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Information and documentation — Library performance indicators

Information et documentation — Indicateurs de performance des bibliothèques

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 8, *Quality — Statistics and performance evaluation*.

This fourth edition cancels and replaces the third edition (ISO 11620:2014), which has been technically revised.

The main changes are as follows:

— addition of library training participation indicators aligned with relevant UN Sustainable Development Goals (UN SDGs);

— addition of library awareness, impact related indicators;

— addition of staff research and research support related indicators; and

— deletion of several indicators no longer relevant or feasible.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is concerned with the evaluation of libraries of all types.

The main purpose of this document is to endorse the use of performance indicators regarding the quality of library services in libraries and to spread knowledge about how to conduct performance measurement.

Performance indicators can be used for comparison over time within the same library. Comparisons between libraries can also be made, but only with caution. Comparisons between libraries will need to consider any differences in the constituencies of the libraries and library attributes, with a good understanding of the indicators used, limitations to comparisons, and careful interpretation of the data.

There are other limitations to the performance indicators in this document that depend on local factors, such as the community the library serves, service mandates, and the technological and financial infrastructure. Results from the use of performance indicators in this document are intended to be interpreted with regard to these factors.

Performance indicators are not specified for all services, activities, and types of use of the library, either because such indicators have not been proposed and tested at the time of formulation of this document, or because they did not fulfil the criteria specified (see 5.2).

The performance indicators included in this document do not reflect all possible measures or evaluation techniques. It offers accepted, tested, and publicly accessible (i.e. non-proprietary) methodologies and approaches to measuring a range of library service performance.

The quality of library services is related to the broader topic of quality management and quality assurance. This document acknowledges and supports the International Standards prepared by ISO/TC 176.

Every indicator in this document is given a unique name. This name sometimes differs from the literature upon which its description is based. Such differences are documented in the descriptions of the indicators.

The performance indicators included in this document are either in widespread use, well documented in the literature, or sufficiently field-tested. Additional indicators have been developed by the working group in analogy to existing ones in order to cover as far as possible all library services and activities.

Library services will continue to develop and evolve, and such evolution will require monitoring as related to the indicators in this document. The library and information community is encouraged to establish mechanisms and to give high priority to developing relevant indicators for existing and emerging library services and resources.

This document will be maintained by a working group that will monitor developments and incorporate additional indicators as they are tested and validated.

Information and documentation — Library performance indicators

1 Scope

This document specifies the requirements of a performance indicator for libraries and establishes a set of indicators to be used by libraries of all types. It also provides guidance on how to implement performance indicators in libraries where such indicators are not already in use.

This document is applicable to all types of libraries in all countries. However, not all performance indicators apply to all libraries. Limitations on the applicability of individual performance indicators are listed in the scope clause of the description of each indicator (see Annex A).

This document provides a standardized terminology and concise definitions of the performance indicators. Furthermore, it contains detailed descriptions of the indicators and of the collection and the analysis of data needed.

This document is not intended to exclude the use of performance indicators not specified in it.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
access
<virtual> successful request of a library-provided online service

[SOURCE: ISO 2789:2022, 3.2.1]

3.2
access
<physical> right, opportunity, means of finding, using or retrieving information, of using a service; or entering a building

[SOURCE: ISO 15489-1:2016, 3.1, modified — "of using a service; or entering a building" has been added.]

3.3
accessibility
ease of reaching and using a service or facility

1

3.4
active borrower
registered user who has borrowed at least one item during the reporting period

Note 1 to entry: This count underrates the number of active users, but is still for many libraries the only manageable measure.

[SOURCE: ISO 2789:2022, 3.2.3]

3.5
active user
registered user who has visited or made use of library facilities or services during the reporting period

Note 1 to entry: This includes active borrowers.

Note 2 to entry: This can include the use of digital library services, if it is possible, to identify digital use and virtual visits of the individual user, or if data can be obtained by means of surveys.

Note 3 to entry: If a library identifies non-registered active users, e.g. by surveys, these should be counted separately.

[SOURCE: ISO 2789:2022, 3.2.4]

3.6
appropriateness
suitability of any given indicator for evaluating a specific activity

3.7
availability
degree to which content, documents, facilities, or services are actually provided by the library at the time required by users

3.8
capital expenditure
expenditure which results in the acquisition of, or addition to, fixed assets

Note 1 to entry: This includes expenditure on building sites, new buildings and extensions, furnishings and equipment for new and expanded buildings, computer systems (hardware and software), etc. When applicable, local and national sales/purchase taxes [e.g. Value Added Tax (VAT)] are included.

[SOURCE: ISO 2789:2022, 3.6.1]

3.9
closed stacks
stacks that are not accessible to users

[SOURCE: ISO/TR 11219:2012, 2.19, modified — Note 1 to entry has been deleted.]

3.10
conservation
preservation measures and actions applied to prevent, arrest or delay deterioration of a document or other material object

[SOURCE: ISO 5127:2017, 3.12.1.01]

3.11
content unit
original or a digest of other published work

Note 1 to entry: This includes documents or parts of documents (e.g. articles, abstracts, content tables, images) and descriptive records.

Note 2 to entry: PDF, Postscript, HTML and other formats of the same content unit will be counted as separate items.

[SOURCE: ISO 2789:2022, 3.3.9]

3.12
database
collection of electronically stored descriptive records or content units (including facts, texts, pictures, and sound) with a common user interface and software for the retrieval and manipulation of the data

Note 1 to entry: The units or records are usually collected with a particular intent and are related to a defined topic. A database can be issued on CD-ROM, diskette, or other direct-access method, or as a computer file accessed via dial-up methods or via the Internet.

Note 2 to entry: Licensed databases are counted separately even if access to several licensed database products is affected through the same interface.

Note 3 to entry: A common interface providing access to a packet of serials or digital documents, usually offered by a publisher or vendor, is also to be counted as database. Additionally, the single serials or digital documents should be counted as serials or digital documents.

[SOURCE: ISO 2789:2022, 3.3.10]

3.13
descriptive record
computer-processed bibliographic or other individual record in a standard format that references and/or describes a document in any physical form or a content unit

Note 1 to entry: A collection of descriptive records is usually published in the form of a database.

Note 2 to entry: The record can include elements such as title, author, subject, abstract, date of origin.

[SOURCE: ISO 2789:2022, 3.3.12]

3.14
digital collection
all resources in digital form in the library collection, whether born digital or digitized

Note 1 to entry: The digital collection includes databases, electronic serials, and digital documents.

Note 2 to entry: Free Internet resources which have been catalogued by the library in its online catalogue or a database are counted separately.

Note 3 to entry: The resources can be networked, installed on stand-alone workstations or stored on physical carriers.

[SOURCE: ISO 2789:2022, 3.3.13]

3.15
digital document
information unit with a defined content, born digital, or digitized, that has been created or digitized by the library or acquired in digital form as part of the library collection

Note 1 to entry: This includes eBooks, electronic patents, networked audiovisual documents, and other digital documents, e.g. reports, cartographic and music documents, preprints, etc. Databases and electronic serials are excluded.

Note 2 to entry: Items incorporated in databases are covered by 3.12.

Note 3 to entry: A digital document can be structured into one or more files.

Note 4 to entry: A digital document consists of one or more content units. Before digitization, the library should decide which content units should be searchable afterwards, e.g. articles in serials or songs on records.

[SOURCE: ISO 2789:2022, 3.3.14]

3.16
digital service
library service delivered digitally, whether from local servers or provided via networks

Note 1 to entry: Digital library services include the online catalogue, the library website, the digital collection, electronic lending, electronic document delivery (mediated), digital reference service, digitally delivered user training, services for mobile devices, services for interactive use (including services on social networks), and Internet access offered via the library.

Note 2 to entry: This does not include booking physical services (e.g. rooms or library tours) digitally.

[SOURCE: ISO 2789:2022, 3.2.10]

3.17
digitization
process of converting analogue materials into digital form

Note 1 to entry: Digitization for document supply from the library collection to a user or institution is excluded.

Note 2 to entry: Digitization for preservation purposes is included.

Note 3 to entry: Mass digitization is included.

Note 4 to entry: Purchase of electronic copies for replacing print copies is excluded.

[SOURCE: ISO 2789:2022, 3.3.17]

3.18
document
recorded information or material object, which can be treated as a unit in a documentation process

Note 1 to entry: Documents can differ in form and characteristics.

[SOURCE: ISO 5127:2017, 3.1.1.38, modified — Notes to entry have been deleted and replaced.]

3.19
download
successful request of a content unit from a library-provided online service or other Internet service

[SOURCE: ISO 2789:2022, 3.2.12]

3.20
eBook
electronic book
non-serial digital document, licensed or not, where searchable text is prevalent, and which can be seen in analogy to a print book (monograph)

Note 1 to entry: The use of eBooks is, in many cases, dependent on a dedicated device and/or a special reader or viewing software.

Note 2 to entry: eBooks can be lent to users either on portable devices (eBook readers) or by transmitting the contents to the user's PC or other device for a limited time period.

Note 3 to entry: Doctoral dissertations in electronic format are included.

Note 4 to entry: Documents digitized by the library are included.

[SOURCE: ISO 2789:2022, 3.3.22]

3.21
educational services
learning sessions and learning materials and programmes in all formats for children and adults for the purpose of enhancing skills in library and information use

Note 1 to entry: This includes the provision of services for schools and the cooperation with other libraries in preparing and offering educational services.

Note 2 to entry: Education of librarians is excluded.

[SOURCE: ISO 21248: 2019, 3.22]

3.22
effectiveness
measure of the degree to which given objectives are achieved

Note 1 to entry: An activity is effective if it maximizes the results it was established to produce.

3.23
efficiency
measure of the utilization of resources to realize a given objective

Note 1 to entry: An activity is efficient if it minimizes the use of resources or produces better performance with the same resources.

3.24
electronic document delivery, mediated
electronic transmission of a document or part of a document from the library collection to a user, mediated by library staff, not necessarily via another library

Note 1 to entry: Electronic transmission of documents to members of the population to be served is included. Fax transmission is excluded.

Note 2 to entry: Can be split up as to transmission with or without charge to the user.

Note 3 to entry: Unmediated downloading by users from the electronic collection of the library is excluded.

[SOURCE: ISO 2789:2022, 3.2.14]

3.25
evaluation
process of estimating the effectiveness, efficiency, utility, and relevance of a service or facility

3.26
event
pre-arranged activity with cultural, educational, social, political, scholarly, or other intent

EXAMPLE   Exhibitions, author visits, literary discussions, workshops

Note 1 to entry: Only events arranged by the library on its own or in partnership with other institutions are included, whether inside or outside the library premises. Events inside the library premises organized by institutions outside the library without the library's cooperation are excluded.

Note 2 to entry: User training lessons and library tours are excluded.

Note 3 to entry: Ongoing programs are included. Each session of a program is counted as one event.

Note 4 to entry: Virtual events are included.

[SOURCE: ISO 2789:2022 3.2.16]

3.27
external user
user of a library who does not belong to that library's population to be served

[SOURCE: ISO 2789:2022, 3.2.19]

3.28
facilities
equipment, study places, etc. provided for library users

Note 1 to entry: Includes photocopiers, online terminals, CD-ROM workstations, seats for reading, and study carrels, but excludes toilets, cafes, and public telephones.

3.29
fixed level of proficiency
FLP
minimum benchmark of basic knowledge in a domain (literacy or numeracy) measured through learning assessments

[SOURCE: UNESCO SGD indicator metadata – Indicator 4.4.1 (Harmonized metadata template - format version 1.0)]

3.30
free Internet resource
internet resource with unrestricted (open) access for which no payment is required

[SOURCE: ISO 2789:2022, 3.3.26]

3.31
full-time equivalent
FTE
measurement equal to one staff person working a full-time work schedule for one year

Note 1 to entry: For example, if out of three persons employed as librarians, one works quarter-time, one works half-time, and one works full-time, then the FTE of these three persons would be 0,25 + 0,5 + 1,0 = 1,75 librarians (FTE).

Note 2 to entry: Not all libraries can use the same number of hours per year to determine an FTE. Thus, any comparative measures between libraries might need to consider any differences in hours.

3.32
functional literacy
ability to understand, evaluate, use and engage with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential

[SOURCE: OECD, 2016]

3.33
functional numeracy
ability to access, use, interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life

[SOURCE: OECD, 2016]

3.34
goal
desired state of affairs to be achieved by the implementation of agreed policies

3.35
impact
difference or change in an individual or group resulting from the contact with library services

Note 1 to entry: The change can be tangible or intangible.

[SOURCE: ISO 16439:2014, 3.25]

3.36
ICT
information and communication technology
diverse set of technological tools and resources used to transmit, store, create, share or exchange information

Note 1 to entry: These technological tools and resources include computers, the Internet (websites, blogs and emails), live broadcasting technologies (radio, television and webcasting), recorded broadcasting technologies (podcasting, audio and video players and storage devices) and telephony (fixed or mobile, satellite, visio/video-conferencing, etc.).

[SOURCE: UNESCO SGD indicator metadata – Glossary]

3.37
ICT proficiency
ability to perform an ICT related activity, which constitutes a learning target that can be assessed in the context of a training lesson

[SOURCE: UNESCO *SGD indicator metadata – Indicator 4.4.1 (Harmonized metadata template - format version 1.0)*.]

3.38
ICT skills
skills that allow an effective use of ICT, independently of the device used, measured through the accomplishment of ICT related activities.

[SOURCE: UNESCO *SGD indicator metadata – Indicator 4.4.1 (Harmonized metadata template - format version 1.0)*.]

3.39
indirect user
non-registered user who uses library services via a registered user

[SOURCE: ISO 2789:2022, 3.2.22]

3.40
indicator
expression (which can be numeric, symbolic, or verbal) used to characterize activities (events, objects, persons) both in quantitative and qualitative terms in order to assess the value of the activities characterized, and the associated method

3.41
in-house use
in-library use
use of documents on the premises having been taken by a user from open access stock

Note 1 to entry: In-house use includes browsing at the shelves in the sense of a short investigation of the contents but excludes looking at the side or spine titles only for selecting material.

[SOURCE: ISO 2789:2022, 3.2.24]

3.42
institutional repository
open access repository for storing the publications of an institution, or a group of institutions, such as e-prints, technical reports, theses and dissertations, datasets, and teaching and learning materials

[SOURCE: ISO 2789:2022, 3.3.29]

3.43
interlibrary loan
transaction of lending a document in its original physical form or delivery of a document, or part of it, in copied form, from one library to another which is not under the same administration

Note 1 to entry: Mediated transmission of documents in electronic form is counted as electronic document delivery.

[SOURCE: ISO 2789:2022, 3.2.25, modified — Note 2 to entry has been omitted]

3.44
library
organization, or part of an organization, the main aim of which is to facilitate the use of such information resources, services and facilities as are required to meet the informational, research, educational, cultural or recreational needs of its users

Note 1 to entry: The supply of the required information resources can be accomplished by building and maintaining a collection and/or by organizing access to information resources.

Note 2 to entry: These are the basic requirements for a library and do not exclude any additional resources and services incidental to its main purpose.

[SOURCE: ISO 2789:2022, 3.1.6]

3.45
library research
systematic study and analysis of some aspect of library and information science

Note 1 to entry: The results are usually published in a journal of library and information science or presented at a library and information conference.

[SOURCE: ISO 2789:2022, 3.5.4]

3.46
library staff research publication
research publication by library staff in professional and academic subjects

Note 1 to entry: Includes publications in all formats, and presentations at conferences.

[SOURCE: ISO 2789:2022, 3.5.5]

3.47
library website
unique domain on the Internet consisting of a collection of web pages that is published by a library to provide access to the library's services and resources

Note 1 to entry: The pages of a website are usually interconnected by the use of hypertext links.

Note 2 to entry: Excludes documents that fit the definitions of electronic collection and free Internet resources that can be linked from the library website.

Note 3 to entry: Excludes web services in the library's domain that are operated on behalf of other organizations.

[SOURCE: ISO 2789:2022, 3.2.27]

3.48
loan
direct lending or delivery transaction of an item in non-electronic form (e.g. book), of a digital document on a physical carrier (e.g. CD-ROM) or other device (e.g. eBook reader), or transmission of a digital document to one user for a limited time period (e.g. eBook)

Note 1 to entry: Renewals are excluded but can be counted separately.

Note 2 to entry: Loans include registered loans within the library (on-site loans).

Note 3 to entry: Loans include copied documents supplied in place of original documents (including fax) and printouts of electronic documents made by library staff for the user.

Note 4 to entry: Loans of documents in physical form to distance users are included.

Note 5 to entry: Mediated electronic transmission of documents is counted as electronic document delivery if their use is permitted for unlimited time. This includes transmissions to members of the population to be served.

[SOURCE: ISO 2789:2022, 3.2.29, modified — Note 6 has been omitted.]

3.49
metadata
structured data about data

Note 1 to entry: The data are associated with either an information system or an information object for purposes of description, administration, legal requirements, technical functionality, use and usage, and preservation.

Note 2 to entry: Adapted from Dublin Core Metadata Initiative, 2005.

3.50
mission
statement approved by the authorities formulating the organization's goals and its choices in services and products development

3.51
mobile device
portable computing device, typically having a display screen with touch, pen and/or keyboard input and Internet connection

[SOURCE: ISO 2789:2022, 3.2.32]

3.52
non-user
person belonging to a specific library's population to be served but not using that library's physical and/or digital services

Note 1 to entry: The definition includes former users of the library.

[SOURCE: ISO 16439:2014, 3.39]

3.53
objective
specific target for an activity to be attained as a contribution to achieving the goal of an organization

3.54
opening hours
hours in a normal week when the main physical services of the library (e.g. reference and loan services, reading rooms) are available to users

[SOURCE: ISO 2789:2022, 3.4.8]

3.55
operating expenditure
ordinary expenditure
recurrent expenditure
expenditure incurred in the running of a library

Note 1 to entry: This is money spent on staff and on resources that are used and replaced regularly. This includes expenditure on employees, rent, acquisitions and licensing, binding, computer network (operations and maintenance), telecommunication, building, maintenance, utilities (electricity, water, sewage, heating, etc.), repair or replacement of existing furnishings and equipment, and events, etc. This can also be termed "current" or "recurrent" expenditure. When applicable, local and national sales/purchase taxes [e.g. Value Added Tax (VAT)] are included.

[SOURCE: ISO 2789:2022, 3.6.4]

3.56
partnership
ongoing, formalized cooperation between a library and one or more other organizations, including other libraries, usually concerning particular services or activities

Note 1 to entry: A partnership will usually have a contractual basis. Partners can make different contributions, e.g. expertise, funding, training, materials in kind, premises, etc.

Note 2 to entry: Cooperation between two or more libraries within a single administrative unit is excluded.

Note 3 to entry: Time-limited cooperation on a specified project is excluded and counted as a cooperative project (see 3.61).

Note 4 to entry: A one-way relationship, whether paid or unpaid, where one partner is only supplying, the other only receiving services, is excluded.

[SOURCE: ISO 2789:2022, 3.5.6]

3.57
performance
effectiveness of the provision of services by the library and the efficiency of the allocation and use of resources in providing services

3.58
performance indicator
numerical, symbolic, or verbal expression derived from library statistics and data used to characterize the performance of a library

3.59
population to be served
number of individuals for whom the library is set up to provide its services and materials

Note 1 to entry: For public libraries, this will normally be the population of the legal service area (authority). For libraries of an institution of higher education, this will normally be the total of academic and professional staff plus students.

3.60
preservation
all measures taken, including financial and strategic decisions, to maintain the integrity and extend the life of documents or collections

[SOURCE: ISO 5127:2017, 3.2.1.39, modified — Notes 1 and 2 to entry have been omitted.]

3.61
project
unique process, consisting of a set of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including the constraints of time, cost, and resources

[SOURCE: ISO 9000:2015, 3.4.2]

Note 1 to entry: An individual project can form part of a larger project structure.

3.62
quality
entirety of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

Note 1 to entry: The quality of products and services includes not only their intended function and performance, but also their perceived value and benefit to the customer. See ISO 9000:2015, 2.2.1.

[SOURCE: ISO 10845-1:2020, 3.27, modified — Note to entry has been added.]

3.63
rare materials
incunabula, manuscripts, books published before 1800, and newer books that are made precious by their limited issue, by their binding, by dedications, and similar characteristics.

Note 1 to entry: Usually, such materials belong to special collections with special shelf marks and are shelved separately in a secure location to which access is restricted.

Note 2 to entry: This excludes archives and records concerning private persons, institutions, and organizations (collections containing manuscripts, letters, notes, photos, and other material given by bequest to the library or purchased as such by, or on behalf of, the library).

[SOURCE: ISO 21248:2019, 3.75]

3.64
reference question
information contact that involves the knowledge or use of one or more information sources (such as printed and non-printed materials, machine-readable databases, the library's own and other institutions' catalogues) by library staff

Note 1 to entry: This can also involve recommendations, interpretation or instruction in the use of such sources.

Note 2 to entry: One reference question can address several issues.

Note 3 to entry: The question can be delivered personally or by means of telephone, regular mail, fax, or electronic media (via email, the library website, or other networked communications mechanisms).

Note 4 to entry: It is essential that libraries do not include informational (directional and administrative) questions, e.g. for locating staff or facilities, regarding opening times, or about handling equipment, such as printers or computer terminals.

[SOURCE: ISO 2789:2022, 3.2.43]

3.65
reference service
provision of oral or written information and assistance, in response to requests, by the staff of an information and documentation organization

[SOURCE: ISO 5127:2017, 3.11.5.03]

3.66
registered user
person or organization registered with a library in order to use its collection and/or services within or away from the library

Note 1 to entry: Users can be registered upon their request or automatically when enrolling in the institution.

Note 2 to entry: The registration should be monitored at regular intervals, minimum of every three years, so that inactive users can be removed from the register.

[SOURCE: ISO 2789:2022, 3.2.46]

3.67
rejected access
turnaway
unsuccessful request of an online service via the library

Note 1 to entry: The failure can be due to the library having no license for the service or to the request exceeding the simultaneous user limit.

Note 2 to entry: Request failure because of wrong passwords is excluded

[SOURCE: ISO 2789:2022, 3.2.47]

3.68
reliability
degree to which a measure repeatedly and consistently produces the same result

3.69
renewal
extension of the loan period for a document usually initiated by the user

Note 1 to entry: Automatic renewals generated by the library system without user interaction are included.

[SOURCE: ISO 2789:2022, 3.2.48]

3.70
research support
library service that allows a researcher to spend more time, more efficiently in his/her role as a researcher, and contributes positively to the quality of the research

Note 1 to entry: Generally, research support services are offered to academics at universities in order to support their role as researcher.

3.71
restoration
actions taken to return a *document* or other material object which has suffered deterioration or damage as closely as practicable to its original state

Note 1 to entry: In archival restoration, no attempt is made to recreate missing text, etc., and all restoration work is kept clearly evident.

[SOURCE: ISO 5127:2017, 3.12.1.02, modified — The term "preservation" has been excluded in the definition, and Note 2 to entry has been omitted.]

3.72
special collection
collection of materials segregated from a library collection according to form, subject, genre, period, geographical area, condition, rarity, source, or value

Note 1 to entry: Special collections are usually administered separately.

Note 2 to entry: Access to special collections can be restricted.

[SOURCE: ISO 21248:2019, 3.83]

3.73
special grant
grant of a non-recurrent nature to fund (or partly fund) projects

[SOURCE: ISO 2789:2022, 3.6.6]

3.74
stable condition
suitability for use
Note 1 to entry: Stable material can have some damage but can be used without immediate risk of further damage. Unstable material will be further damaged if used.

[SOURCE: ISO 21248:2019, 3.85]

3.75
staff training
formal pre-planned training in professional skills and competences, including social skills

Note 1 to entry: The training can be held in-house or externally, and delivered by library staff or external experts.

Note 2 to entry: Web-based training services are included.

Note 3 to entry: Informal training, e.g. point-of-use training, is excluded

[SOURCE: ISO 2789:2022, 3.7.6]

3.76
target population
groups of actual and potential users appropriate to an individual library as the object of a specific service or as the primary users of specific materials

3.77
title
words or symbols at the head of a document that identify it and normally distinguish-it from other documents

[SOURCE: ISO 5127:2017, 3.7.4.01, modified — Note 1 has been omitted]

Note 1 to entry: For measuring purposes, "title" describes a document, which forms a separate item with a distinctive title, whether issued in one or several physical units, and disregarding the number of copies of the document held by the library.

Note 2 to entry: This applies equally to print, digital, audiovisual and other library materials.

Note 3 to entry: A book or serial title can be distinguished from other such titles by its unique International Standard Book Number (ISBN) or International Standard Serial Number (ISSN).

[SOURCE: ISO 2789:2022, 3.3.58]

3.78
unstaffed opening hours
hours when a library, or a specified library area, is open to controlled access, without staff present but with facilities for self-service

Note 1 to entry: Access can be restricted to a specified part of the population to be served, e.g. researchers and postgraduate students.

[SOURCE: ISO 2789:2022, 3.4.10]

3.79
user
DEPRECATED: patron
DEPRECATED: customer
recipient of library services

Note 1 to entry: The recipient can be a person or an institution, including libraries.

Note 2 to entry: Library services include digital services, physical services, and visiting the library premises.

3.80
user place
place provided for users for reading or studying, whether with or without seating or equipment

Note 1 to entry: Includes places in carrels, in seminar and study rooms, and in the audiovisual and children's departments of the library, and informal seating in lounges, group areas, etc.

Note 2 to entry: Excludes places in halls and lecture auditory theatres intended for audiences of special events. Also excludes floor space and cushions on which users can sit.

[SOURCE: ISO 2789:2022, 3.4.12]

3.81
user service area
part of the library that is accessible to users

Note 1 to entry: This includes space for reading and studying (individual or group), lending, reference and information, and any other services delivered to users, self-service areas (lending and returning plus sorting robots), also areas for recreation and communication, sickrooms, the entrance hall, and open access storage areas as integrated parts of user service areas; media centres, workplaces for staff in these areas.

3.82
user training
training programme set up with a specified lesson plan, which aims at specific learning outcomes for the use of library and other information services

Note 1 to entry: User training can be offered as a tour of the library, as library tuition, or as a web-based service for users.

Note 2 to entry: The duration of lessons is irrelevant.

[SOURCE: ISO 2789:2022, 3.2.59]

3.83
validity
degree to which an indicator actually measures what it is intended to measure

3.84
visit
<physical> person (individual) entering the library premises

[SOURCE: ISO 2789:2022, 3.2.61]

3.85
visit
<virtual> continuous cycle of user activities that starts when a user causes a page impression on a digital service

Note 1 to entry: A visitor is no physical person, but a browser or end device.

Note 2 to entry: Each following page impression that the user causes is counted as belonging to this visit.

Note 3 to entry: A visit is counted as finished when for more than 30 minutes no age impression has been caused by the user (time-out).

Note 4 to entry: The visit does not allow information about the time span or intensity of the activities.

Note 5 to entry: If possible, requests of a general entrance or gateway page should be excluded

[SOURCE: ISO 2789:2022, 3.2.62]

4 Performance measurement

4.1 Quality management

Quality management comprises all coordinated activities to direct and control an organization with regard to quality (ISO 9000).

The first step in quality management requires that mission and goals of the specific institution are defined; this should be done in consensus with the stakeholders, for instance a library's parent institution, financing body, population and staff.

When the mission and the general goals have been described, long- and short-time goals can be fixed and resources (funds, space, staff time) can be allocated to the activities that are essential for the attainment of the goals.

After some time, it will be necessary to control whether the goals and the desired quality have been attained. This will probably lead to re-planning and to re-defining goals for the next period.

The simple model of quality management is shown in Figure 1.

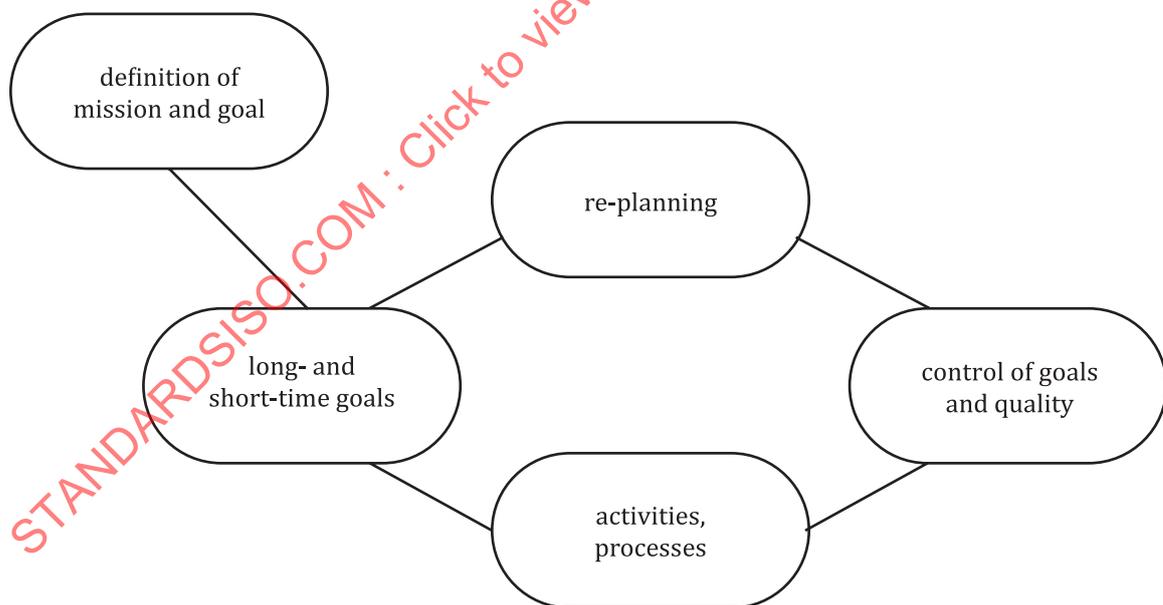**Figure 1 — Simple model of quality management**

4.2 Performance measurement in quality management

Performance measurement is a method used in quality management; it evaluates the performance of an institution against its mission, goals, and objectives. Quality of performance in libraries comprises the effectiveness of service delivery as well as the cost-effective use of resources for those services.

Performance measurement is used for the support of planning and resource allocation, for taking actions to achieve higher quality, for documenting the effect of such actions, and for promoting the achieved state.

The process of performance measurement consists of collecting and analysing statistical data -quantitative and qualitative - that describe the performance of a library. The data are combined to form indicators of performance quality.

4.3 Use of performance indicators

4.3.1 General

Performance indicators should be linked to systematic library planning and evaluation. Furthermore, measurement and evaluation processes should occur regularly. The results should be reported in a way that informs the decision-making processes and demonstrates how the library fulfils its mission.

4.3.2 Objectives of performance indicators

As a library planning and evaluation tool, performance indicators have two principal objectives:

1) to facilitate control in the management process, and

2) to serve as a basis for advocacy and for dialogues between library staff, funding bodies, the user community, and other relevant external stakeholder constituencies.

A secondary objective is to serve in comparative analysis of the performance of libraries and information services which have equivalent missions or objectives.

Performance indicators can also help libraries to align their performance with local, national or global policies and strategies.

4.3.3 Selection of performance indicators

4.3.3.1 General

Libraries, in consultation with their host institutions and relevant authorities, such as local and national government, as well as their users and other stakeholders, will need to decide which indicators are most appropriate to a particular situation. This decision should be made in the light of the mission, goals, and objectives of the library, as well as desired data regarding library performance. It is desirable that all interested parties should be agreed on the appropriateness of the performance indicators used.

In order to determine which performance indicators are most appropriate for a particular library, to collect and analyse the data, and to interpret findings into a management strategy, a range of staff skills will be necessary. Some libraries will find it important to engage in staff training and development of educational skills prior to implementing performance indicators.

4.3.3.2 Criteria for the selection of indicators

In selecting performance indicators for use in a particular library setting, consider the following factors.

a) Will the performance indicator assist the management of the library, the funding body, and the population to be served?

b) Does the librarian have some knowledge that a particular activity or area might not be operating as well as it should? Even if this is only an intuitive feeling of the librarian, this could be a very good reason to use a performance indicator to find out whether there is a problem.

c) What level of effort can the library staff commit to the collection and analysis of the data to produce the performance indicators? Adequate staff time and resources are necessary to produce

a particular performance indicator. Staff will need to have practical knowledge of a range of statistical procedures.

d) Does any external authority require data to be reported on particular library service areas? If yes, it is necessary to decide whether the same data can also be used to produce library performance indicators.

Local factors important to the library can affect the selection of performance indicators. Librarians should make a conscious decision in selecting the performance indicators that will be of most use in assessing the operation of the library in relation to its goals and objectives.

4.3.4 Limitations of performance measurement

4.3.4.1 Optimizing scores on performance indicators

Users of library performance indicators should recognize that it is impossible to achieve optimum scores simultaneously on all performance indicators. For example, a library can achieve a high level of user satisfaction, but incur a high expenditure per user. The scores on performance indicators should be interpreted in the light of what the library intends to accomplish, and not simply in terms of optimizing scores on particular indicators.

4.3.4.2 Degree of accuracy

Care should be taken with the interpretation of results. Lack of precision can occur due to sampling errors, or to subjective aspects of the measuring process, or to inadequate time or resources for the measuring process (e.g. indicators A.1.2.3 and A.2.2.5). It can also imply that the indicators are inherently imprecise (e.g. indicator A.2.2.1).

NOTE   In some cases, a rough estimate is sufficient and to seek greater precision would be a waste of effort.

4.3.4.3 User skills versus library performance

To some extent, library performance indicators are affected by how well the user conducts various transactions with the library. For example, user satisfaction with the availability of materials can be extremely low at one library. This can indicate several things, one being that users lack adequate knowledge of how to locate materials in that particular library, or that the library has insufficient documents to meet demand. Thus, a low score suggests an area that requires review. The review can suggest a need for strategies to improve user knowledge and skills related to library activities, or it can suggest a need to improve the availability of books by changing loan periods or buying additional copies.

4.3.4.4 Linking resources to services

While poor performance can seem to indicate that additional resources are required to improve library services, this is not necessarily true. In fact, there might not be a strong correlation between resources and the quality of library services provided. The range of staff skills, management approaches, and a variety of other factors, including increased resources, can have different effects on increasing the quality of services at different libraries.

4.3.4.5 Comparability of performance indicator data

A primary purpose of using library performance indicators is self-diagnosis. This can include comparisons of one year's performance with another, within the same library. A secondary purpose is to encourage meaningful and useful comparisons across different libraries. Standardizing performance indicators and the procedures for collecting the data assist in that process. However, such comparisons shall always be made with respect to the following factors for each library:

a) mission, goals, and objectives;

b)   performance on a range of performance indicators, not only a single indicator;

c)   resources;

d)   user groups;

e)   governance structure;

f)   procedures.

If comparisons of performance indicator scores across different libraries are made, they should be done with considerable care and in full recognition of the limitations of such comparisons.

4.4   Performance measurement versus impact assessment

4.4.1   Objectives of the two approaches

Performance measurement and impact assessment pursue differing goals:

— Performance measurement tries to identify how well a library fulfils its tasks, including issues of cost-efficiency. The quality is measured via characteristics such as speed, accuracy and availability of services, frequency of use, or adequacy for the needs of the population.

— Impact assessment tries to identify the effect of the library's services and resources on the individual user, on communities, or on society. Evidence of impact is shown by changes in knowledge, skills, behaviour and opinions of individuals, groups and society. Methods for assessing impact are described in ISO 16439.

4.4.2   Methods of the two approaches

4.4.2.1   Performance measurement

Performance measurement relies to a large extent on quantitative data. Quantitative data are numeric, usually expressed in measurement units, e.g. number of loans, opening hours, percentage of reference questions answered within one day. A great part of the data that are used in performance indicators are traditionally collected and reported by libraries, other such data are derived from the library's parent institution, its community, or from general socio-economic statistics. Quantitative data are generally regarded as more objective than qualitative data.

Only a few performance indicators in this document rely on qualitative data: indicators that ask for user satisfaction and indicators that ask for awareness of library services. Qualitative data are data that describe, but do not measure the attributes or properties of an object, in particular the reasons for human actions (see ISO 16439:2014, 5.6.3). Such data can also be analysed quantitatively, e.g. percentage of interviewees saying they were satisfied with their last library visit.

Performance indicators set data from different statistics in comparison, e.g. input statistics (funding, staff, collections, space, equipment) to output statistics (e.g. loans, visits, downloads, reference transactions) or to actual and potential users.

4.4.2.2   Impact assessment

Impact can, in most cases, not be calculated from existing data but shall be assessed via surrogate measures. Evidence of impact can be collected in the following ways:

— It can be inferred based on library statistics, performance indicators or user satisfaction surveys that indicate changes in knowledge, skills, opinions and behaviour.

— It can be observed by direct or indirect observation methods, including data analysis.

— It can be captured by asking the users themselves or the general public. The methods used (interviews, focus groups, self-assessment, surveys) provide qualitative, subjective data, that could be corroborated by other methods.

4.4.2.3 User satisfaction

User satisfaction surveys ask for a user's one-time or long-term experience with library services or for experience compared to expectation. Satisfaction does not prove an impact, as users might be satisfied without benefiting from library services. But generally, satisfaction predisposes users for being influenced and furthers receptivity for new experiences and learning. High satisfaction rates can therefore help to identify library services that may have had an impact on the user's skills, competences, behaviour or opinions.

4.4.2.4 Awareness of libraries and library services

This document describes two performance indicators that evaluate whether users and non-users know a library and its services:

— percentage of survey respondents that know the library;

— percentage of survey respondents who feel it is important that the community or town quarter has a library.

In the same way as satisfaction with library services, awareness of a library's services and of possible benefits predisposes users for being influenced. But awareness in itself is not yet an impact. When people are asked whether they know a library and its services, or whether they think it is valuable to the public, they speak of potential benefits, not of direct benefits that they experienced themselves.

4.4.3 Possible "impact indicators"

4.4.3.1 General

The greater part of the methods mentioned in ISO 16439 for assessing impact do not lend themselves to the specified calculations as described for performance indicators. There are a few exceptions.

4.4.3.2 Tests

Tests provide data that are usually regarded as objective. If a person's information literacy (or data literacy) is tested before and after attendance at library teaching lessons, the results can directly show an influence of the library's activity.

An "indicator" based on tests would require that a similar teaching session and the same set of test questions be used to make results comparable. As information literacy teaching differs largely in libraries, this seems difficult to achieve.

4.4.3.3 Perceived impact

Most methods used for assessing an influence or impact on people rely on asking the people themselves, whether actual users or the general public. The main question is always whether respondents think they profited by a library or a specific library service, that they learned something, got new information, changed their opinions about something, etc. The questioning can be done via surveys, interviews, focus groups, or other methods for requesting information or opinion.

ISO 16439 describes examples of such methods, especially of impact surveys. Though ISO 11620 cannot cover the broad aggregation of impact assessment methods presented in ISO 16439, one indicator named "Perceived Impact" is offered in this document, based on a questionnaire, similar to the indicator "User Satisfaction". This opens the possibility to include at least a simple form of impact assessment into performance measurement.

5 Performance indicators in this document

5.1 General

5.1.1 The performance indicators included in this document are those seen to be most useful for libraries in general. This document recognizes that there are many different types of libraries, in different settings, serving different user groups, having a range of unique characteristics (structure, funding, governance, etc.), and affected by a number of situational factors that impact the services and resources that the libraries can provide. Since there is such a wide variation around the world, it is important to understand that not all established performance indicators are useful to all libraries. The list of performance indicators included in this document is best seen as a menu of possible performance indicators for use in a range of library settings.

Annex A presents a set of performance indicators that for the most part have been thoroughly tested by widespread use in libraries or through explicit testing by researchers and subsequent documentation in the literature. Some new indicators have been added based on existing indicators in order to cover as far as possible all current activities of libraries.

5.1.3 All performance indicators included in Annex A fulfil the criteria presented in 5.2 and are specified according to the descriptive framework presented in 5.3. Performance indicators to be added in revisions of this document will have to fulfil the same criteria and follow the same descriptive framework.

NOTE   Care has been taken to describe the indicators individually and independently of other indicators. This does not imply that the indicators must be used in isolation. When collecting data, it will, in many cases, be possible and practical to collect data for two or more indicators at the same time.

5.1.4 While traditional library statistics are collected over the complete reporting period, this may not be possible for all library services, e.g. in-house use or physical library visits Therefore, this document allows for the application of sampling methods, where data cannot be collected from automated systems, or where data collection over a reporting period is too time consuming. For the calculation of a reliable sample size, handbooks of statistical procedures should be consulted.

5.2 Criteria for performance indicators

5.2.1 In order to conform with this document, a library performance indicator shall be thoroughly tested, validated, and (preferably) documented in the literature. Performance indicators that are in widespread use in libraries can be accepted although they have not been explicitly documented.

5.2.2 The following criteria should be used to test a performance indicator.

a) Informative content — The indicator should be informative as a tool for measuring an activity, for identifying achievements, and for identifying problems and shortcomings in the performance of the library so that action can be taken to remedy these. It should provide information for decision-making, e.g. goal setting, budget allocation, prioritizing services and activities, etc.

b) Reliability — A performance indicator shall be reliable in the sense that it consistently produces the same result when used repeatedly under the same circumstances.

   NOTE 1   The fact that an indicator reflects the underlying variability of the data, such as seasonal variations or fluctuations in loan activities, does not in itself mean that the indicator is not reliable.

c) Validity — The indicator shall be valid in that it shall measure what it is intended to measure.

   NOTE 2   That some indicators are indirect indicators or rough estimates do not in itself mean that they are not valid.

d) Appropriateness — The indicator shall be appropriate for its intended purpose. That is, the units and scale shall be suitable, and the operations necessary to implement the process of measurement should be compatible with the library's procedures, physical layout, digital services, etc.

e) Practicality — The indicator shall be practical in the sense that it uses data that the library can produce with a reasonable amount of effort in terms of staff time, staff qualifications, operational costs, and users' time and patience.

If the indicator is intended for comparisons between libraries, a sixth criterion [item f)] applies.

f) Comparability — A library performance indicator allows comparisons between libraries if the same score, making allowance for the accuracy of the score, means the same level of quality of services or the same level of efficiency in the libraries to be compared (see also 4.3.4.5). It is imperative that similar libraries (e.g. mission, library type, target population) are used for comparative purposes. It is also vital to ensure that the activities being measured are comparable.

NOTE 3   This criterion is sufficient for ranking libraries according to the score of the performance indicator, but is not sufficient to determine, for example, that a library with twice the score of another is twice as good.

5.3   Descriptive framework

5.3.1   General

The performance indicators included in Annex A are described according to the following framework, which should also be used in developing descriptions of new or alternative performance indicators.

5.3.2   Balanced Scorecard approach

The presentation of the performance indicators in this document follows the Balanced Scorecard approach[19]. The Balanced Scorecard (BSC) is a management strategy developed for the commercial sector, with the four perspectives: customers, finances, processes, learning and growth.

The BSC approach was adapted to libraries in several projects. Figure 2 shows an indicator framework with four major areas of measurement.
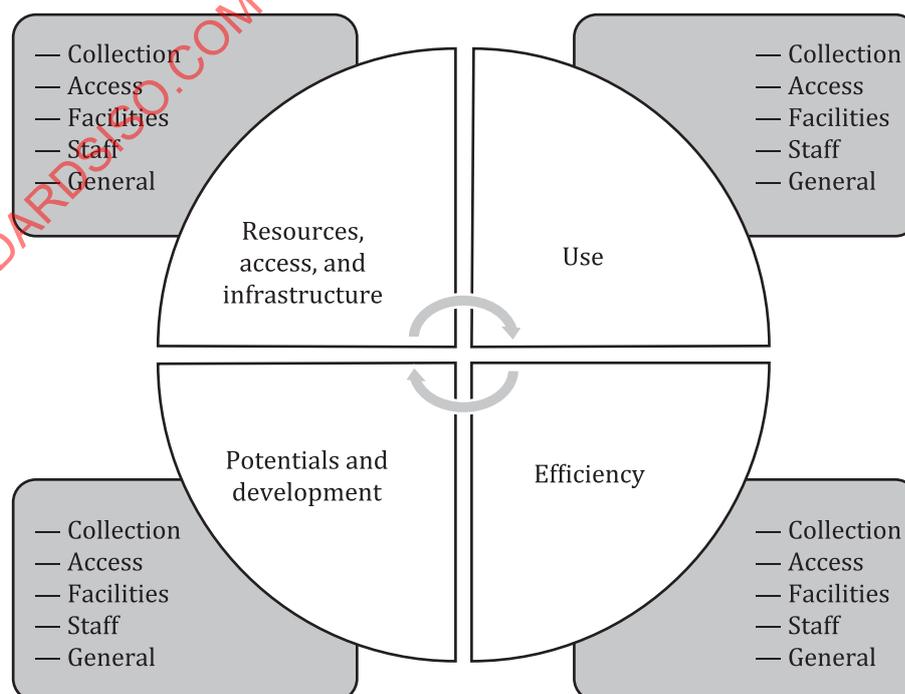

Figure 2 — Indicator framework based on Balanced Scorecard (BSC)

1) Resources, access and infrastructure: This perspective presents indicators that measure the adequacy and availability of library resources and services (e.g. staff, collections, user places).

2) Use: This perspective presents indicators that measure the usage of library resources and services (e.g. loans, downloads, and facilities use).

3) Efficiency: This perspective presents indicators that measure resource and service efficiency (e.g. costs per loan, time required to acquire or process documents, and employee productivity in media processing).

4) Potentials and development: This perspective provides indicators that measure the library's input into emerging service and resource areas and its ability to gain sufficient funding for development (e.g. percentage of staff time spent on educational services and attendances at formal training lessons by staff).

This organization provides users of this document with the ability to identify major areas for performance measurement by content and type of indicator.

The indicators are further categorized along the five service/resource areas of collection, access, facilities, staff and general.

5.3.3 Indicator presentation

5.3.3.1 General

Each indicator is presented in the standard format described in 5.3.3.2 to 5.3.3.9.

5.3.3.2 Name

Each indicator shall have a unique, descriptive name.

5.3.3.3 Background

The background statement describes the actual state and importance of the service, activity or aspect the performance indicator is meant to measure.

The statement shows what is regarded as quality in the service, activity or aspect in libraries and what measures/performance indicators have as yet been used for assessing that quality.

5.3.3.4 Objective

The objective of the performance indicator indicates what the indicator is meant to measure in relation to the library's goals.

5.3.3.5 Scope

The scope shall state the types of libraries to which the indicator can be applied.

The scope shall state whether the indicator is suitable for comparison between libraries and whether there are any limitations concerning comparability.

The scope may include other limitations in the application of the indicator.

NOTE   For example, the scope can state whether the indicator is only suitable for certain parts of the collection such as the loan collection or the reference collection; whether the indicator can be used both for the library service as a whole and for parts of the library service; for showing differences between subjects or between target groups.

5.3.3.6 Definition of the indicator

The definition describes the data that are necessary for the performance indicator and their relation.

This statement may also include definitions of special terms used in the definition of the indicator, if this seems expedient for better understanding of the indicator, even though the definitions are listed in Clause 3.

Unambiguous terms used in the customary sense need not be defined.

5.3.3.7 Method

This subclause describes the way in which the data are collected and results are calculated.

If more than one method has been shown to be effective for the same purpose, several methods may be described; the one most generally applicable shall be described first.

NOTE   Examples of this are total count versus sampling, and use of a direct measure versus an estimate based on different data.

The descriptions supplied shall not include general statistical methodology such as sampling procedures, sampling sizes, estimates of confidence intervals, statistical tests, etc.

If a measure needs to be repeated to determine the value of the indicator, this shall be stated clearly.

If a questionnaire is to be used, only the question(s) to be asked and the score used are included, not a detailed description of the total questionnaire design.

If possible, the descriptions of methods may indicate the effort necessary for preparation, data collection, and analysis of results.

5.3.3.8 Interpretation and factors affecting the indicator

This subclause discusses how the results might be interpreted, especially reasons for low effectiveness. It points to difficulties and to circumstances that could affect the results.

The interpretation statement may include information about the variability to be expected, such as seasonal variations or variations in time of day.

The statement should name possible reactions to the results in order to achieve better results. It may explain what other indicators might be useful in the same context.

5.3.3.9 Source(s)

References are supplied to document the source of the indicator. The description should state clearly whether the indicator as described in this document is a modified version of the indicator described in the source document.

If the name of the indicator is different from the one used in the source, the original name is supplied in parentheses after the reference.

6 List of performance indicators for libraries

Table 1 lists activities and services commonly undertaken or provided in libraries through a Balanced Scorecard approach. The performance indicators described in this document are grouped with the activities or services to which they relate, and reference is given to the descriptions provided in Annex A. The notation is designed to facilitate future additions both to the list of activities and to the list of indicators.

A detailed presentation of each indicator is provided in Annex A in the manner described in 5.3.3.

NOTE   There are a number of indicators in use in libraries which are not described.

Table 1 — List of performance indicators for activities and services commonly undertaken or provided in libraries

A.1 Resources, access, and infrastructure		
Indicators that measure the adequacy and availability of library resources and services (e.g. staff, collections, user places).		
Performance indicator	**PI number**	**Objective**
A.1.1 Collection		
Required titles availability	A.1.1.1	To assess to what extent titles owned or licensed by the library and in demand by the users are actually available when required.
Percentage of required titles in the collection	A.1.1.2	To assess to what extent titles in demand by the users are owned or licensed by the library. The indicator is used to assess the fit of the collection to the requirements of the users.
Percentage of rejected accesses	A.1.1.3	To establish whether there are sufficient licences for each electronic database to meet users' demands.
Number of documents digitized per 1 000 documents in the Collection	A.1.1.4	To assess to what extent the library fulfils its task of making the documentary heritage publicly available in digitized format.
Percentage of documents digitized per special collection	A.1.1.5	To assess to what extent the library fulfils its task of making its special collections publicly available in digitized format.
Percentage of the owner institution's publications in the institutional repository	A.1.1.6	To assess to what degree the academic publications of an institution are accessible through the institutional open access repository.
A.1.2 Access		
Shelving accuracy	A.1.2.1	To assess to what extent documents that are recorded in the library's catalogue are in their correct place on the shelves and thereby available for use.
Median time of document retrieval from closed stacks	A.1.2.2	To assess whether the retrieval processes are effective.
Speed of interlibrary lending	A.1.2.3	To assess the time interval for successfully completing an interlibrary loan or electronic document delivery transaction, from the initial request to sending the requested item(s).
Percentage of successful interlibrary loans	A.1.2.4	To assess the fulfilment of interlibrary loans and electronic document delivery requests relative to the total number of interlibrary loans and electronic document delivery requests.
Speed of reference transactions	A.1.2.5	To assess whether reference answers are provided in a timely manner. The indicator can also be used to analyse the effectiveness of processes in reference services.
Percentage of rare materials accessible via online catalogues	A.1.2.6	To assess whether the rare collections are accessible via the web. The indicator also measures the library's engagement in promoting its rare collection.
Percentage of the rare collection in stable condition	A.1.2.7	To assess whether the rare collection is usable and accessible in its original form. The indicator thereby assesses the adequacy of the library's activity to preserve the originals.

Table 1 *(continued)*

Percentage of rare materials needing conservation/restoration treatment that received such treatment	A.1.2.8	To assess the library's activities in the conservation of rare material in its original form.
A.1.3 Facilities		
User area per capita	A.1.3.1	To assess the importance of the library as a place for study, meeting, and as a learning centre, and indicate the institution's support for these tasks.
User places per capita	A.1.3.2	To assess the availability of user places in the library.
Hours open compared to demand	A.1.3.3	To assess to what degree the opening hours of a library correspond to users' needs.
Average number of loans during recently added opening hours compared to the average number during all other opening hours	A.1.3.4	To assess to what degree additional opening hours of a library correspond to the times when users tend to borrow materials.
Percentage of storage space which has an appropriate environment	A.1.3.5	To assess whether the storage environment adequately protects the collection.
A.1.4 Staff		
Staff per capita	A.1.4.1	To assess the number of library employees per 1 000 members of the population to be served. The number of persons in the population to be served can be considered proportional to the amount of work to be done.
A.2 Use		
Indicators that measure the usage of library resources and services (e.g. loans, downloads, and facilities use).		
A.2.1 Collection		
Collection turnover	A.2.1.1	To assess the overall rate of use of a loan collection.
Usage of print publications acquired during the previous three years	A.2.1.2	To assess the extent of the demand for new documents in the print publications collections.
Loans per capita	A.2.1.3	To assess the rate of use of library collections by the population to be served. It can also be used to assess the quality of the collections and the library's ability to promote the use of the collections.
Percentage of stock not used	A.2.1.4	To assess the amount of physical and electronic collections not used during a specified period. The indicator can also be used to assess the fit of the collection to the requirements of the population to be served.
Number of downloads per document digitized	A.2.1.5	To assess whether the library has digitized documents that are relevant for users.
A.2.2 Access		
Library visits per capita	A.2.2.1	To assess the library's success in attracting users of its services.
Percentage of visits to the online catalogue via mobile devices	A.2.2.2	To assess the success of the library in reaching its users through services for mobile devices.
Percentage of external users	A.2.2.3	To assess the percentage of library users who do not belong to the library's population to be served and thus, the library's importance for learning and culture in the region and its impact and attraction outside its service area.
Percentage of the total library lending to external users	A.2.2.4	To assess the extent to which library loan services are used by external users and therewith to indicate the attractiveness of the library's collection to users outside the population to be served.
User attendances at library events per capita	A.2.2.5	To estimate the attraction of library events for the library's population to be served.

Table 1 *(continued)*

Number of user attendances at training lessons per capita	A.2.2.6	To assess the success of the library in reaching its users through the provision of training lessons.
Percentage of users attending functional literacy and numeracy training lessons that reach a fixed level of proficiency	A.2.2.7	To assess to what extent the library has succeeded in its functional literacy and numeracy training.
Percentage of users attending ICT training lessons that developed targeted skills	A.2.2.8	To assess to what extent the library has succeeded in its ICT training.
A.2.3 Facilities		
User places occupancy rate	A.2.3.1	To assess the overall use rate of user places provided for reading and working in the library, by estimating the proportion of the places in use at any given time.
A.2.4 General		
Percentage of the target population reached	A.2.4.1	To assess the success of the library in reaching a target population.
Percentage of the population reached, including indirect users	A.2.4.2	To demonstrate the whole spread of a library's impact by identifying the hidden users.
User satisfaction	A.2.4.3	To assess the degree to which users are satisfied with the library services as a whole or with different services of the library.
Willingness to return	A.2.4.4	To assess the effectiveness of a reference transaction by the user's willingness to return to the reference desk (or to a virtual reference service).
Percentage of survey respondents who know the library	A.2.4.5	To assess to what extent a library is known to its population to be served.
Percentage of survey respondents who feel it is important that their institution, association, community, region or country has a library	A.2.4.6	To assess whether the value of a library that offers specific services for them is recognized by the potential users.
Perceived impact	A.2.4.7	To assess the degree to which users feel that they are benefited by the library as a whole or by different services of the library.
A.3 Efficiency		
Indicators that measure resource and service efficiency (e.g. costs per loan, electronic resource access or download; time required to acquire or process documents; and correct answer fill rate).		
A.3.1 Collection		
Cost per collection use	A.3.1.1	The indicator assesses the library costs per collection use and therewith the cost-efficiency of library services.
Acquisition cost per collection use	A.3.1.2	The indicator assesses the library's acquisition cost per collection use and therewith the effectiveness and user-orientation of the library's collection building policy.
Cost per download	A.3.1.3	To assess the cost of a specified electronic resource related to the number of downloads from this resource.
A.3.2 Access		
Median time of document processing	A.3.2.1	To assess whether the different forms of processing procedures are effective as to speed.
A.3.3 Staff		
User services staff as a percentage of total staff	A.3.3.1	To determine the library's effort devoted to public services in relation to the background services.
Correct answer fill rate	A.3.3.2	To assess to what extent the staff are able to fulfil the primary requirement for a good reference service, namely to provide correct answers to questions.

Table 1 *(continued)*

Employee productivity in media processing	A.3.3.3	To measure the average number of acquired media (print and electronic documents) processed per employee in a certain period (usually one year). The indicator exemplarily demonstrates employee productivity.
Employee productivity in lending and delivery services	A.3.3.4	To measure the average loan transactions per employee in a certain period (usually a year). The indicator exemplarily demonstrates employee productivity.
Staff costs per title catalogued	A.3.3.5	To assess the staff costs of a specific policy for producing bibliographic records and therewith the efficiency of the library's practices and processes.
Staff costs per loan	A.3.3.6	To assess the efficiency of the library's lending and delivery services.
A.3.4 General		
Cost per user	A.3.4.1	To assess the cost of the library's service related to the number of users.
Cost per library visit	A.3.4.2	To assess the cost of the library's service related to the number of library visits.
A.4 Potentials and development		
Indicators that measure the library's input into emerging service and resource areas and its ability to gain sufficient funding for development (e.g. percentage of expenditures on electronic resources and attendances at formal training lessons by staff).		
A.4.1 Staff		
Number of attendance hours at formal training lessons per staff member	A.4.1.1	To assess the improvement of library staff skills by attending training lessons.
Percentage of staff time spent in training	A.4.1.2	To assess the percentage of staff time allocated to formal training activities for the purpose of enhancing staff skills.
Percentage of staff in cooperative partnerships and projects	A.4.1.3	To assess the library's local, regional, national, and international cooperation and therewith the library's importance in and impact on the library world.
Percentage of staff time spent on educational services	A.4.1.4	To assess the percentage of staff time allocated to developing and delivering user training and educational services in all formats for the purpose of enhancing skills in library and information use.
Percentage of library staff providing research support	A.4.1.5	To assess the extent to which the library invests human resources in providing support for researchers.
Number of research publications per professional staff member	A.4.1.6	To assess to what extent the library engages in library and information research and other academic research.
A.4.2 General		
Percentage of library means received by special grant or income generated	A.4.2.1	To assess the library's success in obtaining additional financial resources.
Percentage of institutional means allocated to the library	A.4.2.2	To measure the importance of the library (expressed in monetary units) and the support by the funding institution.
Number of publications in the media per event	A.4.2.3	To assess the library's success in obtaining media attention and therewith public interest for its events.

Annex A
(informative)

Description of performance indicators

A.1 Resources, access, and infrastructure

A.1.1 Collection

A.1.1.1 Required titles availability

A.1.1.1.1 Background

The extent to which the titles in demand are available for use when required by users is a classic indicator, widely used as an overall library performance and collection evaluation measure in both public and academic libraries. Studies of availability have appeared in the literature since the thirties of the last century, mostly conducted to determine the level of user satisfaction with the availability of materials as a measure of library effectiveness[32].

In the actual context, where library collections combine both print and digital materials, the traditional availability concept must be extended to measure user success in immediately getting access to digital resources owned or licensed by a particular library.

The indicator can also help to identify barriers to user success such as incorrect catalogue information, misshelving, insufficient number of copies or licenses, and dead links to digital documents.

A.1.1.1.2 Objective

To assess to what extent titles owned or licensed by the library and in demand by the users are actually available when required.

A.1.1.1.3 Scope

This performance indicator is applicable to all libraries.

Reference and loan collections should be measured separately. In loan collections, many items can be lent out, while items in reference collection are more liable to be misplaced or stolen.

Print and digital collections should also be measured separately, as the reasons for non-availability differ very much.

This indicator can be used for specified collections, subject areas, branches, or time periods. For each specified area within the library, the resulting indicators can be compared to see if the availability differs significantly.

The indicator can be used for comparing libraries with the same mission, provided that the same method is used for calculating the indicator.

A.1.1.1.4 Definition of the indicator

The percentage of titles owned by the library and required by at least one user that are immediately available in either print or digital format.

Available means, for the purpose of this indicator, that one or more copies of the title are available to users for loan, in-library use, or downloading. Copies to be retrieved from closed stacks are counted as being available.

Copies taken out for processing, such as cataloguing, classification, bookbinding, reshelving, etc., and copies missing because they are stolen, misplaced, etc. are counted as not available but the titles are included in the total number of titles. In addition, copies indicated as part of the digital collection, but inaccessible to users at the time of request (e.g. simultaneous use, system downtime), are counted as not available but are included in the total number of titles.

Titles can, for the purpose of this indicator, include individual articles in journals, books, e-journals, or eBooks, or other catalogued documents or resources, if they are included in the total number of titles as well. What is included shall be stated explicitly in each case.

A.1.1.1.5 Method

Draw a random sample of titles owned or licensed by the library in print and digital formats and required by at least one user. For each title in the sample, record whether a copy of that title is available. For a rough measure for print titles, check only the records of the library. For a more accurate measure, check the actual copies. Titles in digital formats shall be checked directly.

The required titles availability is shown as Formula (A.1):

$$\frac{A}{B} \times 100 \tag{A.1}$$

where

    A is the number of available required titles in the sample;

    B is the total number of required titles in the sample.

Round off to the nearest integer.

A random sample of required titles can be established in two ways.

a) Ask a random sample of users what they are looking for in the library's print and digital collections and then discard any titles not owned or licensed by the library. Only specific titles, not subject searches, are included in the sample. Remove duplicates of the same title. In order to achieve a truly random sample, either all required titles shall be taken from each user, or one title should be selected randomly from each user.

b) Draw a random sample using actual loan transactions. Remove duplicates of the same title.

NOTE 1   Method a) can be used for print and digital collections, method b) only for print collections.

NOTE 2   Method b) is less obtrusive to the users, but reflects only the demand for titles already acquired that have resulted in a loan transaction. For some purposes, the result is adequate.

For libraries with marked variations, e.g. seasonal variations, a more accurate indicator can be attained by measuring the Required Titles Availability at intervals over a period of time and then calculating the mean availability.

A.1.1.1.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100. It estimates the probability that a randomly selected title owned or licensed by the library and required by users is available. A high score means high availability.

In some libraries, marked seasonal variations are to be expected. Variations during the week or during the day can also be expected.

The indicator is affected by several factors. The most important are the following:

— number of copies of each title, especially titles in much demand;

— number of simultaneous users allowed for a licensed digital resource;

— composition of the collection in relation to the demands of the users;

— standard loan period of the library, specific loan periods for titles in heavy demand, and the number of documents authorized for borrowing simultaneously;

— number of print titles also available in digital format.

Minor factors, such as the number of titles taken out for bookbinding or other processing, speed of reshelving, etc. will influence the score.

A.1.1.1.7   Source(s)

See the following references:

— Reference [28] p. 300;

— Reference [36] pp. 84 - 89 (“Availability”);

— Reference [41] pp. 60 - 71 (“Materials Availability”).

A.1.1.2   Percentage of required titles in the collection

A.1.1.2.1   Background

One of a library's primary tasks is to select, maintain, and provide access to relevant information resources which satisfy its users' demand. Therefore, it is important to check to what extent the publications required by its users are owned or licenced by a library.

This indicator is closely related to the indicator “Required titles availability” (see A.1.1.1) as its necessary complement when assessing the two main aspects of availability: whether the document that a user request is in the collection and whether it is available for use.

A.1.1.2.2   Objective

To assess to what extent titles in demand by the users are owned or licensed by the library. The indicator is used to assess the fit of the collection to the requirements of the users.

A.1.1.2.3   Scope

This performance indicator is applicable to all libraries.

The indicator can be used for specified collections, subject areas, branches, or time periods. For each specified area within the library, the resulting indicators can be compared to see if the availability differs significantly.

The indicator can be used for comparing libraries with the same mission and a similar population to be served.

A.1.1.2.4   Definition of the indicator

The percentage of titles, required by at least one user, that is already owned or licensed by the library.

If a title has been published and ordered before the investigation but has not been received by the library, it is counted as owned by the library.

Titles can, for the purpose of this indicator, include individual articles in journals or books, if they are included in the total number of titles as well. What is included has to be stated explicitly in each case.

A.1.1.2.5 Method

Draw a random sample of titles required by at least one user, by asking a sample of users what they are looking for in the library. Include titles in print and digital format. Sample only specific titles, not subject searches.

NOTE   This method will not result in a truly random sample unless only one required title is taken from each user. For most purposes, the result is adequate even if all titles named are used.

Record for each title in the sample whether the library owns or has licensed a copy of that title.

The percentage of required titles in the collection is shown as Formula (A.2):

$$\frac{A}{B} \times 100 \tag{A.2}$$

where

   A is the number of required titles in the sample owned or licensed by the library;

   B is the total number of required titles in the sample.

Round off to the nearest integer.

A.1.1.2.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100. It estimates the probability that a title required by users is in the library's collection. A high score indicates a good fit between the collection and the requirements of the users.

NOTE   As well as indicating a poor fit between the collection and the requirements of the users, a low score might also indicate that the users have a wrong perception of the subject coverage of the library. This can be addressed through the promotion of the library's services.

The results to be expected will depend on the type of library (e.g. special library or general library, academic library or public library, etc.).

A.1.1.2.7 Source(s)

See Reference [35] pp. 84 - 89 (Included in "Availability": called "Acquisition Rate" or "Ratio of Acquired items to Sought items").

A.1.1.3 Percentage of rejected accesses

A.1.1.3.1 Background

The high costs of licensed digital electronic resources are significant for libraries. As a result, It is necessary for them to carefully evaluate the use of these digital resources, finding the necessary balance between the users' demand (translated into a specific number of access licences) and the restrictions of the library budget.

High numbers of turnaways (rejected accesses) indicate that the number of simultaneous user licences is insufficient for user demand.

A.1.1.3.2 Objectives

To establish whether there are sufficient licences for each database to meet users' demands.

A.1.1.3.3 Scope

This performance indicator is applicable to all libraries with licensed databases.

A.1.1.3.4 Definition of the indicator

The percentage of rejected accesses of the total attempted accesses for each licensed database during a specified time period. In the sense of this indicator, a rejected access is an unsuccessful request on a database due to the request exceeding the simultaneous user limit.

Accesses by library staff and for user training should be included.

Accesses rejected because of incorrect passwords or user IDs are not included.

A.1.1.3.5 Method

Count the total number of attempted accesses on a database and the number of unsuccessful attempts during a specified time period.

The percentage of rejected accesses is calculated as shown in Formula (A.3):

$$\frac{A}{B} \times 100 \tag{A.3}$$

where

A is the number of rejected accesses on a licensed database during a specified time period;

B is the total number of rejected and successful accesses on the electronic database during the same time period.

Round off to nearest integer, or one decimal place if less than 10.

A.1.1.3.6 Interpretation and factors affecting the indicator

The indicator is an integer in the range of 0 to 100. A high score indicates that the number of licenses is not adequate to users' needs.

The indicator should be considered separately for each database. There is nothing to be gained by calculating a global figure for all databases.

A.1.1.3.7 Source(s)

See Reference [16] (PI 10).

A.1.1.4 Number of documents digitized per 1 000 documents in the collection

A.1.1.4.1 Background

Many libraries hold valuable documentary heritage collections. An urgent objective today is to preserve these collections long-term and to make them available for public use via digitization.

Many libraries are digitizing material which in analogue formats can be fragile and at risk of loss in order to conserve the original analogue document by offering a digital surrogate for use. Besides, digitization improves wider access and collaborative sharing of information resources.

The level of digitization of its documentary heritage is, therefore, an important measure of library collections accessibility, since it is essential for preservation, effective dissemination and integration of these materials into the learning and research process.

A.1.1.4.2   Objective

To assess to what extent the library fulfils its task of making the documentary heritage publicly available in digitized format.

A.1.1.4.3   Scope

The performance indicator is applicable to all libraries whose tasks include preserving and promoting the documentary heritage.

Comparing the results between libraries will be difficult, as the collection size can differ considerably. But comparison over time and with goals will be important for each library.

A.1.1.4.4   Definition of the indicator

The number of documents digitized (by the library itself or other institutions) per year per 1 000 documents in the collection.

NOTE 1   An item is only counted as digitized if the complete item has been copied.

NOTE 2   Digitization for preservation purposes is included.

NOTE 3   Mass digitization is included.

NOTE 4   Purchase of digital copies for replacing print copies is excluded.

A.1.1.4.5   Method

Establish the number of documents in the library's collection. Count the number of documents digitized out of the analogue collection in the reporting year.

The number of documents digitized per 1 000 documents in the collection is shown as Formula (A.4):

$$\frac{A}{B} \times 1\,000 \tag{A.4}$$

where

  A is the number of documents (physical units) digitized in the reporting year;

  B is the total number of documents (physical units) in the library's collection.

Round off to the nearest integer.

A.1.1.4.6   Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 1 000.

A high score shows the library's commitment to making its collection accessible.

The indicator will be influenced by the funding of local, regional, or national heritage programs.

A.1.1.4.7   Source(s)

See ISO/TR 28118:2009, A.5.1.

A.1.1.5 Percentage of documents digitized per special collection

A.1.1.5.1 Background

Many libraries hold special collections that have intrinsic value to the institution, for instance rare books, genealogy materials, archives, local history, theses, or books from local authors.

An important objective today is to make these collections universally available by digitization. Digitization of special collections provides a new set of choices in the realms of preservation, reformatting, and security of materials. It also brings significant benefit to the users by improving the access to the material and thus increasing their use.

A.1.1.5.2 Objective

This performance indicator assesses to what extent the library fulfils its task of making its special collections publicly available in digitized format.

A.1.1.5.3 Scope

The indicator is relevant for all libraries with special collections.

The results are not comparable between libraries as each special collection is unique, but comparison over time and with goals is important for each library.

A.1.1.5.4 Definition of the performance indicator

The indicator is the percentage of documents digitized (by the library itself or other institutions) per special collection at a specified period of time.

NOTE 1   An item is only counted as digitized if the complete item has been copied.

NOTE 2   Digitization for preservation purposes is included.

NOTE 3   A special collection is defined as a collection of materials segregated from a library collection according to form, subject, genre, period, geographical area, condition, rarity, source, or value.

NOTE 4   The calculation of the percentage could be based on the number of titles, copies, in the case of periodicals also the number of annual volumes, or pages of objects/documents.

A.1.1.5.5 Method

Establish the number of documents per special collection of the library. If a full count is not available, the number may instead be estimated.

Count the number of documents that have already been digitized per special collection.

The percentage of documents digitized per special collection is given as Formula (A.5):

$$\frac{A}{B} \times 100 \tag{A.5}$$

where

   A is the number of documents in the special collection that have been digitized;

   B is the total number of documents in the special collection.

Round off to the nearest integer.

A.1.1.5.6   Interpretation and use of results

The performance indicator is an integer between 0 and 100.

A high percentage is regarded as good as it shows the library's commitment to making its collections accessible.

A.1.1.5.7   Source(s)

See ISO 21248:2019, A.1.3.2.

A.1.1.6   Percentage of the owner institution's publications in the institutional repository

A.1.1.6.1   Background

Currently, many educational institutions are setting up repositories for publications of their researchers to provide open access to these materials as a means of increasing the publications visibility, improving their positioning in the international rankings, and facilitating scholarship communication. In many cases, these institutional repositories are managed by libraries.

The success of an institutional open access repository can be measured by the volume and scope of its contents which mainly depend on the participation of the academic institution's scholarly community.

A.1.1.6.2   Objective

To assess to what degree the academic publications of an institution are accessible through the institutional open access repository.

A.1.1.6.3   Scope

The performance indicator is applicable for libraries responsible for the institution's institutional repository.

The indicator could be used for one institution or a group of institutions, and include the storing of different kinds of academic publications, such as journal articles, eBooks, e-prints, technical reports, theses and dissertations, data sets, and teaching and learning materials.

Comparison is possible with other institutions with the same open access policy and organization.

A.1.1.6.4   Definition of the indicator

The percentage of the total number of the owner institution's academic publications, such as journal articles, eBooks, e-prints, technical reports, theses and dissertations, data sets, and teaching and learning materials, that are stored in the institution's open access repository.

Student works are not included.

The indicator may include masters' theses, or be used separately for these.

The indicator can only be used in institutions that keep records of published academic publications in the institution.

A.1.1.6.5 Method

It is desirable to calculate the indicator separately for records and open access full text academic documents.

1) To assess the percentage of the owner institution's academic publications available as records in the institutional repository:

   — establish the total number of academic publications that have been published (journal articles, eBooks, e-prints, technical reports, theses and dissertations, data sets, and teaching and learning materials) in the institution during the last three years;

   — establish the number of these publications that are recorded in the institutional repository.

The percentage of the owner institution's academic publications in the institutional repository (records only) is calculated using Formula (A.6):

$$\frac{A}{B} \times 100 \tag{A.6}$$

where

A is the number of records of the institution's academic publications in the institutional open access repository;

B is the number of academic publications published by the institution or the institution's scientific staff during the past three years.

Round off to nearest integer.

2) To assess the percentage of the owner institution's academic publications freely available as full text academic documents in the institutional repository:

   — establish the total number of academic publications that have been published (journal articles, e-prints, technical reports, theses and dissertations, data sets, and teaching and learning materials) in the institution during the last three years;

   — establish the number of these publications for which the full text is available for all users in the institutional open access repository.

The percentage of the owner institution's academic publications in the institutional repository is calculated using Formula (A.7):

$$\frac{A}{B} \times 100 \tag{A.7}$$

where

A is the number of the institution's academic publications stored in the institutional open access repository;

B is the number of academic publications published by the institution or the institution's scientific staff during the past three years.

Round off to the nearest integer.

A.1.1.6.6 Interpretation and factors affecting the indicator

The performance indicator is an integer between 0 and 100. A high score indicates a good access for external users to academic publications produced by the institution.

A low score could be caused by low knowledge about the benefits of open access publishing or by a missing open access policy in the institution.

A.1.1.6.7   Source(s)

See Reference [12].

A.1.2   Access

A.1.2.1   Shelving accuracy

A.1.2.1.1   Background

Returning physical documents to their correct place on the shelves and thereby assuring that they are available for use is an activity that still reflects the efficiency and effectiveness of a library. Literature on shelving processes has been addressing areas such as collection arrangement, shelving speed, or staff efficiency. The accuracy level of documents re-shelved in the stacks is seen as main indicator for good processes in this sector.

A.1.2.1.2   Objective

To assess to what extent documents that are recorded in the library's catalogue are in their correct place on the shelves and thereby available for use.

A.1.2.1.3   Scope

The performance indicator is applicable to all libraries with physical collections.

The indicator can be used for specified collections, subject areas, or branch libraries. For each specified area within the library, the resulting indicators can be compared to see if the rate of accuracy differs significantly.

Comparisons between libraries are possible if differences in storage (open or closed stacks) and frequency of use are taken into consideration.

This indicator does not measure the speed of shelving.

A.1.2.1.4   Definition of the indicator

The percentage of documents recorded in the library's catalogue that is in the correct place on the shelves at the time of investigation.

Documents whose absence is accounted for in the library's records, e.g. by being on loan, taken out for bookbinding or repair, or noted as missing, are not included in the sample.

A.1.2.1.5   Method

a)   Check a random sample of shelves with the help of a shelf-list. Record, for each document in the list, whether it is shelved correctly. For all missing documents, check whether their absence is accounted for in the library's records. If all documents in a collection are equipped with barcodes, scanning tools and wireless technology can be used instead of shelf-lists.

In open access areas, the shelves should be checked out of opening times in order to include documents that have been used in-house. Documents awaiting shelving should be reshelved before counting.

The shelving accuracy is calculated using Formula (A.8):

$$\frac{A}{B} \times 100 \tag{A.8}$$

where

    A is the number of documents correctly shelved;

    B is the total number of documents in the sample (excluding those whose absence is accounted for in the library's records).

Round off to the nearest integer.

NOTE   The number of missing documents comprises both documents that have been misplaced and those that have been stolen, if the latter have not been noted as missing in the library's records. This assumes that correct shelving implies frequent shelf-reading so that losses get noted at an early stage.

b)   Check a random sample of shelves in the collection. Count the number of documents on each shelf in the sample. Record all documents that are found in the wrong place, irrespective of their being misplaced near to or far from their correct position. In open access areas, the shelves should be checked out of opening times in order to include documents that have been used in-house.

The shelving accuracy is calculated using Formula (A.9):

$$\frac{A - B}{A} \times 100 \tag{A.9}$$

where

    A is the total number of documents on the shelves at the time of investigation;

    B is the number of misplaced documents on the shelves.

Round off to the nearest integer.

NOTE 1   As an estimate, the simpler method b) can be sufficient.

NOTE 2   If all documents in a collection are equipped with barcodes, scanning tools and wireless technology can be used in the counting of documents in the sampled shelves.

A.1.2.1.6   Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100. A high score means high shelving accuracy. The shelving accuracy is affected by several factors. The most important are the following:

— the frequency of shelf-reading;

— the speed of reshelving.

The indicator could also point to the classification or other shelf-location system not being transparent and easy to use or to the need for a security system.

For libraries, with part of their collection in closed stacks and part in free access, or where use varies much between parts of the collection, shelving accuracy should be assessed for the different parts of the collection separately, as documents in open access areas and in frequent use will be more liable to misshelving.

A.1.2.1.7   Source(s)

See Reference [36], C 13.

A.1.2.2 Median time of document retrieval from closed stacks

A.1.2.2.1 Background

Most libraries are (or will be in a near future) hybrid since they offer a combination of traditional and digital products and services. In hybrid library collections, digitized and born digital resources coexist with non-digital documents, which are stored either in open access shelves or in closed stacks. To retrieve documents from closed stacks, users must consult the library catalogue, submit a request and wait for the delivery of the item.

In this context, the time spent in fetching documents from closed stacks is crucial for a quick and effective access to the collection.

A.1.2.2.2 Objective

To assess whether the retrieval processes are effective.

A.1.2.2.3 Scope

All libraries with part of their material in closed stacks.

Comparing libraries can be possible if local circumstances concerning buildings, transportation, etc. are taken into account.

A.1.2.2.4 Definition of the indicator

The median time elapsed between the request for a document placed in closed stacks and the moment it is available to the user.

The time interval is measured in library business hours (the hours the library is open for business, excluding weekends, holidays, or other days when the library is closed).

A.1.2.2.5 Method

Draw a random sample of documents owned by the library, stored in closed stacks and requested by the users.

Register, for each request, the date and time of the day when the request was submitted and the time when the document was ready to be collected by the user. Subtract the starting time from the finishing time, expressed in minutes or hours as seems most fit.

The median time of document retrieval from closed stacks is established by ranking the requests in ascending order by the retrieval time. The median time is the value of the request in the middle of the ranking list. If the number of requests is even, the median time is the average of the two values in the middle of the ranking list, rounded off to the nearest minute.

The sample can be established in two different ways.

a) The sample is drawn among the titles owned by the library and not on loan. The requests are made by the investigators or their proxies at random times during the sampling period and the time of handing in the request is recorded.

b) The sample is drawn among actual requests at the time when the documents are ready to be collected by the user. The method presumes that the date and time of the request is recorded as part of the normal routine.

Failed requests are left out of the calculation, since no finishing time can be assigned to a failed request.

Requests for documents in off-site storage should be counted separately.

A.1.2.2.6   Interpretation and factors affecting the indicator

The indicator is a real number with no top limit. The indicator is expressed in minutes or hours and minutes.

A short retrieval time is considered good. The retrieval time can be affected by the number of orders at peak times, by storage conditions, or shelving accuracy.

Delivery of materials stored in closed stacks placed in distant locations can take more time.

Results should be compared to the standard of service to which the library has committed.

A.1.2.2.7   Source(s)

See the following references:

— Reference [15];

— Reference [36] pp. 202 - 205 ("Lending Speed");

— Reference [43] pp. 112 (item F 95).

A.1.2.3   Speed of interlibrary lending

A.1.2.3.1   Background

In times of growing digital resources, the relevance of Interlibrary Lending (ILL) has not decreased, since no individual library or country can be self-sufficient in meeting all the information needs of their users.

The necessity for performance assessment in interlibrary lending is evident, and there is a general agreement in the literature that turnaround time (the time between the initiation and the completion of a request) is one of the primary and most widely used criteria.

A.1.2.3.2   Objective

To assess the time interval for successfully completing an interlibrary loan or electronic document delivery transaction, from the initial request to sending the requested item(s).

A.1.2.3.3   Scope

This performance indicator is applicable to all libraries participating in interlibrary lending and electronic document delivery services.

Comparison is possible between libraries of similar mission and goals if a similar type of lending and delivery system is used.

A.1.2.3.4   Definition of the indicator

The number of hours required for library staff to successfully complete an interlibrary loan or electronic document delivery transaction.

A request is complete when the item is sent to the requesting library by the lending library.

The time interval is measured in library business hours (the hours the library is open for business, excluding weekends, holidays, or other days that the library is closed).

An interlibrary loan is a loan of a document in physical form or a delivery of a document, or part of it, in copied form, from one library to another which is not under the same administration.

An electronic document delivery in the sense of this indicator is the electronic transmission of a document or part of a document from the library collection to a user, mediated by library staff, not necessarily via another library.

Time received is the date and time the request is received by the lending library.

Time sent is the date and time the item requested was sent to the requesting library.

A.1.2.3.5 Method

The speed of interlibrary lending is shown as Formula (A.10):

$$\frac{A}{B} \tag{A.10}$$

where

> A is the total number of hours to complete a specified number of interlibrary loans or electronic document delivery transactions;
>
> B is the number of interlibrary loan plus electronic document delivery transactions included in A.

Exclude days library is closed for business. Round to the nearest whole hour.

Sampling is possible. The recommended method is "typical week." A "typical week" is a time that is neither unusually busy nor unusually slow. Avoid holidays, vacation periods, and days when unusual events are taking place in the community or in the library. Choose a week in which the library is open regular hours.

If "full count" method is preferred, data should be collected monthly to reduce the burden to staff when analysing the results.

If only one of the services is available in the library (e.g. interlibrary lending or electronic document delivery), then A and B would reflect the single service available.

A.1.2.3.6 Interpretation and factors affecting the indicator

The indicator is a positive real number with no top limit.

A lower score is usually considered as good. It shows whether its processes are organized efficiently.

The indicator is influenced by internal conditions. Staffing, collection size, days the library can be closed for business, and delivery delays can greatly influence the score.

The indicator should be judged against the mission and objective of the library.

A.1.2.3.7 Source(s)

See Reference [23], 5.3.

A.1.2.4 Percentage of successful interlibrary loans

A.1.2.4.1 Background

In times of growing digital environment, Interlibrary Loan (ILL) and document delivery maintain their relevance.

There is a general agreement in the literature that the fill rate of requests and the turnaround time (see Indicator A.1.2.3) are the two primary and most widely used criteria for evaluating interlibrary lending and electronic document delivery.

A.1.2.4.2 Objective

To assess the fulfilment of interlibrary loans and electronic document delivery requests relative to the total number of interlibrary loans and electronic document delivery requests.

A.1.2.4.3 Scope

This performance indicator is applicable to all libraries participating in interlibrary lending and document delivery services.

The indicator excludes resource sharing within the same library administration.

A.1.2.4.4 Definition of the indicator

The percentage of successfully completed interlibrary lending or electronic document delivery transactions.

An interlibrary lending or electronic document delivery transaction is successfully completed when an item requested is delivered to the requesting library or user.

Delivery includes all methods of transmission of an item (e.g. facsimile, digital image, pdf, postal, or other form of surface delivery service).

An interlibrary loan is a loan of a document in physical form or a delivery of a document, or part of it, in copied form, from one library to another which is not under the same administration.

An electronic document delivery in the sense of this indicator is the electronic transmission of a document or part of a document from the library collection to a user, mediated by library staff, not necessarily via another library.

A.1.2.4.5 Method

The percentage of successful interlibrary loans is calculated as shown in Formula (A.11):

$$\frac{A}{B} \times 100 \tag{A.11}$$

where

    A is the number of successful interlibrary loan and electronic document delivery transactions;

    B is the total of all interlibrary loan and electronic document delivery requests.

Round off to the nearest integer.

The total number of all requests and successful interlibrary lending and electronic document delivery transactions is required.

Collection point is the library department responsible for interlibrary lending and electronic document delivery.

Effort is low for libraries with automated methods for determining the number of interlibrary loan and electronic document delivery requests and successfully completed transactions.

Sampling is possible. The recommended method is "typical week." A "typical week" is a time that is neither unusually busy nor unusually slow. Avoid holidays, vacation periods, and days when unusual events are taking place in the community or in the library. Choose a week in which the library is open regular hours.

A.1.2.4.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A higher score is usually considered as good. It is an indicator of the quality of the library's collection shelving accuracy and shows the library's importance to the library community.

The indicator will be influenced by a high percentage of documents on loan or not available for lending at the time of collection.

A low score can indicate that other libraries have an incorrect perception of the subject coverage of the library to which they send the requests.

The indicator should be judged against the mission and objective of the library.

A.1.2.4.7 Source(s)

See Reference [23], 3.0.

A.1.2.5 Speed of reference transactions

A.1.2.5.1 Background

Answering users' reference questions is still an important service of libraries that has increased in outreach with the introduction of digital reference.

Speed of providing answers in reference transactions, which is often referred to as turnaround time, is another quality aspect for reference services besides the accuracy of answers (see A.3.3.2). Libraries should take care that the speed of answering does not influence the quality of the answers. Therefore, libraries should assess both speed and accuracy of responses when evaluating their reference services.

A.1.2.5.2 Objective

To assess whether reference answers are provided in a timely manner. The indicator can also be used to analyse the effectiveness of processes in reference services.

A.1.2.5.3 Scope

The indicator is relevant for all libraries.

Comparison is possible between libraries of similar mission and goals if a similar type of reference service is provided (e.g. online reference).

A.1.2.5.4 Definition of the indicator

The average total time (commonly known as turnaround time) required to complete reference transactions, measured in minutes, hours or days, depending on the type of services.

NOTE 1   This measures the total time of the transaction, not the staff time spent on the transaction.

NOTE 2   The time interval considers only library business hours (the hours the library is open for business, excluding weekends, holidays, or other days that the library is closed).

NOTE 3   Reference questions can regard facts, documents, or advice on sources for the user's subject.

NOTE 4   The definition excludes directional and administrative inquiries, e.g. for locating staff or facilities, regarding opening times, about handling equipment, such as reader printers or computer terminals, using self-service functions.

NOTE 5   Reference questions can be delivered by telephone, mail, electronic means (such as e-mail, text messaging, or digital reference software) or personally (face to face).

A.1.2.5.5   Method

Draw a random sample of reference transactions. A sample period should be a typical week, which is neither unusually busy nor unusually quiet. Sample periods can be selected from various months throughout the year to offset peak periods and off periods. Exclude days when the library is closed for business. During the sample week, keep a count of the reference transactions on a daily basis. The transactions shall be initiated within the sample week, but completion could take longer.

Record for each transaction the date and time that the library receives a reference question and the date and time that the library delivers the answer to the users. Negative answers (e.g. no source found) are included. The data can be collected by unobtrusive testing sheets. For digital reference transactions, the data can be collected by log files.

The time needed for each delivery should be calculated by counting only the business hours of the reference services on the sampling days. Include all time taken before providing the answer to the user regardless of the actual time spent working on the specific inquiry.

NOTE   Libraries might want to assess different modes of reference transactions (online, face-to-face, etc.) separately.

In case transactions of different units of time (minutes, hours, etc.) are included in the sample, the durations must be converted to the same unit before using the formula of counting the speed of reference transactions.

The speed of reference transactions is shown as Formula (A.12):

$$\frac{A}{B} \tag{A.12}$$

where

A is the total number of minutes, hours or days, depending on the type of services, to complete the reference transactions in the sample;

B is the number of reference transactions in the sample.

A.1.2.5.6   Interpretation and factors affecting the indicator

The indicator is a positive real number without top limit.

A lower score is usually considered as good. It informs the library whether its processes are organized efficiently.

When interpreting the results of this indicator, libraries should pay special attention to the quality of the reference answers. It is not always desirable to have shorter turnaround times because in such cases accuracy can be impeded by speed. When a question is complicated or a user expects a comprehensive answer, longer turnaround time might result in better service for the user. Type and speciality of a question will greatly influence the indicator result.

Some transactions can take much longer than others. It is useful to analyse the median speed and the distribution of turnaround times in such cases.

A.1.2.5.7   Source(s)

See ISO/TR 28118:2009, A.6.2.

A.1.2.6 Percentage of rare materials accessible via online catalogues

A.1.2.6.1 Background

Many libraries hold rare materials such as manuscripts, incunabula and rare books in their collections. Such materials are sometimes not yet fully catalogued, or the cataloguing data are only searchable via book, card or manuscript catalogues. These older catalogues are gradually converted into online catalogues in order to make the titles accessible for everybody via the web.

The percentage of rare materials that are findable via online catalogues is an indicator for the library's engagement in making its rare collections accessible.

A.1.2.6.2 Objective

To assess whether the rare collections are accessible online. The indicator also measures the library's engagement in promoting its rare collection.

A.1.2.6.3 Scope

The performance indicator is applicable to all libraries with rare collections.

Comparison between libraries can be affected by national or regional funding for retrospective cataloguing.

A.1.2.6.4 Definition of the indicator

Percentage of rare materials in a library's collection that can be retrieved in the online catalogue/s of the library.

In the sense of this indicator, rare materials are incunabula, manuscripts, books published before 1800, and newer books that are made precious by their limited issue, by their binding, by dedications, and similar characteristics.

NOTE 1   Usually, such materials will belong to special collections with special shelf marks and are shelved separately in a secure location to which access is restricted.

NOTE 2   The definition excludes archives and records concerning private persons, institutions, and organizations (collections containing manuscripts, letters, notes, photos, and other material given by bequest to the library or purchased as such by, or on behalf of, the library).

A.1.2.6.5 Method

Count the total number of rare materials (titles) in the library's collections. If the real number is not available, an estimate should be made.

Count the number of rare materials' cataloguing records that are contained in the library's online catalogues.

The percentage of rare materials accessible via online catalogues is calculated as shown in Formula (A.13):

$$\frac{A}{B} \times 100 \tag{A.13}$$

where

   A is the number of rare materials retrievable via online catalogues;

   B is the total number of rare materials.

Round off to nearest integer.

The indicator can be split up as to materials.

A.1.2.6.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is considered good. It means that a high percentage of the rare material is retrievable via online catalogues and therefore can be easily located by users.

If the score is low, the library can, for example, initiate projects for retrospective cataloguing of rare materials directly into the online catalogues.

A.1.2.6.7 Source(s)

See ISO/TR 28118:2009, A.2.2.

A.1.2.7 Percentage of the rare collection in stable condition

A.1.2.7.1 Background

The physical condition of a collection is important for its suitability for any form of use. Since unstable material will suffer additional damage if handled, the distinction between stable and unstable is a critical one, separating material that can be used from that which cannot. In the case of mould infestation there may be also health risks to human beings.

Libraries whose tasks include preserving the documentary heritage need to assure an effective access to their rare collections. Therefore, collections should be in a stable condition.

A.1.2.7.2 Objective

To assess whether the rare collection is usable and accessible in its original form. The indicator thereby assesses the adequacy of the library's activity to preserve the originals.

A.1.2.7.3 Scope

The indicator is relevant for all libraries whose tasks include preserving the documentary heritage.

Comparison between libraries with similar mission and collections is possible.

A.1.2.7.4 Definition of the indicator

The percentage of rare materials in the collection that is in a stable condition.

Stable condition is defined as suitable for use. Stable material might have some damage but can be used without immediate risk of further damage. Unstable material will be further damaged if used.

The indicator is restricted to the print and manuscript collection.

A.1.2.7.5 Method

A random sample of 400 items of the print or manuscript rare collections is surveyed as to the condition of items in the sample. Items are classified in four categories:

1) good condition: usable with the normally advisable care for the collection;

2) fair condition: damaged, but stable if used with extra care and attention;

3) poor condition: moderately deteriorated, no use possible without further damage;

4) unusable condition: strongly deteriorated, item is to be excluded from use by its fragility, by mould, or pest infestation, respectively.

Categories 1 and 2 would be counted as stable, categories 3 and 4 as unstable.

The percentage of the rare collection in stable condition is:

$$\frac{A}{B} \times 100 \tag{A.14}$$

where

    A is the number of items in stable condition;

    B is the total number of items in the sample.

Round off to the nearest integer.

The indicator can be expanded to include the total collection.

A.1.2.7.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is usually considered as good.

The indicator will be influenced by the frequency of use of the collections, the storage conditions, and the availability of funding for preservation/conservation measures.

If the results show low stability, further surveys could target specific parts of the collection (e.g. medieval or modern manuscripts, cartographic material, newspapers) or the special kind of damage (e.g. mechanical, biological, acid paper) in order to prioritize preservation activities. Measures taken can include:

— improvement of environmental conditions (temperature and relative humidity);

— changes in handling methods;

— storage in enclosures, e.g. boxes;

— conservation treatment;

— mass deacidification;

— rebinding;

— substitution of unusable items by copies or surrogates.

A.1.2.7.7 Source(s)

See ISO/TR 28118:2009, A.8.1.

A.1.2.8 Percentage of rare materials needing conservation/restoration treatment that received such treatment

A.1.2.8.1 Background

Libraries that hold rare materials are obligated to preserve those materials as far as possible in their original state. For this purpose, they can use preventive measures, such as storing the materials in an adequate environment and substituting surrogates for usage. Preventive measures are usually much

more cost-effective than intervention measures taken to remedy damage after deterioration has taken place.

If the items have already some damage, conservation and restoration methods should be used. Conservation aims at preserving the materials in their original and authentic form. All information, including historic material and techniques, is retained, not only the textual information.

The percentage of rare materials showing damage that received conservation/restoration treatment shows the library's engagement in preserving its cultural heritage collections.

A.1.2.8.2 Objective

To assess the library's activities in the conservation of rare material in its original form.

A.1.2.8.3 Scope

The indicator is relevant for all libraries with rare materials collections.

Comparing the results between libraries is difficult, as the rare collections will differ considerably. But comparison over time and with goals is important for each library.

A.1.2.8.4 Definition of the indicator

The percentage of all rare materials needing conservation/restoration treatment that received such treatment during one year.

In the sense of this indicator, rare materials are defined as incunabula, manuscripts, books published before 1800, and newer books that are made precious by their limited issue, by their binding, by dedications, and similar characteristics.

NOTE 1   In the context of this indicator, conservation/restoration is restricted to the treatment of rare materials and means manual treatment techniques such as reinforcing joints or mending tears.

NOTE 2   Mass conservation (deacidification) is excluded.

A.1.2.8.5 Method

The number of rare materials items that received conservation/restoration treatment is counted during a reporting year. The number of items needing conservation/restoration treatment is assessed by a survey (see A.1.2.7 "Percentage of the Collection in Stable Condition"). The groups 3 and 4 in the survey need such treatment.

The percentage of rare materials needing conservation/restoration treatment that received such treatment is

$$\frac{A}{B} \times 100 \tag{A.15}$$

where

- A is the number of rare materials needing conservation/restoration treatment at the start of the reporting period that received such treatment during the reporting year;

- B is the total number of rare materials needing conservation/restoration treatment at the start of the reporting period.

Round off to the nearest integer.

A.1.2.8.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high percentage is considered as good.

In order to get a more detailed view of conservation activities, the indicator should be calculated for different types of materials, e.g. manuscripts, newspapers, cartographic material.

If the results show a low percentage of items treated, actions to be taken can be:

— promoting the importance of preserving the documentary heritage in its original form via public media;

— trying for additional funds, e.g. by an adopt-a-book programme.

Given the marketing potential of rare material, such activities can be successful.

A.1.2.8.7 Sources(s)

See ISO/TR 28118:2009, A.8.2.

A.1.3 Facilities

A.1.3.1 User area per capita

A.1.3.1.1 Background

Traditionally, libraries have been collection-centred organizations, sometimes more intent on building and storing collections than in serving users. However, in the last decades the focus has shifted from the storage and display of resources to a user-centred approach.

With decreasing frequency of their physical collection's use, libraries have had to rethink the functions assigned to their physical spaces. Nowadays a library is required not only to satisfy its users' information needs, but also to provide effective spaces where a variety of services, activities and programs can be carried out: group and individual work, interaction with librarians, use of resources and new technologies, meeting and socializing with other people, or using the library as a place of refuge and contemplation.

The amount of space dedicated to user services and activities can therefore be seen as indicating the library's engagement in user services.

A.1.3.1.2 Objective

To assess the importance of the library as a place for study, meeting, and as a learning centre, and indicate the institution's support for these tasks.

A.1.3.1.3 Scope

This performance indicator is applicable to all libraries with physical premises.

Comparison can be possible if differences in the mission of the library and population to be served are considered.

A.1.3.1.4 Definition of the indicator

The total user area offered by the library per 1 000 members of the population to be served.

User area in the sense of this indicator is the net useable area for user services. It includes space for reading and studying (individual or group), lending, reference and information, and any other

services delivered to users, self-service areas (lending and returning plus sorting robots), also areas for recreation and communication, sickrooms, the entrance hall, and open access storage areas, as integrated parts of user service areas; media centres, workplaces for staff in these areas.

Premises not usually available to users should be excluded.

A.1.3.1.5 Method

Establish the library's total user area in square metres.

The user area per capita is calculated using Formula (A.16):

$$\frac{A}{B} \times 1\,000 \tag{A.16}$$

where

  A is the library area available for user services, expressed, in square metres;

  B is the number of persons in the population to be served.

Round off to the nearest integer.

A.1.3.1.6 Interpretation and factors affecting the indicator

The indicator is a real number with no top limit. A higher score will usually be considered good.

The indicator is affected by the extent to which the institution provides studying, reading, and meeting facilities outside the library premises.

A.1.3.1.7 Source(s)

See Reference [36], pp. 46 – 50.

A.1.3.2 User places per capita

A.1.3.2.1 Background

Adequate seating in libraries is recognised as an important factor for user satisfaction, even more in the actual context of the library as learning, researching and meeting place. However, to estimate the number of seats a library should provide in order to serve its institution or community adequately has become difficult. The functions of libraries have changed in the digital age, and their spaces must be reshaped to meet the changing user needs. Whether seating is adequate can depend on local circumstances, such as the size and type of the population, the building design, or options of other workspaces nearby.

It can be assumed that in higher education libraries where students often need a seat for the whole day, the demand for working places will be higher than in public libraries, where users primarily need seats for a shorter time of reading and browsing.

This indicator can help to identify whether a library's seating availability is adequate to the population to be served by benchmarking the results with other libraries of similar features.

A.1.3.2.2 Objective

To assess the availability of user places in the library.

A.1.3.2.3 Scope

This performance indicator is applicable to all libraries with a defined population to be served and with reading and working facilities.

A.1.3.2.4 Definition of the indicator

The ratio of publicly available user places, whether with or without equipment, per 1 000 defined library population to be served.

For this indicator, user places include places in carrels, in seminar and study rooms and the audiovisual and children's departments of the library, and informal seating in lounges and group areas.

Excludes places in halls and lecture and auditory theatres intended for audiences of special events. Also excludes floor space and cushions on which users can sit. Also excludes seats reserved exclusively for the use of staff.

A.1.3.2.5 Method

Establish the number of user places available in the library.

The user places per capita is calculated as shown in Formula (A.17):

$$\frac{A}{B} \times 1\,000 \tag{A.17}$$

where

- A is the number of available user places;
- B is the number of persons in the population to be served.

Round off to the nearest integer.

A.1.3.2.6 Interpretation and factors affecting the indicator

The indicator is an integer with no top limit. A higher score is usually considered as good.

The number of user places provided elsewhere in the institution for reading, studying, or working might have an impact on the interpretation of this indicator.

A.1.3.2.7 Source(s)

See the following references:

- Reference [30] 3.3a (variation of "Total Reading and Working Places");
- Reference [41] pp. 82 - 88 (a special case of "Facilities Use Rate").

A.1.3.3 Hours open compared to demand

A.1.3.3.1 Background

Though many library resources and services are today offered for remote access, libraries are in high demand as studying, reading and meeting places. The library's opening hours remain crucial for the accessibility of its services and are frequently used as performance indicator in individual quality assessment and benchmarking projects.

A current topic among librarians is the desirability of opening the library 24 hours a day 7 days a week (24/7). Counter arguments frequently focus on whether the users per hour justify the additional resources.

This indicator provides help for finding the necessary balance between the efficient use of the library resources and the quality of the service offered by adapting the library opening hours to the real demand of users.

A.1.3.3.2 Objective

To assess to what degree the opening hours of a library correspond to users' needs.

A.1.3.3.3 Scope

This performance indicator is applicable to all libraries.

Comparison can be possible if differences in the mission and population to be served of the library are considered.

The indicator can be used with different target groups, e.g. students, academic staff, elderly people, etc.

The indicator can be used for branch libraries or departments of the library with different opening times.

A.1.3.3.4 Definition of the indicator

The actual number of a library's opening hours compared to the number of hours needed by users.

Opening hours in the sense of this indicator are the hours in a normal week that the main physical services of the library (e.g. reference and loan services, reading rooms) are available to users.

A.1.3.3.5 Method

Design a simple questionnaire asking for satisfaction with opening hours and giving the option to name additional times the library should be open and existing opening hours that are not needed. Questions about user status can be included as they will help to identify the needs of special user groups.

EXAMPLE   Example of a survey:

How would you rate your satisfaction with the present opening times of the library?

[ ] Very Unsatisfactory

[ ] Unsatisfactory

[ ] Moderately Satisfactory

[ ] Satisfactory

[ ] Very Satisfactory

Please specify the hours other than the present hours you need the library to be open, by placing an "O" in the appropriate box.

The present opening hours are indicated by an "X". As the library might not be able to meet the demand for additional opening hours, please indicate which present hours are not necessary for you by crossing through the appropriate "X" in the box.

Opening hours	Day of the week						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
7 to 8							
8 to 9	X	X	X	X	X		
9 to 10	X	X	X	X	X		
10 to 11	X	X	X	X	X	X	
11 to 12	X	X	X	X	X	X	
12 to 13	X	X	X	X	X	X	
13 to 14	X	X	X	X	X	X	
14 to 15	X	X	X	X	X	X	
15 to 16	X	X	X	X	X	X	
16 to 17	X	X	X	X	X	X	
17 to 18	X	X	X	X	X	X	
18 to 19	X	X	X	X	X	X	
19 to 20	X	X	X	X	X		
20 to 21	X	X	X	X	X		
21 to 22	X	X	X	X	X		
22 to 23							
23 to 24							

Libraries might want to modify the hours in the table to meet their service context.

Draw a random sample of users and ask them to complete the questionnaire. The data can be collected through a number of questionnaire types (e.g. printed survey distributed in the library, postal mail, online survey, telephone interview) as appropriate. The survey could also be added to a comprehensive survey of user satisfaction with the library's services.

If libraries have different open hours during academic term or vacation, it would be advisable to have separate surveys during term and vacation time.

The hours open compared to demand is calculated using Formula (A.18):

$$\frac{A}{(B-C)} \tag{A.18}$$

where

A is the number of current opening hours;

B is the number of hours identified as being needed by a minimum of 20 % of survey respondents;

C is the number of current opening hours not needed by a minimum of 20 % of survey respondents.

EXAMPLE   If a library is open 60 hours per week and in the questionnaire, users ask for 10 additional hours, and the users select 3 hours they do not need, the score would be 60:67 = 0,90.

A.1.3.3.6   Interpretation and factors affecting the indicator

If a high percentage of respondents is dissatisfied with the existing open hours and asks for extended hours or a different distribution of hours over the day/week, libraries should react to modify and/or extend their open hours. This can be difficult, especially if users demand extended times at weekends or during the night.

The proposed method shows whether users need additional opening hours, what time of the day/week such additional opening hours are required, and whether existing opening hours are not needed.

A possible solution might be to open the library without offering full service, so that non-professional staff could run the library during these times. Libraries could also test unstaffed opening hours, when the library, or a specified library area, is open to controlled access, without staff present but with facilities for self-service.

Libraries should also review the usage of their opening hours by counting visits and monitoring user activities during different opening hours.

The indicator will be affected by other libraries nearby offering extended opening hours for reading and studying.

Budgetary and other local factors can affect a library's ability to meet user requests for additional opening hours.

A.1.3.3.7   Source(s)

See the following references:

— Reference [20] p. 15 ("Opening Hours Compared to Demand");

— Reference [36] pp. 54 - 59 ("Opening Hours Compared to Demand").

A.1.3.4   Average number of loans during recently added opening hours compared to the average number during all other opening hours

A.1.3.4.1   Background

The hours that the physical library and its services are accessible to users can influence not only the type of population that visits the library but also the type and amount of usage. Lending activities, that users often perform in passing, are especially liable to be biased by opening times that are acceptable and convenient to the target population.

The library should carefully monitor the effect of all changes in opening hours.

A.1.3.4.2   Objective

To assess to what degree additional opening hours of a library correspond to the times when users tend to borrow materials.

A.1.3.4.3   Scope

The performance indicator is applicable to all libraries with loan collections. It is especially useful for libraries where lending is still the most-used service.

Comparison between libraries is difficult, as users' reasons for preferring specific hours can vary greatly.

A.1.3.4.4   Definition of the performance indicator

The average number of loans during opening hours that the library recently added compared with the average number of loans during the opening hours that already existed, measured over a specified period.

Opening hours in the sense of this indicator are the hours in a normal week that the main physical services of the library (e.g. reference and loan services, reading rooms) are available to users.

A.1.3.4.5 Method

Several months after the introduction of additional opening hours, count the number of registered loans over a specified period, separately for old and new opening hours. As far as possible, a normal time should be taken which is neither unusually busy nor unusually quiet. Calculate the average number of loans for both old and additional opening hours.

The average number of loans during recently added opening hours compared to the average number during all other opening hours is calculated as shown in Formula (A.19):

$$\frac{A}{B}$$ (A.19)

where

A is the average number of loans during an additional opening hour;

B is the average number of loans during an old opening hour.

Round off to one decimal place.

EXAMPLE   A library was open 50 hours per week and has recently added 10 more hours. Over 3 months, there were on average 200 loans per "old" opening hour and 220 per "new" opening hour. The score would be 220:200=1,1.

A.1.3.4.6 Interpretation and use of results

A score > 1 is considered as good. It shows the library's success in planning its accessibility and could be used for promoting the new opening hours and, where applicable, for requesting funding for maintaining or further enlarging those hours.

A.1.3.4.7 Source(s)

Not Available.

A.1.3.5 Percentage of storage space which has an appropriate environment

A.1.3.5.1 Background

One of the most important factors affecting the lifespan and usability of library collections is the environment in which they are stored. Strict controls are necessary as to the levels of temperature, relative humidity, light, and air pollution of the storage space. Controlling the adequacy of these factors and maintaining a stable environment to avoid physical and chemical decay of the materials are crucial for the preservation of collections. Compliance with relevant standards and professional guidelines can give support in this task.

Storing physical collections in an appropriate environment allows to reduce the rate of deterioration, to avoid the need for costly repair and to prolong the lifetime of the documents, making them available for future use.

A.1.3.5.2 Objective

To assess whether the storage environment adequately protects the collection.

A.1.3.5.3 Scope

The indicator is relevant for all libraries whose tasks include preserving the documentary heritage. It is relevant for the whole physical collection.

Comparison between libraries with similar mission and collections is possible.

A.1.3.5.4 Definition of the indicator

The percentage of storage space for the collection that offers an appropriate environment.

In the sense of this indicator, appropriate environment is defined as adequate temperature, relative humidity (RH), light, air quality and restricting the use of contaminants. The adequacy of temperature, RH, light, air quality, gaseous contaminants for the long-term preservation of the main library and archive materials is given in ISO 11799:2015, Annex C.

A.1.3.5.5 Method

Due to climate changes over the day and in the seasons, the data of temperature and RH should be collected during a reporting year by non-stop measuring in storage rooms with professional measuring instruments.

The area (in square metres) of storage rooms with appropriate environmental conditions is compared with the total area of storage rooms in the library.

NOTE   Reading rooms with collections are excluded, as they are normally conditioned for the comfort of the library's users rather than for the preservation of the collection.

The percentage of storage space which has an appropriate environment is calculated using Formula (A.20):

$$\frac{A}{B} \times 100 \tag{A.20}$$

where

    A is the area of storage rooms with adequate environmental conditions;

    B is the total area of storage rooms in the library.

Round off to the nearest integer.

A.1.3.5.6 Interpretation and factors affecting the indicator

The performance indicator is an integer between 0 and 100.

A high percentage will be considered as good.

If routine monitoring shows constant levels of temperature, RH, and light according to ISO 11799:2015, Annex C, the environmental conditions for the documents are optimal.

It should be kept in mind that in some countries with high temperature and humidity, the real environment can deviate from the appropriate environment given by ISO 11799:2015, Annex C.

Environmental monitoring can be relatively easy and inexpensive. It can be difficult to attain the standards without installation of an air conditioning system, but it is important to aim for stability of environment given the damaging influence of temperature and RH. By using ultraviolet protective glass or filter, curtains, and sunshades to avoid the penetration of sunlight, the environmental conditions in storage and reading rooms can be optimized.

The potential damage by pollution can be reduced by filtering external air entering storage areas, or if filtration is not possible, by closing windows and doors effectively. To minimize the internal pollution of materials, equipment components, e.g. paints, should be tested under this aspect. The use of storage enclosures in archival quality will protect collections considerably.

A.1.3.5.7 Source(s)

See ISO/TR 28118:2009, A.8.3.

A.1.4 Staff

A.1.4.1 Staff per capita

A.1.4.1.1 Background

The number and qualification of staff is the topic of an ongoing debate between funding institutions and libraries. Library associations, as well as funding institutions, have tried to address this issue with models for calculating the adequate number of employees. Models based on production times or products per FTE person are time-consuming and the results might become outdated when changes in library services and workflows occur.

Consequently, this indicator follows a simpler approach: it compares the number of employees to the population to be served to obtain an estimate.

A.1.4.1.2 Objective

To assess the number of library employees per 1 000 members of the population to be served. The amount of work to be done can be considered proportional to the number of persons in the population to be served.

A.1.4.1.3 Scope

This performance indicator is applicable to all libraries with a defined population to be served.

Comparing libraries can be possible if differences in the mission of the library and socio-economic factors in the population are taken into account.

A.1.4.1.4 Definition of the indicator

The ratio of employees including student assistants and project employees defined per 1 000 members in the population to be served.

A.1.4.1.5 Method

Obtain the number of employees (FTE) including student assistants and project staff.

Volunteers are excluded.

To calculate the FTE for part-time employees:

— annual employment: weekly working hours divided by the regular working hours per week;

— non-annual employment: weekly working hours divided by the regular working hours per week and then multiplied with the quotient (number of weeks employed/52).

The staff per capita is calculated using Formula (A.21):

$$\frac{A}{B} \times 1\,000 \tag{A.21}$$

where

$\quad A \quad$ is the number of employees in FTE;

B is the number of persons in the population to be served.

Round off to the nearest integer.

A.1.4.1.6 Interpretation and factors affecting the indicator

The indicator is an integer with no top limit.

A high score is usually considered as good. This indicator should only be considered in combination with indicators measuring the quality of services and the efficiency of processes.

A.1.4.1.7 Source(s)

See the following references:

— Reference [14] (PI 1.2);

— Reference [36] pp.82 - 87.

A.2 Use

A.2.1 Collection

A.2.1.1 Collection turnover

A.2.1.1.1 Background

High usage has always been seen as indicator for the quality of all library collections that are intended to fulfil current user needs. This is especially relevant for the recently acquired parts of collections. The use rate can help to adapt the collection policy to user needs and to decide on weeding selections.

Usage data are less relevant for libraries with archival functions, e.g. because of special collecting programs or legal deposit.

A.2.1.1.2 Objective

To assess the overall rate of use of a loan collection.

The indicator can also be used to assess the fit of the collection to the requirements of the population to be served.

A.2.1.1.3 Scope

This performance indicator is applicable to all libraries with a loan collection.

Can be used with specified collections, subject areas, branches, or new acquisitions. For each specified area within the library, the resulting indicators can be compared to see if the turnover differs significantly.

Can be used for comparing libraries with the same mission, if the same time period is used.

A.2.1.1.4 Definition of the indicator

The total number of loans in the specified collection during a specified period of time, normally one year, divided by the total number of documents in the collection.

A loan is a direct lending or delivery transaction of an item in non-electronic form (e.g. book), or of a digital document on a physical carrier (e.g. CD-ROM) or other device (e.g. eBook reader), or transmission of a digital document to one user for a limited time period (e.g. eBook).

NOTE 1   Renewals are excluded, but can be counted separately.

NOTE 2   Loans include registered loans within the library (on-site loans).

NOTE 3   Loans include copied documents supplied in place of original documents (including fax) and printouts of digital documents made by library staff for the user.

NOTE 4   Loans of documents in physical form to distance users are included.

NOTE 5   Mediated electronic transmission of documents is not counted as loan, but as electronic document delivery if their use is permitted for unlimited time. This includes transmissions to members of the population to be served.

A.2.1.1.5   Method

Count the number of loans registered in the specified period for the collection specified. Count the total number of documents in the collection.

The collection turnover is calculated as shown in Formula (A.22):

$$\frac{A}{B} \tag{A.22}$$

where

A   is the number of registered loans in the specified collection;

B   is the total number of documents in the specified collection.

Round off to one decimal place.

If the total number of documents is not available, an estimate can be substituted. Such estimates are the length of the shelf list, or the length of occupied shelves in the loan collection, multiplied by the estimated mean number of documents per unit length.

If a large number of reference copies are intermixed with copies for loan in the collection, the reference copies should not be included in the calculations.

A.2.1.1.6   Interpretation and factors affecting the indicator

The indicator is a real number with no top limit. The normal range will depend upon the type of library. The indicator estimates the mean number of times the documents in the collection have been on loan during one year, but the library can measure the turnover during another period of time. The higher the number, the more intensive is the rate of use.

The collection turnover is influenced by several factors:

— the composition of the collection in relation to the demands of the users; a collection with a large proportion of out-of-date or inappropriate material will result in a lower turnover;

— the policy of the library in weeding out obsolete titles and extra copies no longer needed;

— the number of copies of titles in much demand;

— the proportion of in-library use to loans; high in-library use can result in lower turnover rates;

— the standard loan period of the library and any special loan periods for titles in demand, and the number of documents authorized for borrowing simultaneously;

— the promotional activities of the library and the skills of the staff in the area of promotion.

Where data on individual documents is available from the library's circulation system, further details can be provided by calculating

— the percentage of stock not used within a specified period and

— the percentage of stock used at least once within a specified period.

A.2.1.1.7 Source(s)

See the following references:

— Reference [25] pp. 38 - 40;

— Reference [29] p. 31 ("Circulation Rate");

— Reference [36] pp. 128 - 131 ("Collection Use");

— Reference [41] p. 47 ("Turnover Rate", includes documents in reference collection);

— Reference [42] pp. 54 - 55 ("Circulation per Volume Held", given as a variation of "Circulation". On p. 60, also "Total Materials Use by Volume Held", given as a variation on "Total Materials Use" and including in-library use).

A.2.1.2 Usage of print publications acquired during the previous three years

A.2.1.2.1 Background

The continuous decrease of the print materials demand is a common phenomenon in libraries all over the world due to the increasing acquisition and use of digital resources.

To know to which extent the recently acquired print publications are demanded and used allows libraries a better allocation of their economic resources and a more effective design of their acquisition policy.

A.2.1.2.2 Objective

This performance indicator assesses the extent of the demand for new documents in the print publications collection.

The indicator can also be used to assess the fit of the print material collection to the requirements of the library's users and to check to what extent is worth spending part of the acquisitions budget in this type of publications.

A.2.1.2.3 Scope

This performance indicator is applicable to all libraries that acquire print publications.

The indicator can be used for comparing libraries with the same mission and similar collection areas.

A.2.1.2.4 Definition of the performance indicator

This performance indicator is the total number of loans + interlibrary loans registered during a year from the print publications acquired during the previous three years before the reporting year, divided by the total number of print publications acquired during the last three years before the reporting year.

NOTE 1   Digital resources are excluded.

NOTE 2   Onsite loans are included.

A.2.1.2.5   Methods

A.2.1.2.5.1   Count the number of loans + interlibrary loans registered during a year from the print publications acquired during the last three years before the reporting year. Establish the total number of print publications acquired during the last 3 years before the reporting year.

The usage of print publications acquired during the previous three years is calculated as shown in Formula (A.23):

$$\frac{A}{B} \times 100 \tag{A.23}$$

where

    A is the total number of loans + interlibrary loans registered during a year for print documents acquired during the last 3 years before the reporting year;

    B is the total number of print documents acquired during the last 3 years before the reporting year.

Round off to one decimal place.

A.2.1.2.5.2   Take a sample of print documents acquired during the last three years before the reporting year. Establish the number of loans + interlibrary loans from those documents during a year.

The usage of print publications acquired during the previous three years is calculated as shown in Formula (A.24):

$$\frac{A}{B} \times 100 \tag{A.24}$$

where

    A is the total number of loans + interlibrary loans registered during a year for the documents in the sample;

    B is the total number of documents in the sample.

Round off to one decimal place.

A.2.1.2.6   Interpretation and use of results

A high score is considered as good. It shows the effectiveness of the library's collection policy for print publications.

If the usage of print publications is low, the following actions might be taken:

— promoting the print publications collection;

— evaluating user requests;

— assessing user needs by surveys of individual users or other libraries.

A.2.1.2.7   Source

See ISO 21248:2019, A.1.1.3.

A.2.1.3   Loans per capita

A.2.1.3.1   Background

Lending from physical library collections is one of the most used library services. Borrowing books and other materials for reading and studying at home or inside the library ranks high in users' priorities.

The number of loans per member of the library's population to be served can indicate the importance of a library for its users and the effectiveness of its collection policy.

A.2.1.3.2   Objective

To assess the rate of use of library collections by the population to be served. It can also be used to assess the quality of the collections and the library's ability to promote the use of the collections.

A.2.1.3.3   Scope

This performance indicator is applicable to all libraries with a loan collection.

The indicator can be used with specified collections, subject areas, or branches. For each specified area within the library, the results can be compared.

The indicator can be used for comparing libraries if differences in the mission of the library, socio-economic factors, and lending periods are taken into account.

A.2.1.3.4   Definition of the indicator

The total number of loans in a year divided by the population to be served.

A loan is a direct lending or delivery transaction of an item in non-electronic form (e.g. book), or of a digital document on a physical carrier (e.g. CD-ROM) or other device (e.g. eBook reader), or transmission of a digital document to one user for a limited time period (e.g. eBook).

NOTE 1   Renewals are excluded.

NOTE 2   Interlibrary loans are excluded.

NOTE 2   Loans include registered loans within the library (on-site loans).

NOTE 3   Loans include copied documents supplied in place of original documents (including fax) and printouts of digital documents made by library staff for the user.

NOTE 4   Loans of documents in physical form to distance users are included.

NOTE 5   Mediated electronic transmission of documents is excluded, if their use is permitted for unlimited time.

A.2.1.3.5   Method

Count the number of loans by the population to be served during a year. Count or estimate the number of persons in the population to be served.

The loans per capita is shown in Formula (A.25):

$$\frac{A}{B} \tag{A.25}$$

where

    A is the total number of loans by the population to be served in a year;

B   is the number of persons in the population to be served.

Round off to nearest integer, or to one decimal place if less than 10.

It is important that the inclusions and exclusions are described when the indicator is used for comparing libraries.

A.2.1.3.6   Interpretation and factors affecting the indicator

The indicator is a real number with no top limit.

A change in loan periods or in the number of books authorized for borrowing simultaneously can affect the indicator substantially. Further details can be provided by analysing the indicator by subject or by different categories of borrowers. The indicator can also be used to show areas where demand is low or unsatisfied and to point to areas where use can be increased.

The indicator is sensitive to a number of uncontrollable variables and relates only to lending. In particular, it can be affected by the studying conditions in the library, levels of literacy, levels of poverty, and other socio-economic variables.

There is a strong relation between the indicator and the ability of the library staff to promote the collection.

A.2.1.3.7   Source(s)

See Reference [41], pp. 42 - 44 ("Circulation per capita").

A.2.1.4   Percentage of stock not used

A.2.1.4.1   Background

Use statistics are usually the main method for evaluating a library's collection policy, as well for physical as for digital collections. The data can support weeding decisions as well as changes in selection policies and resource allocation to subjects.

Libraries without archival functions or specific collecting tasks can decide to remove some of the stock not used. For the digital collection the analysis of use is essential for deciding on continuing subscriptions.

A.2.1.4.2   Objective

To assess the amount of physical and digital collections not used during a specified period. The indicator can also be used to assess the fit of the collection to the requirements of the population to be served.

A.2.1.4.3   Scope

This performance indicator is applicable to all libraries.

The indicator can be used for specified collections, subject areas, branches, or time periods. The indicator should be calculated separately for the physical and digital collections of the library.

Within each of these categories, the resulting indicators can be compared to see whether the percentage of items not used differs significantly.

A.2.1.4.4   Definition of the indicator

The percentage of documents in the library collection not used during a specified period (rounded off to the nearest integer).

Used means, for the purpose of this indicator, that a physical item has been recorded as having been on loan, or has otherwise been registered as having been used or that an item in the digital collection has been viewed or downloaded during the specified time period. In-house use of physical items is included only when a library records it on a continuous basis.

NOTE   Interlibrary loan is excluded.

The period used for measurement is fixed by the user of the indicator. This should be done in a way that reflects the mission and policies of the library. In general, a period of one year is the minimum appropriate.

A.2.1.4.5   Methods

A.2.1.4.5.1   Physical collections

a)   Draw a random sample of items owned by the library. For each item in the sample, record whether that item has been borrowed during the specified time period, or otherwise registered as having been used in the library.

The percentage of stock not used is calculated as shown in Formula (A.26):

$$\frac{C - A - B}{C} \times 100 \tag{A.26}$$

where

    A is the number of items in the sample which have been borrowed;

    B is the number of items in the sample which have been registered as used in the library and not borrowed;

    C is the total number of items in the sample.

Round off to the nearest integer.

b)   Using the records from an automated circulation system, count the number of items which have been on loan during the specified time period.

The percentage of stock not used is calculated using Formula (A.27):

$$\frac{B - A}{B} \times 100 \tag{A.27}$$

where

    A is the number of items which have been on loan;

    B is the total number of items in the loan stock.

Round off to the nearest integer.

This second method overestimates the true rate, since it does not include data on items which have been used in the library, but not borrowed.

A.2.1.4.5.2   Digital collections

Based on usage data, supplied by vendors or derived from the library's own systems, count the number of documents which are recorded as having been viewed or downloaded during the specified time period. Count the number of distinct titles, not the number of instances of use.

The percentage of stock not used is shown in Formula (A.28):

$$\frac{B - A}{B} \times 100 \tag{A.28}$$

where

    A is the number of documents which have been viewed or downloaded;

    B is the total number of items in the digital collection.

Round off to the nearest integer.

This might overestimate the true rate, if there are documents in the collection for which no usage data are available. If possible, such documents should be excluded from the calculation of B, to provide a more accurate figure.

A.2.1.4.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100. It estimates the probability that a randomly selected document owned by the library has not been used during the specified time period. A high score means a low rate of use.

The indicator is affected by several factors, including:

— the mission of the library, for example whether the library has an archival mission or not;

— the promotional activities of the library;

— the acquisition and weeding policies and practices in the library.

A.2.1.4.7 Source(s)

See Reference [36], pp. 132 - 136.

A.2.1.5 Number of downloads per document digitized

A.2.1.5.1 Background

Many libraries hold valuable documentary heritage collections. A crucial objective today is to make these collections available through digitization projects. Digitization can have different aims: to conserve the original analogue material by offering a digital surrogate for use or to make the material available for public use.

The use data of digitized documents are important for the evaluation of a library's digitization policy. If digitized titles are properly selected, they will meet user needs and expectations.

A.2.1.5.2 Objective

To assess whether the library has digitized documents that are relevant for users.

A.2.1.5.3 Scope

The performance indicator is applicable to all libraries whose tasks include preserving and promoting the documentary heritage.

Comparing the results between libraries will be difficult, as the contents and therewith the attractiveness of digitized collections can differ considerably, but comparison over time will be important for each library.

A.2.1.5.4 Definition of the indicator

The number of downloads per document digitized out of the library's collection during a specified period.

For the purpose of this indicator, only those digitized documents that are available for public access are included.

A.2.1.5.5 Method

Establish the number of documents digitized out of the library's collection and that are available for public access. Count the number of downloads from these documents during a specified time period, normally a year.

The number of downloads per document digitized is calculated using Formula (A.29):

$$\frac{A}{B} \tag{A.29}$$

where

  A is the number of downloads from documents digitized out of the library's collection during a specified time period;

  B is the total number of documents digitized out of the library's collection.

Round off to the nearest integer.

The indicator can be differentiated by types of materials, e. g. manuscripts, doctoral dissertations, or children's books.

A.2.1.5.6 Interpretation and factors affecting the indicator

The indicator is a positive integer with no top limit.

A high number of downloads will be regarded as good. It shows that the library has digitized documents that are relevant for its population, for researchers, or the general public. If, however, downloading focuses on a limited number of documents in the digitized collection, the results can be misleading.

The indicator can be affected by several factors, some outside the control of the library, such as:

— the level of network access;

— whether or not fees are charged for access or downloading;

— the promotion of the services.

The number of downloads will also be affected by the quality and efficiency of users' search strategies.

A.2.1.5.7 Source(s)

See ISO/TR 28118:2009, A.5.3

A.2.2   Access

A.2.2.1   Library visits per capita

A.2.2.1.1   Background

Users usually visit libraries in order to use their collections and services. Today libraries offer a growing amount of online collections and services, accessible via virtual visits. In some libraries physical visits have decreased, due to a high number of the library's services and resources being available for remote use. In other cases, physical visits have remained stable or have even increased. This may be due to a growing tendency for group work in libraries, to the trend of users working with their own material in libraries, and to the advantage of using both print and digital resources together with help and training services.

The number of physical and virtual visits together can show whether the library has remained attractive as place and institution.

A.2.2.1.2   Objective

To assess the library's success in attracting users of its services.

A.2.2.1.3   Scope

This performance indicator is applicable to all libraries with a defined population to be served.

Comparing libraries can be possible if differences in the mission of the library and socio-economic factors in the population are taken into account.

A.2.2.1.4   Definition of the indicator

The total number of visits to the library, either physical or virtual, during a full year divided by the total number of persons in the population to be served.

For the purpose of this indicator, a visit is the act of entering the library premises or accessing the library's website in order to use one of the services provided by the library.

A.2.2.1.5   Method

a)   Use a turnstile or similar device to automatically count the number of people leaving or entering the library. Count either entries or exits, not both.

Count the number of visits to the library's website.

The library visits per capita is calculated as shown in Formula (A.30):

$$\frac{A}{B} \tag{A.30}$$

where

   A is the estimated total number of physical plus virtual library visits in a full year;

   B is the number of persons in the population to be served.

Round off to the nearest integer, or to one decimal place if less than 10.

b)   Count the number of persons entering or leaving the library during one or more sampling periods. Only count one entry or exit, not both. Calculate the website visits for the same sampling period. The number and length of the periods are selected by the user of the indicator. Estimate the total

number of visits for one year by extrapolation, using available information about variations during the year.

The library visits per capita is shown in Formula (A.31):

$$\frac{A}{B} \tag{A.31}$$

where

  A is the total number of physical plus virtual library visits in a full year;

  B is the number of persons in the population to be served.

Round off to the nearest integer, or to one decimal place if less than 10.

NOTE For the calculation of website visits, see ISO 2789:2022, 7.2.13.

The indicator can also be used separately for physical and virtual visits.

A.2.2.1.6 Interpretation and factors affecting the indicator

The indicator is an integer with no top limit. A high score is normally considered good.

If a turnstile is used, the count can be too high because staff and other nonusers are included, or because users have to exit and re-enter for a variety of reasons.

The capturing of website visits can depend on factors, such as the method of calculation and software used.

Where there is a substantial amount of seasonal variation, the count should be made for shorter periods of time during which use is more regular.

A.2.2.1.7 Source(s)

See the following references:

— Reference [13] pp. 29, 34 - 35;

— Reference [14] (PI 2.1);

— Reference [36] pp. 112 - 119.

A.2.2.2 Percentage of visits to the online catalogue via mobile devices

A.2.2.2.1 Background

With the rise in smartphone use, library users expect to connect to library services wherever they are. Therefore, libraries create library applications or websites for mobile phones and other mobile devices, such as tablets.

For several years now, libraries have been offering services for mobile devices, especially mobile online catalogues. This is done either by a special catalogue application or by an interface of the online catalogue for mobile visit.

The indicator shows the library's success in reaching users in new ways.

A.2.2.2.2 Scope

The indicator is applicable to all libraries that offer services for mobile devices.

Comparison between libraries is possible if a similar type of application or mobile interface is used for the online catalogue.

A.2.2.2.3   Definition of the performance indicator

The percentage of visits to the online catalogue via mobile devices.

A mobile device is defined as a portable computing device, designed to be held and used in the hands, typically having a display screen with touch, pen and/or keyboard input and Internet connection.

EXAMPLES   Mobile phones, eBook readers, or tablets.

In the sense of this indicator, a visit is a successful request of a library-provided online service.

NOTE   A visit is one cycle of user activities that typically starts when a user connects to a library-provided online service and ends by a terminating activity that is either explicit (by leaving the database through log-out or exit) or implicit (timeout due to user inactivity).

A.2.2.2.4   Method

Count the number of visits to the online catalogue via mobile devices as a subset of all accesses to the online catalogue during a specified period.

If the service has been designed independently of a special platform, weblog statistics can be used.

If it is a specialized application, usage numbers should be able to be captured by means of that application.

NOTE 1   If the online catalogue is used inside the library, several users might make use of the same workstation one after another, and accesses could not be separated. In most systems, an access is cut off after a specified time of non-use thus avoiding part of the problem.

NOTE 2   Browser or proxy caching is likely to reduce the number of requests registered in log files.

The percentage of visits to the online catalogue via mobile devices is calculated using Formula (A.32):

$$\frac{A}{B} \tag{A.32}$$

where

A   is the number of visits to the online catalogue via mobile devices,

B   is the total number of visits to the online catalogue.

Round off to the nearest integer.

A.2.2.2.5   Interpretation and use of results

The performance indicator is an integer between 0 and 100. A high score indicates that the mobile device catalogue is relevant for the library's users.

The indicator may be affected by several factors, some outside the control of the library, such as:

— the level of network access;

— the quality of the interface;

— the distribution of mobile phones in a country;

— the promotion of the service by the library.

A.2.2.2.6 Source

See ISO 21248:2019, A.2.2.3

A.2.2.3 Percentage of external users

A.2.2.3.1 Background

Many libraries permit "external" or "unaffiliated" users to use their collections and services. For a university library, this could be the inhabitants of the community or students of other universities. For public libraries, this can be persons from outside their legal community.

External users can come up to a high percentage of a library's users and can create considerable workload for library staff and therewith costs. Serving the needs of the general public is not often accounted for in the budgets. Therefore, external users will not always be welcome, as the services delivered to them may interfere with the main tasks of the library. However, a high number of external users can prove the attractiveness of the library's services and the importance of the library in the local environment.

A.2.2.3.2 Objective

To assess the percentage of library users who do not belong to the library's population to be served and thus, the library's importance for learning and culture in the region and its impact and attraction outside its service area.

A.2.2.3.3 Scope

This performance indicator is applicable to all libraries serving external users.

A.2.2.3.4 Definition of the indicator

The percentage of external library users out of all library users.

In the sense of this indicator, an external user is defined as an external active borrower, a registered external user who has borrowed at least one item during the reporting period.

For institutions of higher education, this normally includes users who are not members of the academic and professional staff or students. For public libraries, this will normally be the population outside the legal service area (authority).

A.2.2.3.5 Method

Determine the number of external active borrowers and the total number of active borrowers at a specified point of time, usually at the end of the year.

The percentage of external users is calculated as shown in Formula (A.33):

$$\frac{A}{B} \times 100 \tag{A.33}$$

where

    A   is the number of external active borrowers;

    B   is the total number of active borrowers.

Round off to the nearest integer.

A.2.2.3.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A higher score indicates the library's importance and attractiveness beyond its population to be served, and can reflect the relevance of the library's services to a broader population. Whether this is considered as good depends on the library's mission and goals.

The indicator could provide information on the weakness of library service in some areas and potential or required developments in other areas.

The indicator can also be used to estimate the library's workload in the area of external users.

A.2.2.3.7 Source(s)

See of Reference [18], page 2 and Table 2.

A.2.2.4 Percentage of the total library lending to external users

A.2.2.4.1 Background

Many libraries extend the use of their collections and services to users outside their primary clientele, called "external" or "unaffiliated" users. In many cases, the libraries offer only a certain range of services to external users. Onsite use of materials and borrowing rights are in most cases included, but can be restricted to the general collection.

The percentage of the total library lending to external users can show the attractiveness and the quality of library collections.

A.2.2.4.2 Objective

To assess the extent to which library loan services are used by external users and therewith to indicate the attractiveness of the library's collection to users outside the population to be served.

A.2.2.4.3 Scope

This performance indicator is applicable to all libraries that provide loan services to users outside the population to be served.

A.2.2.4.4 Definition of the indicator

The percentage of the library's total loans to non-members of the population to be served.

For institutions of higher education, this normally includes users who are not members of the academic and professional staff or students. For public libraries, this will normally be the population outside the legal service area (authority).

A loan is a direct lending or delivery transaction of an item in non-electronic form (e.g. book), or of a digital document on a physical carrier (e.g. CD-ROM) or other device (e.g. eBook reader), or transmission of a digital document to one user for a limited time period (e.g. eBook).

NOTE 1   Renewals are excluded.

NOTE 2   Interlibrary loans are excluded.

NOTE 2   Loans include registered loans within the library (on-site loans).

NOTE 3   Loans include copied documents supplied in place of original documents (including fax) and printouts of digital documents made by library staff for the user.

NOTE 4   Loans of documents in physical form to distance users are included.

NOTE 5   Mediated electronic transmission of documents is excluded, if their use is permitted for unlimited time.

A.2.2.4.5   Method

Count the number of loans to external users and the number of the library's total loans. The library system should be able to count separately the numbers of loans to external users and loans to users in the population to be served.

The percentage of the total library lending to external users is calculated using Formula (A.34):

$$\frac{A}{B} \times 100 \tag{A.34}$$

where

   A is the number of loans to external users;

   B is the total number of loans.

Round off to the nearest integer.

A.2.2.4.6   Interpretation and factors affecting the indicator

The indicator is an integer in the range of 0 to 100. A high rate indicates that the library offers a high amount of services to users outside the population to be served. Whether this is considered as good will depend on the library's mission and goals.

The indicator will be affected by the extent to which the library's policy allows offering services to external users.

A.2.2.4.7   Source(s)

Not available.

A.2.2.5   User attendances at library events per capita

A.2.2.5.1   Background

Libraries offer various kinds of events to their users and the general public. Such events can have a cultural or literary intent, e.g. promoting the cultural heritage by exhibitions, author visits and literary discussions, or an educational intent. In most cases, such events are offered free of charge.

Organization of library events involves considerable effort and input of resources, especially staff resources. It is therefore useful if libraries can show what interest the events raise.

A.2.2.5.2   Objective

To estimate the attraction of library events for the library's population to be served.

A.2.2.5.3   Scope

This performance indicator is predominantly applicable to public libraries, but can also apply to other libraries that offer various events for their population to be served.

A.2.2.5.4 Definition of the indicator

The total number of attendances at the library's events during a full year per 1 000 members of the population. Events, in the sense of this indicator, include activities with literary, cultural, or educational intent, e.g. author visits, reading groups, literary discussions, workshops, etc.

There can be different events for children, youths, and adults.

Only events arranged by the library are included.

Exhibitions are excluded.

Include events attended online (i.e. via webcast, webinar, or other technologies).

A.2.2.5.5 Method

Count the number of attendances at each library event and sum up for the year.

When the same person attends more than one event, he/she should be counted every time.

Determine the number of persons in the population to be served.

The user attendances at library events per capita is shown in Formula (A.35):

$$\frac{A}{B} \times 1\,000 \tag{A.35}$$

where

A is the number of attendances at the library events;

B is the number of persons in the population to be served.

Round off to the nearest integer.

NOTE 1   The indicator can be used separately for adults, youths, or children, or for particular target populations (e. g. senior level students, immigrants, people with reading disabilities), if the number of persons belonging to each group in the population to be served is known.

NOTE 2   The indicator can also be used separately for events dealing with specific subject areas such as health, communication skills, or sustainable development.

A.2.2.5.6 Interpretation and factors affecting the indicator

The indicator is an integer with no top limit.

A high score indicates that the events that the library arranged were suited to the population to be served.

Attendants, not belonging to the population to be served, might be included in the counts.

A.2.2.5.7 Source(s)

See the following references:

— Reference [20] (PI 8);

— Reference [36] pp. 154 - 157.

A.2.2.6 Number of user attendances at training lessons per capita

A.2.2.6.1 Background

Most libraries have always offered training in the use of their services, either as guided library tours or as general introductory lessons about the library services or a specified service. Information resources and ways of information retrieval have changed. The difficulty today is how to find and select relevant information. Public and academic libraries organize various training courses in information literacy, techniques for information retrieval and assessment of information resources. Academic libraries organize and training courses in scientific writing, open access, archiving, etc.

Developing and offering training courses involves considerable effort and input of resources. Libraries should be able to show at least basic data about input and output of their training activities. The indicator shows the interest of users in library training.

A.2.2.6.2 Objective

To assess the success of the library in reaching its users through the provision of training lessons.

A.2.2.6.3 Scope

This performance indicator is applicable to all libraries with a defined population to be served.

A.2.2.6.4 Definition of the indicator

The number of user attendances at training lessons during a specified time period per 1 000 members of the population to be served.

User training is defined as a training programme established by the library with a specified lesson plan, which aims at specific learning outcomes for the use of library and other information services. User training can be offered as tour of the library, as library teaching lessons, or as a web-based service for users.

A.2.2.6.5 Method

Count the number of persons that attend library instruction (and, if applicable, tours of the library) during a specified time period (usually one year). These numbers should be cumulated at the end of the period. Count the number of sessions on the library's (interactive) online training modules during the same period. These numbers should also be cumulated at the end of the period. The sum of these numbers is used for the indicator.

The number of user attendances at training lessons per capita is calculated as shown in Formula (A.36):

$$\frac{A}{B} \times 1\,000 \tag{A.36}$$

where

- A is the number of attendances at library instructional sessions (and, if applicable, tours). This should include the number of sessions on the library's online training modules;

- B is the number of persons in the population to be served.

Round off to the nearest integer.

NOTE 1 The indicator can be used separately for training lessons for adults, youths, or children, or for particular target populations (e. g. senior level students, immigrants, people with reading disabilities), if the number of persons belonging to each group in the population to be served is known.

NOTE 2   The indicator can also be used separately for training on specific subject areas such as health, communication skills, or sustainable development.

A.2.2.6.6   Interpretation and factors affecting the indicator

The indicator is a real number with no top limit. A higher number shows efficiency in reaching users by training lessons.

The indicator is affected by the amount of training provided by the library. The indicator does not allow evaluation of the quality of the training programme, nor assessment of the optimal expenditure on training activities.

A.2.2.6.7   Source(s)

See the following references:

— Reference [14] (PI 2.3);

— Reference [36] pp. 145 - 149.

A.2.2.7   Percentage of users attending functional literacy and numeracy training lessons that reach a fixed level of proficiency

A.2.2.7.1   Background

Literacy and numeracy skills are essential for personal wellbeing, social inclusion and economic success. The relevance of these skills is reflected, for instance, in the Sustainable Development Goals (SDGs) 2030 Agenda, namely in SGD 4 target 4.6 which states that "By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy." These learning outcomes are measured through one global indicator: "4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex". The target age group for this indicator is the population of 15 years and older.

Libraries, especially public libraries, are increasingly engaged in supporting youth and adults' functional literacy and numeracy and need to prove the success of their effort. This indicator can provide evidence of libraries' contribution to SDGs targets and specifically to the achievement of target 4.6.

A.2.2.7.2   Objective

To assess to what extent the library has succeeded in its functional literacy and numeracy training.

A.2.2.7.3   Scope

The performance indicator is applicable to all libraries that offer functional literacy and numeracy training.

Comparison between libraries requires

— that the levels of proficiency are defined in the same way,

— that similar tests are used,

— that the libraries' resources and the socio-economic factors in the population are considered.

A.2.2.7.4   Definition of the indicator

The percentage of users attending functional literacy and numeracy training lessons that reach a fixed level of proficiency.

Functional literacy is defined as the ability to understand, evaluate, use and engage with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential.

Functional numeracy is defined as the ability to access, use, interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life.

Fixed level of proficiency (FLP) is the minimum benchmark of basic knowledge in a domain (literacy or numeracy) measured through learning assessments.

User training is defined as training programme set up with a specified lesson plan, which aims at specific learning outcomes. The training can be offered as face-to-face tuition or as online training.

A.2.2.7.5 Method

For each training in functional literacy and numeracy, the library shall define the level of proficiency that is intended to be reached. It is recommended to use established levels, such as the PIAAC - Programme for the International Assessment of Adult Competencies levels.

The attendants should be tested at the end of the training course, separately as to functional literacy and numeracy.

The percentage of users attending functional literacy and numeracy training lessons that reach a fixed level of proficiency is calculated using Formula (A.37):

$$\frac{A}{B} \times 100 \tag{A.37}$$

where

A   is the number of attendants reaching the fixed level of proficiency;

B   is the total number of attendants.

Round off to the nearest integer.

The indicator may be differentiated as to age groups and sex of attendants.

A.2.2.7.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is seen as good. It shows that the attendants of library training lessons have gained measurable competencies in functional literacy and/or numeracy.

A.2.2.7.7 Source(s)

See Reference [38].

A.2.2.8 Percentage of users attending ICT training lessons that developed targeted skills

A.2.2.8.1 Background

Information and communication technology (ICT) have radically reshaped people's lives. But having physical access to ICT does not necessarily mean that a person can fully benefit from these tools. The lack of skills is a key barrier preventing individuals from realising the potential of ICT for personal and community development.

The relevance of ICT skills for sustainable development is echoed on the UN's 2030 Agenda goals and targets, namely Goal 4, target 4.4. "By 2030, substantially increase the number of youth and adults

who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship". Progress towards this target is measured through the global indicator: "4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill". This indicator is collected by the International Telecommunication Union [(ITU) the United Nations specialized agency for ICT] through national household surveys. The target group for this indicator is the population aged 16 to 74 years.

Libraries, especially public libraries, are increasingly engaged in supporting youth and adults' ICT skills development and need to prove the success of their effort. By using an indicator that measures users' proficiency at performing ICT related activities, libraries can gather evidence of their contribution to SDGs' target 4.4.1.

A.2.2.8.2   Objective

To assess to what extent the library has succeeded in its ICT training.

A.2.2.8.3   Scope

The performance indicator is applicable to all libraries that offer ICT training.

Comparison between libraries requires:

— that users' ICT proficiency is measured though the accomplishment of similar ICT activities;

— that similar tests are used;

— that the libraries' resources and the socio-economic factors in the population are considered.

A.2.2.8.4   Definition of the indicator

The percentage of users attending ICT training lessons that developed targeted skills

ICT skills are skills that allow an effective use of ICT, independently of the device used, measured through the accomplishment of ICT related activities.

ICT proficiency is the ability to perform an ICT related activity, which constitutes a learning target that can be assessed in the context of a training lesson. An attendant of an ICT training lesson that proves to be able to accomplish a task set as learning target is a user that developed the intended ICT skills.

User training is defined as training programme set up with a specified lesson plan, which aims at specific learning outcomes. The training can be offered as face-to-face tuition or as online training.

A.2.2.8.5   Method

For each training in ICT, the library shall define the ICT skill that is intended to be reached. The targeted ICT skill is expressed through a specific ICT activity. It is recommended to use established types of ICT activities, such as the ones set by ITU for measuring ICT access and use by households and individuals and simultaneously monitor SGDs' target 4.4.1 (UNESCO. Institute for Statistics, 2021):

Table A.1 — ICT skill levels and activities

ICT Skills level	ICT Activities
Basic	Using copy and paste tools to duplicate or move data, information and content in digital environments (e.g. within a document, between devices, on the cloud)
	Sending messages (e.g. e-mail, messaging service, SMS) with attached files (e.g. document, picture, video)
	Transferring files or applications between devices (including via cloud-storage)

Table A.1 *(continued)*

ICT Skills level	ICT Activities
Standard	Using basic arithmetic formulae in a spreadsheet
	Connecting and installing new devices (e.g. a modem, camera, printer) through wired or wireless technologies
	Finding, downloading, installing and configuring software and apps
	Creating electronic presentations with presentation software (including text, images, sound, video or charts)
Advanced	Setting up effective security measures (e.g. strong passwords, log-in attempt notification) to protect devices and online accounts
	Changing privacy settings on your device, account or app to limit the sharing of personal data and information (e.g. name, contact information, photos)
	Verifying the reliability of information found online
	Programming or coding in digital environments (e.g. computer software, app development)

The attendants should be tested at the end of the training course, to assess their proficiency to perform the ICT activity.

The percentage of users attending ICT training lessons that developed targeted skills is calculated as shown in Formula (A.38):

$$\frac{A}{B} \times 100 \qquad (A.38)$$

where

A is the number of attendants that developed targeted skills;

B is the total number of attendants.

Round off to the nearest integer.

The indicator may be differentiated as to age groups and sex of attendants.

A.2.2.8.6   Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is seen as good. It shows that the attendants of library courses have gained measurable skills in ICT.

A.2.2.8.7   Source

See Reference [39].

A.2.3   Facilities

A.2.3.1   User places occupancy rate

A.2.3.1.1   Background

Most libraries have reading rooms or other working spaces to provide for on-site use of their services. As facilities in such spaces have limited capacity, it is important to determine whether a library is providing a sufficient number of seats for visitors.

In general, measuring the user places occupancy rate means measuring the probability that a user will find a free seat and therewith the priority that the library gives to its role as a place for reading and studying.

A.2.3.1.2   Objective

To assess the overall use rate of user places provided for reading and working in the library, by estimating the proportion of the places in use at any given time.

A.2.3.1.3   Scope

This performance indicator is applicable to all libraries with reading and working facilities.

Measurement can be conducted at specified times of the day, the week, or the year, e.g. peak times or off-peak times. This should be stated explicitly when using the indicator.

A.2.3.1.4   Definition of the indicator

The percentage of user places in use at the time of investigation. User places reserved exclusively for the use of staff are not included.

User places in carrels, in seminar and study rooms and the audiovisual and children's departments of the library, and informal seating in lounges, and group areas are included.

Exclude places in halls and lecture and auditory theatres intended for audiences of special events. Also exclude floor space and cushions on which users can sit.

A.2.3.1.5   Method

Make a survey of user places provided for reading and working, whether with or without equipment at the time specified.

Count the number of user places in use.

The user places occupancy rate is calculated using Formula (A.39):

$$\frac{A}{B} \times 100 \tag{A.39}$$

where

    A is the number of user places in use;

    B is the total number of user places provided.

Round off to the nearest integer.

User places which show evidence of being used, such as coats, bags, notebooks, etc. deposited at the places, are counted as being in use, even if the user is absent. Due to the inherent variability of the indicator, a more accurate indicator can be attained by measuring the user places occupancy rate at random intervals over a period of time and then calculating the mean occupancy rate (using the cumulated sum of the user places in use, divided by the cumulated sum of the user places provided, times 100).

A.2.3.1.6   Interpretation and factors affecting the indicator

The indicator is an integer in the range 0 to 100. It estimates the probability that a randomly selected place is in use at any time, or at the times specified.

A.2.3.1.7 Source(s)

See Reference [41] pp.82 - 88 (a special case of "Facilities Use Rate").

A.2.4 General

A.2.4.1 Percentage of the target population reached

A.2.4.1.1 Background

Most libraries have a specific population to be served, for whom the library is set up to provide its services and materials. Beside that main population, libraries often have various target populations, groups of actual and potential users as the object of a specific service or as the primary users of specific materials.

The penetration rate indicates whether the library aligns with needs and expectations of its population to be served and/or of a specific target population. It points to the library's impact as it assesses whether the library has been successful in attracting its potential users.

A.2.4.1.2 Objective

To assess the success of the library in reaching a target population.

NOTE   The target population can be the population to be served by the library, a specific group within that population (for example, with needs that require special library services), or some other group that the library is aiming to serve.

A.2.4.1.3 Scope

This performance indicator is applicable to all libraries.

The indicator can be used for comparing libraries aiming to serve similar target populations, provided that the same method is used for calculating the indicator.

A.2.4.1.4 Definition of the indicator

The percentage of the target population using library services.

A user can, for the purpose of this indicator, be an individual or a corporate body (an organization, institution, or company).

A.2.4.1.5 Method

a) Draw a random sample from the target population. Ask each person in the sample whether they have visited the library, or used the services of the library in other ways, during the last year.

The percentage of the target population reached is calculated as shown in Formula (A.40):

$$\frac{A}{B} \times 100 \tag{A.40}$$

where

   A is the number of persons answering "Yes";

   B is the total number of persons answering.

Round off to the nearest integer.

b) Using the records of the computerized issue system, count the number of users (belonging to the target population) who borrowed documents within the last year.

Estimate the number of persons in the target population.

The percentage of the target population reached is calculated using Formula (A.41):

$$\frac{A}{B} \times 100 \tag{A.41}$$

where

A   is the number of active borrowers belonging to the target population;

B   is the total number of persons in the target population.

Round off to the nearest integer.

Since not all uses by an individual are taken into account, this method can result in a score that is lower than the true percentage.

A.2.4.1.6   Interpretation and factors affecting the indicator

The indicator is an integer in the range of 0 to 100. A higher score is normally considered better than a lower score, but a relatively low score can be considered satisfactory from the point of view of a specific library, e.g. with a specific type of target population.

The proportion of the target population using the library can be affected by several factors, many outside the influence of the library. Examples are demographic composition of the target population, level of urbanization, level of education, characteristics of institutions served (e.g. teaching methods, level of financial support to students), book-buying habits, geographical distances between libraries and users, general social conditions, economic climate, etc.

The score ought to be sensitive to active promotion of the library services, as well as to improvement of the services provided.

A.2.4.1.7   Source(s)

See the following references:

— Reference [14] (PI 2.1);

— Reference [29] p. 35 ("Percentage of the Population who have Books on Loan", using loans as an estimate of the percentage of the population who has used the library.);

— Reference [36] pp. 100 - 104 ("Market Penetration");

— Reference [41] pp. 41 - 42 ("Registrations as Percentage of Population");

— Reference [43] pp. 88 - 90.

A.2.4.2   Percentage of the population reached, including indirect users

A.2.4.2.1   Background

Registered users sometimes use the library on behalf of other persons, e. g. relatives, friends, colleagues. This can include lending or copying of materials, downloading items from the library's digital collection, or finding information for specific topics via library services. The number of active users can thus be higher than the counting described in A.2.4.1 shows as those indirect users generally remain hidden.

Knowing more about the extent of their user community is not only important for the planning of library services, but can provide good arguments when applying for resources.

A.2.4.2.2 Objective

To demonstrate the whole spread of a library's impact by identifying the hidden users.

A.2.4.2.3 Scope

This performance indicator is applicable to all libraries, but can be especially useful for libraries whose population is detained by monetary problems, bad transport means or reservation towards official institutions to visit the library.

The indicator can be used for comparing libraries aiming to serve similar populations, provided that the same method is used for calculating the indicator.

A.2.4.2.4 Definition of the indicator

The percentage of the population to be served using library services, including indirect users.

Indirect users are defined as non-registered users that use the library via a registered user.

A.2.4.2.5 Method

The first step consists in assessing the percentage of indirect users compared to all registered users out of the population to be served. This can be only achieved by surveying.

Great care should to be taken to get a representative sample of users to be questioned. The visitor structure can differ very much in specific times of the day, the week, or the year, e. g. more school children, more seniors, more parents coming in behalf of their children. As far as possible, "normal" times should be chosen.

Question a sample of registered users after a physical library visit in a follow-up interview or survey. The interviewees should belong to the library's population to be served.

The questions could be:

— Did you borrow materials (e. g. books, games, music) for another person that has no library card (e. g. a child, a friend, a colleague)?

— Did you seek information on specific topics for another person that has no library card (e. g. a child, a friend, a colleague)?

NOTE   As registered users could also act in behalf of other registered users, it is important to ask whether they acted for persons without a library card.

The percentage of respondents that affirm having acted in behalf of others during the visit is considered as representing the percentage of indirect users that use the library via registered users.

Identify or estimate the number of persons in the population to be served. Determine the number of registered users belonging to the population to be served and add the determined percentage of indirect users.

The percentage of the population reached, including indirect users is calculated using Formula (A.42):

$$\frac{A+B}{C} \times 100 \tag{A.42}$$

where

    A is the number of registered users belonging to the population to be served;

    B is the number of indirect users;

    C is the total number of persons in the population to be served.

Round off to the nearest integer.

EXAMPLE   The population to be served counts 12 000 persons, of which 4 300 = 35,83 % are registered users.

Out of 400 respondents, 74 answer yes to one or both of the questions =18,5 %. Indirect users would then be 18,5 % of 4 300 = 795,5.

The total number of persons in the population that the library reached, directly or via proxy, would be 5 095,5 = 42,46 %.

NOTE 1   The questions can be included in surveys assessing the time duration of physical visits or the user activities during a visit.

NOTE 2   The percentage of indirect users established by the survey can be too low, if interviewees have been acting on behalf of more than one person, or if they were afraid to admit that they borrowed materials for others.

The method can only be applied to virtual visits if users must identify themselves, so that members of the population to be served can be differentiated.

The question at the end of a virtual visit could be:

— During your visit, did you seek and/or download information for another person without a library card (e. g. a child, a friend, a colleague)?

As there can be duplication between physical and virtual visitors, the counts should be kept separate.

A.2.4.2.6   Interpretation and factors affecting the indicator

The indicator is an integer in the range of 0 to 100. A higher score for the population reached is normally considered better than a lower score.

Whether a high or a low percentage of indirect users is considered better, depends on the library's tasks, its resources and on the demographic composition of the population. In surroundings that make it difficult for a library to reach its population, it can be seen as evident success if it attracts more users, even in an indirect way. On the other side, if a library serves a population that is in a way obliged to use it, such as the members of an educational institution, it could be seen as insufficient if the library reaches part of its population only in an indirect way.

A.2.4.2.7   Source

See Reference [21].

A.2.4.3   User satisfaction

A.2.4.3.1   Background

For all types of libraries, the assessment of users' needs and their satisfaction with the resources and services offered is a crucial issue. Users' needs and wishes can, for instance, be ascertained by the evaluation of usage data or of users' complaints and suggestions. Focus groups and interviews can be used for assessing user opinion. For a comprehensive overview most libraries prefer surveys that ask for the satisfaction of the user with the library's services and resources.

User surveys can ask for different levels of experience with library services:

— the particular experience and satisfaction with library services during the last library visit or the last use of a library service;

— the long-time experience and satisfaction with all or individual library services;

— the experience and satisfaction compared with the expected quality level.

Satisfaction surveys assist in adapting a library's services to the needs and interests of the users. They reveal reasons for dissatisfaction and thus help to detect problems and shortcomings in the service delivery.

A.2.4.3.2 Objective

To assess the degree to which users are satisfied with the library services as a whole or with different services of the library.

A.2.4.3.3 Scope

This performance indicator is applicable to all types of libraries.

Comparing the same library at different points in time is possible. Comparing different libraries is, in general, very difficult, and only valid if the circumstances, questions, and procedures are identical. There are a number of user satisfaction surveys available, for both public and academic libraries, which can be used for comparison between libraries of similar mission when the same questionnaire and survey processes are used.

The indicator can be used to assess the satisfaction of specific user categories, e.g. undergraduates, faculty members, or elderly people.

The indicator can be used for measuring users' perceptions of the library service as a whole or any of the public services of a library. For example:

— opening hours;

— study facilities;

— availability of documents;

— interlibrary lending service;

— inquiry and reference service;

— user training.

Different aspects of individual services can also be assessed within the same survey, e. g. attitudes of reference staff or comfort of seating.

A.2.4.3.4 Definition of the indicator

The average rating by users of the library services as a whole or of different services of the library. The rating should be on a numeric scale, either:

— a four-point scale, from 1 to 4 with 1 as the lowest value,

— a five-point scale, from 1 to 5 with 1 as the lowest value, or

— a seven-point scale, from 1 to 7 with 1 as the lowest value.

Other types of scales, like 0 or 1 to 9 or 10 etc. may also be considered.

As some of the interviewees may not have information, experience or opinion about the topic in question, an extra answering alternative outside the numbered scale should be offered (for instance "I have not used the service in question", "I don't have experience of the topic", "I have no opinion").

A.2.4.3.5 Methods

There are various and competing measurement approaches for user satisfaction. The most used method is the direct measurement method, where users rate the services and their attributes by their satisfaction and by the importance of the services to them on different scales.

Another well-known approach in the library sector is the expectancy-disconfirmation paradigm in different variants. Users compare the actual product and service performance with their prior expectations. In cases where user expectations are met or even exceeded, the user is satisfied. The difference between the service performance and the expectation can be used as a measure to describe how well the goal has been achieved. This approach is also called gap analysis.

Libraries have also tested a very simple method developed in the commercial sector that relies mainly on one question and that can be used without connection to a broader survey: the Net Promoter Score (NPS).

A new project in Finland tries to measure satisfaction via a list of attributes that are weighted by coefficients appointed by experts. An appropriate list is used as well for the evaluation of specific services as for the library as a whole. The method is called composite index.

Questions about user status can be included in the questionnaires of all methods. Different categories of users have different needs, so the data can be analysed to identify how satisfaction is related to these variables.

a) Direct measurement method

Design a simple questionnaire listing the specific services, and/or aspects of services, which are to be assessed. A four-, five-, or seven-point scale is generally provided for answering the questions. The same scale should be used throughout the questionnaire.

Draw a random sample of users and ask them to fill out the questionnaire. The data can be collected by a postal questionnaire, by an electronic questionnaire, by face to face interview, or by telephone interview, as appropriate.

The average user satisfaction for each service or aspect of service is calculated as shown in Formula (A.43):

$$\frac{A}{B} \tag{A.43}$$

where

  A is the sum of the values for each service indicated by the users;

  B is the number of persons answering the questions.

Round off to one decimal place.

This indicator is calculated and reported separately for each question in the survey. For each service, also count the frequency with which each value appears. Then calculate the percentage for each value. This additional analysis shows how the users' perceptions are distributed across the range of possibilities.

A specific selection of questions in the survey can be used to identify specific sources of dissatisfaction, and to identify the relative importance of various services.

b) Gap analysis method

Gap analysis can be used for calculating user satisfaction as defined by this indicator, if questions are posed appropriately. The method provides additional information about customer expectations which is not used for the calculation of this indicator.

Design a questionnaire listing the specific services, and/or aspects of services, which are to be assessed. Include questions asking users to rate the service they currently receive.

A four-, five-, or seven-point scale is generally provided for answering the questions. The same scale should be used throughout the questionnaire.

Draw a random sample of users and ask them to fill out the questionnaire. The data can be collected by a postal questionnaire, electronic questionnaire, face to face interview, or telephone interview, as appropriate.

The average user satisfaction for each service or aspect of service is shown in Formula (A.44):

$$\frac{A}{B} \tag{A.44}$$

where

A is the sum of the values for each service as currently received by the users;

B is the number of persons answering the questions.

Round off to one decimal place.

The gap (G) between perceived and expected service quality for each service or aspect of service is calculated using Formula (A.45):

$$G = \frac{A_\mathrm{p} - A_\mathrm{e}}{B} \tag{A.45}$$

where

A_p is the sum of the values currently received (perceived) for each service indicated by the users;

A_e is the sum of the values they would like to receive (expected) for each service indicated by the users;

B is the number of persons answering the question.

Include only those persons answering both parts of the question. Round off to one decimal place.

This indicator is calculated and reported separately for each question in the survey. For each service, also count the frequency with which each value appears. Then calculate the percentage for each value. This additional analysis shows how the users' perceptions are distributed across the range of possibilities.

A specific selection of questions in the survey can be used to identify specific sources of dissatisfaction, and to identify the relative importance of various services. Questions relating to users' expectations of the various services can be used to identify those where there is the greatest discrepancy between expectation and experience.

c) Net promoter score (NPS)

The NPS was originally developed as company loyalty metric (see Reichheld 2003). The method found broad interest because of its ease of use.

The net promoter score is based on the assumption that when people recommend something to somebody, they take a sort of responsibility for the quality of what they recommended. It uses a single question answered on a numerical scale (0 to 10):

— How likely is it that you would recommend our company/product/service to a friend or colleague?

The scoring for this answer is based on a 0 to 10 scale (0 = not likely at all, 10 = very likely). Respondents are grouped as follows:

— Score 9-10 Promoters: loyal customers who will recommend the institution/service to others

— Score 7-8 Passives: satisfied but unenthusiastic customers, vulnerable to competitive services if available

— Score 0-6 Detractors: dissatisfied customers who can damage the reputation of the institution/service through negative word-of-mouth

The NPS is calculated by subtracting the percentage of respondents who are detractors from the percentage of respondents who are promoters. For purposes of calculating an NPS, passives count toward the total number of respondents, thus decreasing the percentage of detractors and promoters and pushing the net score toward 0.

User satisfaction is calculated as net promoter score as shown in Formula (A.46):

$$P - D \tag{A.46}$$

where

    P is the percentage of promoters of all respondents;

    D is the percentage of detractors of all respondents.

Round off to one decimal point.

The NPS is a number on the range −100 to + 100.

EXAMPLE   In a survey, 35 % of respondents are promoters (ticking 9 or 10), 20 % are passives (ticking 7 or 8), and 45 % are detractors (ticking 0 to 6). The NPS is 35 – 45 = −10.

In addition to their estimate of recommending the institution/service, the respondents are asked the simple question "Why?" which gives the opportunity of justifying their estimate. There are no pre-defined answers. The advantage is that spontaneous answers may cover a broad field and contain new ideas. The disadvantage is that it is difficult and labour-intensive to code and analyse the collected data.

Libraries have started to use NPS as a quick and simple way for assessing satisfaction grades of their users. Net promoter score can be used for the whole library as well as for specific services.

d)   Composite index

This method evaluates user satisfaction in a more differentiated way by assigning several variables or attributes to the specific library services. Each attribute is weighted with coefficients derived from experts' opinions on its importance.

EXAMPLE 1   Weighted attributes of services

1)   The service is useful (100)

2)   I am able to find what I am looking for in the service (99)

3)   The service is easy to use (87)

4)   Using the service saves time (82)

5) On a scale from 0-10, how likely is it that you would recommend the service to others? (0 being the lowest and 10 being the highest) (78)

6) Using the service is enjoyable (62)

7) On a scale from 0-10, how would you rate the service? (0 being the lowest and 10 being the highest) (62)

The attributes used and their number for counting the Composite Index may be decided by the individual library, but the requirements of benchmarking and the comparability of the time series should be considered. The weight values are usually given in advance of a survey, but ex post weighting is also possible.

The composite index is counted as shown in Example 2.

EXAMPLE 2   Calculation of the composite index (with the weighted attributes of example 1)

Attribute [1]	Weight (W) [1]	Ratio (R) [3]	Measured Score (Ms) [4]	Min (A)	Max (B)	Range (L) [5]	Weighted Score (Sw) [6]
1	100	0,18	4,5	1	5	4	0,16
2	99	0,17	4,0	1	5	4	0,13
3	87	0,15	3,6	1	5	4	0,10
4	82	0,14	4,0	1	5	4	0,11
5 [8]	78	0,14	30,0	-100	100	200	0,09
6	62 [9]	0,11	3,9	1	5	4	0,08
7	62 [9]	0,11	8,0	0	10	10	0,09
Weight Sum(S) 570 [2]		1,00 [3]					I_{UX} = 0,76 [7]

1) Attributes in the order decided by the experts according to relative weight (W) given

2) $S = \sum W_i$, where i = 1, ..., N; N is number of attributes

3) $R = W / S$; sum of Ratios must be 1

4) Ms: Results from the user survey

5) $L = B - A$ (of each Attribute)

6) $S_w = \dfrac{R \times (M_s - A)}{L}$

where

   S_w is the weighted score;

   R is the ratio;

   M_s is the measured score;

   A is the minimum attribute;

   L is the range.

7) The Composite Index is calculated: $Iux = \sum Sw_i$, where i = 1, ..., N; N is number of attributes

8) In this example, the Net Promoter Score (NPS) was included as one of the attributes

9) More than one attribute can be given same weight value if desired

The weighted scores represent the user satisfaction on each attribute. The weighted score for a specific attribute is calculated as shown in Formula (A.47):

$$\frac{R*(Ms-A)}{L} \tag{A.47}$$

where

R is the ratio;

M_s is the measured score;

A is the minimum attribute;

L is the range.

Round off to two decimal points.

For comparability, the weights of the attributes shall be kept constant during several survey cycles, but they must also be re-evaluated regularly.

A.2.4.3.6 Interpretation and factors affecting the indicator

a) Direct measurement: For each service or aspect of a service, this indicator is a number with one decimal place between 1 and 4, 1 and 5, or 1 and 7, depending on the scale chosen.

b) Gap analysis method:

— If G = 0 (neutral), there is no gap between the perceived and expected quality of service;

— If G > 0 (positive gap), then perceived service is better than expected;

— If G < 0 (negative gap), then perceived service is worse than expected.

The closer the gap (G) is to zero, the better balance there is between satisfaction and importance.

The gap (G) between −0,5 and +0,5 may be considered acceptable, however:

— If G is between +0,5 and +1,0, too many resources may be allocated for the aspect;

— If G is between −0,5 and -1,0, measures to improve the aspect should be considered;

— If G < −1,0 or G > +1,0, the situation is critical: Immediate measures are necessary especially when G-value is negative.

c) For the Net Promoter Score that ranges from −100 to +100, a positive number will generally be considered as good.

d) Composite index:

The weighted score is a number between 0 and 1. A higher number would indicate higher satisfaction.

e) General:

The indicator user satisfaction, whether calculated via direct measurement, gap analysis, Net Promoter Score, or Composite Index, should always be used together with other indicators for service quality and with usage statistics for the services that are evaluated.

High satisfaction rates are seen as good and can be used as an efficient marketing tool of the library. Low satisfaction with a service points to shortcomings in the service delivery. The open comments of users in the questionnaires can give more information about the reasons for dissatisfaction.

For the interpretation of the scores, it is important to bear in mind that the results are based on the subjective opinion of a random sample of users. Individual circumstances at the time of the survey can influence the answers.

An important factor is the expectation of the users. If they have not had experience of high quality services, they can be satisfied with lower quality, which is one reason why it is difficult to compare one library with another.

A.2.4.3.7   Source(s)

See the following references:

— Reference [17];

— Reference [25] pp. 118 - 122;

— Reference [36] pp. 105 - 111;

— Reference [42] pp. 43 – 53;

— Reference [26] (Net Promoter Score);

— Reference [27] (Composite Index).

A.2.4.4   Willingness to return

A.2.4.4.1   Background

Libraries provide reference services, i.e., oral or written information and assistance, in response to user requests, both face-to-face and virtually. It is important for libraries to evaluate not only the accuracy and speed of their reference transactions, but also the users' appreciation of the service.

The criterion of willingness to return points to user satisfaction with the service as a whole. Many factors affect this user appreciation, such as the quality of the reference response, the librarian's behaviour, or the ease of the interface in a virtual reference service.

A.2.4.4.2   Objective

To assess the effectiveness of a reference transaction by the user's willingness to return to the reference desk (or to a virtual reference service).

A.2.4.4.3   Scope

The indicator is relevant for all libraries with a reference service.

Comparison is possible between libraries of similar mission and goals if a similar type of reference service is provided.

The indicator is applicable for traditional face-to-face reference and for virtual reference.

A.2.4.4.4   Definition of the indicator

The percentage of reference transactions after which users state that they are willing to return to the reference desk (to the virtual reference service) with another question.

NOTE 1   Reference questions can regard facts, documents, or advice on sources for the user's subject.

NOTE 2   The definition excludes informational questions (directional and administrative inquiries).

NOTE 3   Virtual reference questions can be delivered by e-mail or web forms.

This indicator does not assess the speed of the reference transaction or the accuracy of the reference answers.

A.2.4.4.5 Method

a) Actual reference users

Actual users are questioned after a reference interview in a follow-up interview or survey. After a reference transaction in a virtual reference service, a web survey is offered. Users answer the question as to their willingness to return:

— Based on the experience of this reference transaction, if you had the option, would you return to this reference desk (this virtual reference service) again with another question?

The willingness to return is calculated using Formula (A.48):

$$\frac{A}{B} \times 100 \tag{A.48}$$

where

    A is the number of persons answering "Yes";

    B is the total number of persons answering.

    Round off to the nearest integer.

b) Proxy user method

Proxy or surrogate users ask a reference question at the reference desk (in the virtual reference service). They observe staff behaviour and all circumstances related to the reference transaction.

After the reference transaction, the proxy users answer the question as to their willingness to return:

— Based on the experience of this reference transaction, if you had the option, would you return to this reference desk (this virtual reference service) again with another question?

The willingness to return is calculated as shown in Formula (A.49):

$$\frac{A}{B} \times 100 \tag{A.49}$$

where

    A is the number of persons answering "Yes";

    B is the total number of persons answering.

Round off to the nearest integer.

In order to know more about the reasons of willingness or non-willingness to return, libraries could ask more questions such as:

— Was the reference librarian (the virtual service) easily approachable?

— Did the reference librarian show competence?

— Did the reference librarian ask at least one question to find out more about your information need?

— If you were referred to a source, either inside or outside of the library, did the librarian check whether you got a helpful answer?

— Did the librarian finally ask you whether the information provided fully met your information needs?

A.2.4.4.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is considered good. It means that a high percentage of reference transactions were successful according to the rating of actual or proxy users.

If the score is low, the library can identify the reasons via the aspects rated by the users. One reaction could be to organize staff training in interpersonal skills.

A.2.4.4.7 Source(s)

See Reference [19] and Reference [31].

A.2.4.5 Percentage of survey respondents who know the library

A.2.4.5.1 Background

It is vital for all types of libraries that the potential users be aware of their existence, their collections and the services that they offer. This awareness level can influence not only the physical and virtual usage, but also the liberality of funders and donators.

A.2.4.5.2 Objective

To assess to what extent a library is known to its population to be served.

A.2.4.5.3 Scope

The indicator is applicable to all libraries. It is less relevant for libraries who are affiliated to an institution with a defined membership, where the population is in a way obliged to use them.

A library of an educational institution or of a commercial firm will usually be known to the members of the institution or firm. Public libraries can have more difficulties to achieve a high level of awareness in their surroundings. National libraries or general research libraries that serve researchers worldwide will have still more problems to reach publicity in their potential usership.

Comparisons between libraries of different types are therefore of limited validity.

A.2.4.5.4 Definition of the indicator

The percentage of survey respondents that state that they know the library and/or its basic services.

NOTE   This does not necessarily mean that the respondents have already visited the library or used its services.

A.2.4.5.5 Methods

A.2.4.5.5.1 Survey a sample of the library's population to be served, including active users and non-users of the library as to their awareness of the library.

The question is:

— Do you know this library (name) that serves the specific interests of your institution (firm, community, town quarter, region, country) and that you can use?

The percentage of survey respondents who know the library is calculated as shown in Formula (A.50):

$$\frac{A}{B} \times 100 \tag{A.50}$$

where

  A is the number of persons answering "yes";

  B is the total number of persons answering.

Round off to the nearest integer.

The question could be asked by phone or mail, or by interviewing a random sample of persons in specific localities or situations, e.g. in the cafeteria of an institution or in frequented parts of a community.

The population from which the interviewees are taken should as much as possible correspond to the individual library's target groups.

A.2.4.5.5.2   In order to get a more detailed result, the survey can ask whether the interviewees know the main services that the library offers.

The question could be:

— What services does this library (name) offer? Check all you know.

EXAMPLE 1   (for a research library)

— digital collections

— catalogues

— reference and information

— lending services

— research support

EXAMPLE 2   (for a public library)

— print collections

— digital collections

— catalogues

— lending services

— children's library

— events, exhibitions

The percentage of survey respondents who know the library is calculated using Formula (A.51):

$$\frac{A}{B} \times 100 \tag{A.51}$$

where

  A is the number of persons checking at least half the services named;

  B is the total number of persons answering.

NOTE   An average rating of awareness can be calculated for each service.

A.2.4.5.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is considered good. It shows whether the library has succeeded in making itself known.

A.2.4.5.7 Source(s)

See ISO 21246:2019, A.4.1

A.2.4.6 Percentage of survey respondents who feel it is important that their institution, association, community, region or country has a library

A.2.4.6.1 Background

Libraries usually serve either an institution (e. g. a school, a university, a commercial firm), an association (e. g. a professional association, a learned society) or a specific geographical area (e. g. a community or town quarter, a region or – as national libraries – a nation). They offer resources, services and facilities for the informational, research, educational, cultural or recreational needs of their potential users. In addition, they often serve as meeting points and help to create a sense of belonging to the institution, community or area.

The indicator shows whether the library has succeeded in making their potential users value their existence.

A.2.4.6.2 Objective

To assess whether the value of a library that offers specific services for them is recognized by the potential users.

A.2.4.6.3 Scope

The indicator is applicable to all libraries.

Comparison between libraries of a similar type and mission is possible.

A.2.4.6.4 Definition of the indicator

The percentage of survey respondents who feel it is important that there is a specific library that serves their institution (e. g. school, university, commercial firm) or association, community or town quarter, region or nation.

NOTE 1   This does not necessarily mean that the respondents have already visited the library or used its services.

NOTE 2   An institution, association, community, region or nation can house more than one library.

A.2.4.6.5 Method

Survey a sample of the library's population to be served, including active users and non-users of the library as to their perception of the library's importance.

The question is:

— Do you feel it is important that there is a specific library serving this institution (or: association, community, town quarter, region, nation)?

The question could be asked by phone, mail, or interview.

The percentage of survey respondents who feel it is important that their institution, association, community, region or country has a library is calculated using Formula (A.52):

$$\frac{A}{B} \times 100 \tag{A.52}$$

where

    A is the number of persons answering "yes" to the question;

    B is the total number of persons answering.

Round off to the nearest integer.

In order to get a more detailed result, a five-point scale could be offered for answering this question:

— How important is it for you personally that there is such a library?

    (quite unimportant 1 – 2 – 3 – 4 – 5 extremely important)

In that case, an average rating of importance could be calculated from the answers.

A.2.4.6.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100.

A high score is seen as good. It shows that the particular library is considered valuable for its population to be served.

A.2.4.6.7 Source(s)

See ISO 21246:2019, A.4.2

A.2.4.7 Perceived impact

A.2.4.7.1 Background

Libraries conduct impact surveys to assess the extent to which direct or long-term library impact is experienced by their users. Survey results show the degree to which users feel they are benefited by the library as a whole or by different services of the library. Although this information does not necessarily demonstrate impact on its own, it can be used as a first approach to identify potential library impacts (see ISO 16439:2014, 5.2).

A.2.4.7.2 Objective

To assess the degree to which users feel that they are benefited by the library as a whole or by different services of the library.

A.2.4.7.3 Scope

The performance indicator is applicable to all libraries.

Comparing the same library at different points in time is possible. Comparing different libraries is, in general, very difficult, and only valid if the circumstances, questions and procedures are identical.

The indicator may be used to assess the perceived impact of specific user categories, e.g. students, researchers, children, or elderly people.

The indicator can be used for assessing users' perceptions of any of the public services of a library, e. g. digital collection, study facilities, reference service, user training.

A.2.4.7.4 Definition of the indicator

The average rating given by users on a numeric scale ranging from completely disagree to completely agree expressing their perception of their various benefits from library services as a whole, and from individual services offered by the library.

The rating should be on a numeric scale, for example:

— a five-point scale, from -2 to +2 with 0 as neutral value;

— a seven-point scale, from -3 to +3 with 0 as neutral value.

As some of the interviewees may not have information, experience or opinion about the topic in question, an extra answering alternative should be offered ("not applicable").

A.2.4.7.5 Method

The library designs a questionnaire that asks for the different aspects of perceived impact (on a numeric scale). The same scale should be used throughout the questionnaire. Space should be given for additional comments.

The survey should explain the purpose of the project to the participants.

Special questionnaires may be designed for different user groups.

The questionnaire should be tested by a small sample of users in each user group to see whether the questions are clear and understandable.

Calculate the mean impact for each aspect in the questionnaire as shown in Formula (A.53):

$$A / B \tag{A.53}$$

where

A is the sum of the values for a form of impact indicated by the users;

B is the number of persons answering the questions.

In order to check the perceived impact against the respondents' status and experience of library services, the following questions may be added:

a) user status, such as age group, status (researcher, student, others);

b) purpose of library use, such as study, research, professional interests, general interests;

c) frequency of library use, such as frequency of library visits, frequency of remote use, frequency of using special services (interlibrary lending, reference, online catalogue, etc.).

Table A.2 — Example of an impact survey for public library users

Have you benefited from visiting the library or using its online services? To what extent do you agree to the following:

(+2 = I completely agree; +1 = I mostly agree; 0 = neutral; -1 = I mostly disagree; -2 = I completely disagree)

	+2	+1	0	-1	-2	not applicable
1. I have developed new skills, I have learned something.	o	o	o	o	o	o
2. I have got new ideas, new interests.	o	o	o	o	o	o
3. I got helpful information for school/learning.	o	o	o	o	o	o
4. The library has supported me in my research.	o	o	o	o	o	o
5. The library helped me to do better in examinations.	o	o	o	o	o	o
6. I got helpful information for job seeking.	o	o	o	o	o	o
7. I got helpful information for health and well-being.	o	o	o	o	o	o
8. I got helpful information about my community/neighbourhood.	o	o	o	o	o	o
9. The library helped me in my profession.	o	o	o	o	o	o
10. The library helped me to save time.	o	o	o	o	o	o
11. I made contacts with different kinds of people.	o	o	o	o	o	o
12. I experienced the library as an enjoyable, safe and/or quiet place.	o	o	o	o	o	o
13. Other (please describe)						

Table A.3 — Example of an impact survey for researchers

Have you benefited from visiting the library or using its online services? To what extent do you agree to the following:

(+2 = I completely agree; +1 = I mostly agree; 0 = neutral; -1 = I mostly disagree; -2 = I completely disagree)

	+2	+1	0	-1	-2	not applicable
1. The library helps me to stay informed of the topics that interest me.	o	o	o	o	o	o
2. I have got new ideas, new interests by using the library's collections and services.	o	o	o	o	o	o
3. I got helpful information for studying/learning.	o	o	o	o	o	o
4. The library has supported me in my research projects and publications.	o	o	o	o	o	o
5. I got essential information that could be found nowhere else.	o	o	o	o	o	o
6. The library helped me in my profession.	o	o	o	o	o	o
7. The library helped me to save time.	o	o	o	o	o	o
8. I made contacts with other researchers working on my topics.	o	o	o	o	o	o
9. Without this library, the conditions for my research would be much less convenient.	o	o	o	o	o	o
10. Other (please describe)						

A.2.4.7.6 Interpretation and factors affecting the indicator

For each aspect of impact, this indicator is a number with one decimal place between +2 and -2, or +3 and -3, depending on the scale chosen.

Users' opinions are very subjective, and depend on individual circumstances at the time of the survey. Users may overrate changes in their skills and behaviour; on the other side, they may not be aware of any influence they experienced.

A.2.4.7.7 Source(s)

See the following references:

— Reference [8];

— ISO 21248:2019, Clause 6.

A.3 Efficiency

A.3.1 Collection

A.3.1.1 Cost per collection use

A.3.1.1.1 Background

Libraries are increasingly required to demonstrate that they use their funds efficiently and offer services of high quality. In this context, cost analysis studies can help to assess the level of efficiency. If the costs per unit of individual products and services are known, comparisons between services and benchmarking with other libraries is possible.

Additionally, the staff will gain a better understanding of the cost implications of practices and policies.

A.3.1.1.2 Objective

The indicator assesses the library costs per collection use and therewith the cost-efficiency of library services.

A.3.1.1.3 Scope

The indicator is relevant for all libraries with both a physical and a digital collection.

Comparison between libraries of similar mission, structure, and population to be served is possible, if differences in the collections and in lending policies are considered and if the recurrent expenditure is calculated in the same way.

A.3.1.1.4 Definition of the indicator

The total operating expenditure of the library in a full financial year divided by the total number of instances of collection use (loans plus downloads plus in-house use) in the same period.

The total operating expenditure is the sum of expenditures for

a) acquisitions of library materials of all formats (including binding, licenses, and pay-per-view costs),

b) staff (including project staff, student assistants, etc.) and staff training, and

c) all other purposes: operations and maintenance of computers and network, software licenses and telecommunication, rent and maintenance of premises, utility costs (heat, electricity, water, sewage), repair or replacement of existing furnishings and equipment, and other costs such as cataloguing records, copying, postage, promotion of services, stationery, insurance, transport and communications, consulting, etc.

Capital expenditure (on acquisition of, or addition to, building sites, new buildings, and extensions, on computer systems, furniture, and equipment) is excluded.

Loans for the purpose of this indicator include:

— ordinary loans;

— in-house loans;

— interlibrary loans;

— electronic document delivery transactions.

NOTE   Renewals are excluded.

In-house *use* in the sense of this indicator means a document taken by a user from open access stock for use on the premises.

A download in the sense of this indicator is the successful request of a content unit (a document or part of a document) from the library's digital collection.

A.3.1.1.5   Method

Calculate the total ordinary expenditure for one financial year, using accounts data. To get an estimate for the current year, data from the budget can be used instead.

Establish the number of collection use cases (loans + in-house use + downloads) for the same period.

In-house use may be estimated from sample counts by one of several methods:

a)   re-shelving count;

b)   observation studies;

c)   user questionnaire (handed out before the search);

d)   techniques used for book identification such as radio frequency identification (RFID).

The method used should be reported.

The cost per collection use is calculated using Formula (A.54):

$$\frac{A}{B} \tag{A.54}$$

where

   A is the total recurrent expenditure for one financial year, expressed in the relevant currency;

   B is the total number of instances of collection use (loans + downloads + in-house use) in the same period.

Round off in the manner customary with the currency used.

A.3.1.1.6   Interpretation and factors affecting the indicator

The indicator is a real number with no top limit. The normal range will depend on the type of library and the currency used.

The indicator establishes a relation between the number of loans + downloads + in-house use and the cost of providing all the services of the library, but cannot, in the normal case, be interpreted as an estimate of the average cost of a loan, download transaction, or in-house use. Especially in libraries where loans are the dominant service, the indicator can be used to assess the overall efficiency of the service.

It should be kept in mind that loans and in-house use of physical materials and downloads from the digital collection are quite different ways of collection use. However, as digital media are increasingly replacing print media, both types of collection use together should be compared to the library costs when assessing the efficiency of the library's services.

The indicator can be influenced by other libraries nearby supplying services to the library's population to be served and by fees for library use.

This indicator should not be used by itself. It is useful for placing the service indicators in a more general context.

A.3.1.1.7 Source(s)

See the following references:

— Reference [25] pp. 50 - 51 ("Cost per use", using an estimate of the actual cost of the circulation service);

— Reference [36] Indicator C.3.

A.3.1.2 Acquisition cost per collection use

A.3.1.2.1 Background

Libraries are concerned to adapt their collection policy to the needs of the population they serve. They must therefore balance their acquisitions policy with budgetary constraints. In this context, it is important to assess the appropriateness and user-orientation of the library's acquisitions policy, i.e. whether the library's collection meets the needs of the users.

The use of the collection shows the extent to which the library collection is user-oriented. The acquisition cost per use of the collection indicates the cost-effectiveness of the collection.

A.3.1.2.2 Objective

The indicator assesses the library's acquisition cost per collection use and therewith the effectiveness and user-orientation of the library's collection building policy.

A.3.1.2.3 Scope

The indicator is relevant for all libraries with both a physical and a digital collection.

The indicator can be used for comparing the cost of one instance of use in the same library over time.

Comparison between libraries of similar mission, structure, and population to be served is possible, if differences in the collections and in lending policies are considered and if the acquisitions expenditure is calculated in the same way.

A.3.1.2.4 Definition of the indicator

The acquisitions expenditure of the library in a full financial year for library materials of all formats divided by the total number of instances of collection use (loans plus downloads plus in-house use) in the same period.

NOTE   This includes binding, licenses, and pay-per-view costs.

Loans for the purpose of this indicator include:

— ordinary loans;

— in-house loans;

— interlibrary loans;

— electronic document delivery transactions.

NOTE   Renewals are excluded.

In-house use in the sense of this indicator means a document taken by a user from open access stock for use on the premises.

A download in the sense of this indicator is the successful request of a content unit (a document or part of a document) from the library's digital collection.

A.3.1.2.5 Method

Calculate the acquisitions expenditure of the library for one financial year.

Establish the number of collection use cases (loans + in-house use + downloads) for the same period.

In-house use may be estimated from sample counts by one of several methods:

a)   re-shelving count;

b)   observation studies;

c)   user questionnaire (handed out before the search);

d)   techniques used for book identification such as radio frequency identification (RFID).

The method used should be reported.

The acquisition cost per collection use is calculated as shown in Formula (A.55):

$$\frac{A}{B} \tag{A.55}$$

where

A is the total acquisitions expenditure for one financial year, expressed in the relevant currency;

B is the total number of instances of collection use (loans + downloads + in-house use) in the same period.

Round off in the manner customary with the currency used.

A.3.1.2.6 Interpretation and factors affecting the indicator

The performance indicator is a real number with no top limit. The normal range will depend on the type of library and the currency used.

The indicator establishes a relation between the number of loans + downloads + in-house use and the cost of the physical + digital collection.

A lower value indicates cost-efficiency for the collection. It shows that the library has adapted its collection policy to the needs of its population to be served.

It should be kept in mind that loans and in-house use of physical materials and downloads from the digital collection are quite different ways of collection use. However, as digital media are increasingly replacing print media, the total usage of the collection should be compared to the library's acquisition costs when assessing the adequacy and user-orientation of the library's collection policy.

The indicator can be influenced by other libraries nearby supplying services to the library's population to be served and by fees for library use.

A.3.1.2.7 Source(s)

See Reference [36] Indicator C.3.

A.3.1.3 Cost per download

A.3.1.3.1 Background

User demand for digital content for learning, teaching, research and entertainment is growing. Libraries therefore have to allocate a significant part of their budget to the purchase of licences for access to

digital resources. In a context of limited budgets and growing demand for digital contents, libraries need evidence to justify their investment in digital resources.

The number of downloads from specific resources can support decisions to prolong or cancel licensed resources and also to purchase additional digital media.

A.3.1.3.2 Objective

To assess the cost of a specified digital resource related to the number of downloads from this resource.

A.3.1.3.3 Scope

This performance indicator is applicable to all libraries.

The indicator can be used for comparisons over time to digital resources or the same resource in another library if differences in collection policies and socio-economic factors in the population are taken into account. The performance indicator only applies to priced digital resources.

A.3.1.3.4 Definition of the indicator

The costs of each digital resource divided by the number of downloads from that digital resource during a specified period.

The cost of a digital resource is the acquisitions, subscription, or licensing cost paid by the library for that resource. "Pay per download" costs are not included in this definition as the costs per download are evident.

A download in the sense of this indicator is a successful request of a content unit.

A content unit in the sense of this indicator is a uniquely identifiable textual or audio-visual piece of published work that can be original or a digest of other published work. This includes documents or parts of documents (e.g. articles, abstracts, content tables, images) and descriptive records.

A.3.1.3.5 Method

For each digital resource, the cost during a specific period (usually a full financial year) is divided by the number of downloads during that period. If the time periods between costs and downloads measured differ, they should be normalized.

Downloading by library staff and in user training should be included in the number of downloads.

Digital versions of resources acquired in a package with print versions should be excluded if costs cannot be clearly separated. The costs of resources acquired by bulk purchase should be allocated pro rata.

The cost per download is calculated using Formula (A.56):

$$\frac{A}{B} \tag{A.56}$$

where

- A is the cost of each digital resource for a specified period;
- B is the number of downloads from each digital resource during the same period.

Round off in the manner customary with the currency used.

A.3.1.3.6 Interpretation and factors affecting the indicator

The indicator is a real number with no top limit. The normal range will depend on the currency used.

A lower value indicates cost efficiency for digital resources. This should, however, be considered in conjunction with the demand for the resource, especially with the number of visits. An expensive resource can be crucial for a specific research project.

Depending on the users' browser cache configurations and use of proxy servers, the number of downloads indicated by server statistics will usually be lower than the real number.

The indicator should not be used by itself, but in conjunction with user satisfaction surveys.

Interpretation of the results is dependent on local factors such as negotiated licensing agreements, service contracts, etc.

A.3.1.3.7 Source(s)

See Reference [16] (PI 6).

A.3.2 Access

A.3.2.1 Median time of document processing

A.3.2.1.1 Background

The background processes in a library are important for the delivery of library services. Their quality can be expressed by measures such as accuracy and speed. As the processing of new documents is a process that occurs in all libraries, it has proved convenient to evaluate the effectiveness of background services by the example of document processing.

In many libraries, acquisition and cataloguing processes are now combined in a media processing department and are carried out in one operation.

A.3.2.1.2 Objective

To assess whether the different forms of processing procedures are effective as to speed.

A.3.2.1.3 Scope

This performance indicator is applicable to all libraries. The indicator is especially useful for monographs (print and digital). It can be applied to different types of documents or different subjects.

Comparisons between libraries are possible, but only if differences in mission affecting the level of descriptive cataloguing, subject cataloguing, binding policies, etc. are taken into account. When interpreting the results, differences in automation and the use of copy cataloguing should be given special attention.

A.3.2.1.4 Definition of the indicator

Median number of days between the day a document arrives at the library and the day it is available for the user.

A.3.2.1.5 Methods

The period used for measurement (e.g. one month) is fixed by the user of the indicator. Collect data on documents arriving in the library during the specified period. Keep a log, either by an automated library system or by a log sheet accompanying the document through the process.

For each title record, the exact dates of all stages of document processing should be logged:

— receipt or access (for library staff), including administrative process;

— cataloguing/metadata tags;

— subject cataloguing/metadata tags;

— bindery preparation;

— binding;

— shelving.

For digital documents, the end of processing will either coincide with cataloguing, when the network address of its location (e.g. URI, URL, DOI) for a document on an external server has been added, or with the installation of the document on the library's server and the URL being added in the catalogue.

For each title, calculate the number of days between arrival and availability or accessibility. Rank the titles according to the number of days elapsed.

The Median Time of Document Processing is the number of days that is in the middle of the ranking list.

NOTE   Documents for which processing has not been completed are left out of the calculation, since no finishing time can be assigned to an incomplete process.

If the number of titles is even, the median time of document processing is calculated using Formula (A.57):

$$\frac{A+B}{2} \tag{A.57}$$

where A and B are the two values in the middle of the ranking list.

Special processing procedures for different documents (e.g. rush procedures, rare documents, gift and exchange documents) should be analysed separately. The median time of each stage of processing can be calculated in the same way.

The processing speed for digital media should be assessed separately.

A.3.2.1.6   Interpretation and factors affecting the indicator

The indicator is an integer with no top limit.

Where data for all stages of processing have been collected, the indicator could point to

— failures in the sequence of procedures,

— delays due to stockpiling (backlogs), and

— delays due to overload.

Possible management decisions based on the results could be

— streamlining the process,

— forwarding documents at shorter intervals to the next department, and

— additional assignment of staff.

A.3.2.1.7   Source(s)

See Reference [36] pp. 193 - 198 ("Media Processing Speed").

A.3.3 Staff

A.3.3.1 User services staff as a percentage of total staff

A.3.3.1.1 Background

Usually, a library's stakeholders (active and potential users, financing authorities, politicians, and the general public) are rather more interested in the library's services for users than in the background activities, even if these are crucial for the direct service delivery. Library activities such as acquisition and cataloguing, administration of soft- and hardware, or budget planning and staff development, are often suspected of taking too much staff time from the direct user services.

It is therefore helpful for the library's reporting to be able to show the amount of staff time spent on the direct user services.

A.3.3.1.2 Objective

To determine the library's effort devoted to direct user services in relation to the background services.

A.3.3.1.3 Scope

This performance indicator is applicable to all libraries.

This performance indicator can be used for comparing libraries with the same mission and population to be served, provided that the same method of counting staff positions has been used.

A.3.3.1.4 Definition of the indicator

The number of full-time equivalent staff directly serving users expressed as a percentage of the number of full-time equivalent staff of the library.

Direct user services usually include the following functions: lending, reference and information, interlibrary lending, educational services, control and support in reading-rooms, (group)working-spaces and makerspaces, entrance control, reprography, shelving and retrieving items, research support (publishing help, research data management), services for user groups with special needs, e.g. persons with reading disability. Libraries may include other specific services that they offer to their users.

A.3.3.1.5 Method

The number of library staff employed in direct user services is calculated by adding the time spent by all permanent and temporary staff, including project-based staff, on that service area. Several methods, e.g. estimation and time logging, are possible:

a) Estimate: Calculate the number of full-time equivalent positions directly assigned to direct user services. Estimate the average time spent by employees of that service area on other services and deduct the time from the number. Estimate the average time spent by employees of other service areas spent on direct user services and add the time to the number of FTE positions.

    EXAMPLE   23,5 FTE staff are directly assigned to direct user services. During the reporting period, they spent 10 % of their time on other services. Staff members from other services (18 FTE) spent 20 % of their time on direct user services. Total FTE for direct user services was then 23,5 – 2,35 +3,6 = 24,75.

b) Time logging: Choose a sampling period (normally one or two weeks) during which the user services experience average workload. Record the time, by work diaries, that staff members, including members of other areas, spend on direct user services. The sample counts are grossed up to FTE numbers for the reporting period.

The number of full-time employees is calculated on the basis of staff records. Full-time employees who have worked for a full year count as one. Full-time employees who have worked for part of the year are each counted as the proportion of the year that they have worked (expressed as a decimal number with two decimal places).

To calculate the FTE for part-time employees:

— annual employment: weekly working hours divided by the regular working hours per week;

— non-annual employment: weekly working hours divided by the regular working hours per week and then multiplied with the quotient (number of weeks employed/52).

In case any of the responsibilities for direct user services have been out-sourced to an external institution (in return for payment or not), this indicator should only be applied if the external workload can be quantified accordingly (i.e. as FTE). This amount should be added to both A and B in the formula.

Exclude janitorial and building maintenance staff from the calculations.

The user services staff as a percentage of total staff is calculated as shown in Formula (A.58):

$$\frac{A}{B} \times 100 \tag{A.58}$$

where

A is the number of full-time equivalent (FTE) employed in direct user services;

B is the total number of full-time equivalent (FTE) employees.

Round off to the nearest integer.

A.3.3.1.6 Interpretation and factors affecting the indicator

The indicator is an integer between 0 and 100. For most libraries, a high percent of staff in direct user services is considered good.

This indicator should be used in conjunction with indicators of service quality.

The indicator is affected by the following:

— mission and special tasks of the library (e.g. preservation of rare collections);

— population to be served (e.g. adults, children);

— number of service points;

— opening hours;

— proportion of stock in open access;

— scope and variety of services offered;

— self-service options for users.

A.3.3.1.7 Source(s)

See Reference [40] p. 19 ("qualified staff assigned to reference", "size of staff").