Usage Logging)	1	1
	Metric_type	1	1
	SUSHI (Standardized Usage Statistics Harvesting Initiative)	1	2
	Text / data mining, TDM	1	4
	Turnaway. See access denied	1	0
	Usage (statistics)	1	3
	View(s)	1	3
usage Total		9	20

Pivot Table Report | Glossary Terms and Definitions Grouped by Category

Term category	Term	Definition	COUNT of Glossary Terms in Category
data, general	Accuracy (of data)	Accuracy describes the correspondence between a phenomenon in the world and its description as data. When comparing the data value with the empirically ascertainable value, the difference can be determined either in binary terms (equal or unequal) or the	1
	Analytics. See Web analytics	(blank)	1
	Completeness (of data)	Completeness is the relationship between the amount of data represented and the amount of data to be represented. While the former can be counted (number of rows, number of non-null values), the latter can often only be estimated. A dataset (e.g., table)	1
	Privacy (of data)	Data are private if the persons described in the data have control over and access to that data. Private (also confidential) data protects the user's right to informational self-determination. The legal protection of privacy can be ensured organisationall	1
	Reuse (of data)	Data Reuse, or Secondary Data Analysis, is the analysis of existing data collected by other individuals or institutions for a new research purpose. It can refer to statistical, quantitative data or descriptive, qualitative data.	1
	Transparency (of data)	The dimension of transparency includes disclosure requirements about the origin of training data, information about quality checks performed on datasets, about who labelled the datasets, what the learning goals are, whether and to what extent source code	1
	Web analytics*	The collection, measurement, analysis, and reporting of digital data to enhance insights concerning the behavior of website visitors	1
data, general Total			7
industry/ scholcomm	CARE Principles	Set of principles for Indigenous data governance. CARE stands for Collective benefit, Authority to control, Responsibility and Ethics. These principles complement the existing FAIR principles.	1
	Discovery layer	A web-accessible interface for searching, browsing, filtering, and otherwise interacting with indexed metadata and content. The searches produce a single, relevancy-ranked results set, usually displayed as a list with links to full content, when available	1
	Discovery service	A pre-harvested central index coupled with a fully featured discovery layer. A COUNTER Host_Type.	1
	Link resolver	Software that brings together information about the cited resource, the user, and the library's many subscriptions, policies, and services. For the software to work, the content providers must be willing to participate as sources (databases or sites that	1
	Open access*	UNESCO: Open Access means free access to scientific information and unrestricted use of electronic data for everyone. It also references the Berlin Declaration definition. See note.	1
	Public access*	OSTP and federal agencies draw distinctions between the terms public access and open access. Public access refers to the free availability of federally funded scholarly materials to the public (including publications, data, and other research outputs) and	1
industry/ scholcomm Total			6
technical	Checksum	Alphanumeric signature (similar to a fingerprint) calculated from a digital object's content and structure using a mathematical algorithm. The algorithm will always produce the same checksum unless any change, no matter how small, is made to the file. Com	1
	Ingest	The process by which a digital object or metadata package is absorbed by a different system than the one that produced it.	1
	User agent	An identifier that is part of the HTTP protocol that identifies the software (e.g. browser) being used to access the site. May be used by robots to identify themselves.	1
technical Total			3
usage	DUL (Distributed Usage Logging)	A peer-to-peer channel for the secure exchange and processing of COUNTER-compliant private usage records from hosting platforms to publishers.	1
	Metric_type	A COUNTER report attribute that identifies the nature of the usage activity.	1
usage Total			2
Grand Total			**18**

Report | Count of definitions across glossary and crosswalk

Alphabetical list of key terms relevant to usage, impact and the related scholarly ecosystem are included here when there are multiple definitions from listed sources.

Term(s)	Term category	# of definitions
(Author) Accepted manuscript (AM, AAM)	industry/ scholcomm	5
(Journal) Impact Factor (IF)	assessment/ metrics	4
Access denied, turnaway	usage	2
Access method	technical	3
Accuracy (of data)	data, general	1
Aggregator	industry/ scholcomm	2
Altmetrics	assessment/ metrics	3
Analytics. *See Web analytics*	data, general	0
API (Application Programming Interface)	technical	3
Archive. *see also Repository*	industry/ scholcomm	2
Authentication	technical	2
Author affiliation	industry/ scholcomm	3
Bibliometrics	assessment/ metrics	4
CARE Principles	industry/ scholcomm	1
Checksum	technical	1
Citation analysis	assessment/ metrics	2
Citation, Times cited *See also Data citation*	industry/ scholcomm	9
Completeness (of data)	data, general	1
Crawler, Internet robot, spider, bot	technical	3
Data citation	industry/ scholcomm	4
Data consumer, data user, Report consumer	data, general	4
Data dictionary	data, general	2
Data harvesting, harvest, -er, -ing	technical	3
Data quality	data, general	4
Data sovereignty	data, general	2
Data type, content type, output, resource type, document type	data, general	6
Data, security of	technical	2
Data/metadata producer, provider	data, general	3
Dataset, Data set	data, general	7
De-identification	data, general	3
Discovery layer	industry/ scholcomm	1
Discovery service	industry/ scholcomm	1
DOI (Digital Object Identifier)	metadata	6
Download(s)	usage	4
DUL (Distributed Usage Logging)	usage	1
Eigenfactor (score)	assessment/ metrics	2
Element	metadata	4
FAIR (data principles) *see also FAIR Principles website*	industry/ scholcomm	2
Federated (data, search, identity, etc.), federation	data, general	2
Harvest. *See data harvesting*	technical	0
h-index	assessment/ metrics	3
Impact	assessment/ metrics	2
Ingest	technical	1
License	industry/ scholcomm	2

Link resolver	industry/ scholcomm	1
Machine actionable	technical	3
Machine readable	technical	4
Mentions	assessment/ metrics	2
Metadata	metadata	8
Metric(s)	assessment/ metrics	2
Metric_type	usage	1
Open access	industry/ scholcomm	1
Open data	industry/ scholcomm	4
Output(s), research *See data type*	data, general	0
Owner, -ship, data owner	data, general	3
Paywall, loginwall	technical	2
Persistent identifier (PID)	metadata	5
Platform. *See Service provider*	industry/ scholcomm	0
Privacy (of data)	data, general	1
Provenance: data, metadata	industry/ scholcomm	6
Public access	industry/ scholcomm	1
Publisher	industry/ scholcomm	4
Repository, data, digital, instititutional repository (IR)	industry/ scholcomm	7
Request, hit	technical	4
Response	technical	2
Reuse (of data)	data, general	1
Sensitive data	data, general	3
Service Provider, access provider, broker, content host, (hosting, internet) content	industry/ scholcomm	7
Session	technical	3
Standard	technical	4
SUSHI (Standardized Usage Statistics Harvesting Initiative)	usage	2
Tag	metadata	4
Text / data mining, TDM	usage	4
Transparency (of data)	data, general	1
Turnaway. *See access denied*	usage	0
Usage (statistics)	usage	3
User agent	technical	1
Version of Record (VoR)	industry/ scholcomm	3
View(s)	usage	3
Web analytics	data, general	1