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UTILIZATION OF CLASSIFICATION AND SHELVING SYSTEMS FOR INFORMATION RETRIEVAL IN THE INSTIDLA LIBRARY

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Abstract

This article investigates the classification and shelving systems at the INSTIDLA library and their impact on information retrieval. The study employs a qualitative descriptive research design, utilizing primary and secondary data sources to analyze the library's management and organization of collections . The research focuses on the implementation of the Dewey Decimal Classification system and the arrangement of materials in alphabetical order for shelving, as well as the challenges and deficiencies encountered in the classification and shelving system . The findings reveal that while the classification and shelving systems at INSTIDLA play a significant role in facilitating information retrieval, there are challenges such as the absence of dedicated staff for organizing books and the occasional lack of awareness among librarians about collection arrangement . The article concludes by proposing potential solutions to enhance the effectiveness of information retrieval at INSTIDLA.

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INTRODUCTION

A university library, situated within the academic environment, is fundamentally a vital component of an institution of higher learning[1]. The library actively contributes to the realization of the vision and mission of the university, specifically in supporting the needs of education, research, and community service (the Tri Dharma of Higher Education). In alignment with these goals, effective management of all forms of information within the library is crucial to ensure that every stored collection is accessible and beneficial to its users. One key aspect of library management involves careful arrangement and organization of its collections.

Shelving, the arrangement of collections on library shelves, is a crucial aspect of library management directly related to both library materials and users. The organization of collections is a key factor in information retrieval success. The effectiveness of this process is evident when library users can find the information they seek promptly. When library staff properly and accurately organize collections, users can locate desired items either through catalogs or by directly perusing the shelves. Collections are placed on shelves according to call numbers[2].

The provision of an information retrieval system in the library is a facility that serves as a facilitator for users seeking information. While this service is passive, it is incredibly useful for users, aiding them in exploring the available collections[3].

Passive library services manifest in the form of books and documents arranged in rows on shelves following a classification system. Shelving, or the arrangement of collections on shelves, is necessary to facilitate user access to information sources. However, in many libraries today, users still face challenges in finding information sources, often due to improper shelving, the lack of direct access to an Online Public Access Catalog (OPAC), and

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limited storage space that results in ineffective placement of collections[4].

In general, information retrieval in libraries involves assigning labels, typically in the form of classification numbers, before shelving on racks. These numbers are attached to the spine of the book and the bookshelf, adhering to the Dewey Decimal Classification (DDC) system. DDC serves as the book's address in an information retrieval system, facilitating users in locating information[4].

The library at INSTIDLA (Institut Ilmu Sosial dan Ilmu Politik) is a gateway to higher education, signifying the vital role of the library in academic advancement. INSTIDLA's library has implemented automation systems, particularly in classification, shelving, information retrieval systems, and information searching.

Upon initial observation, the researcher found that the arrangement of collections at INSTIDLA is based on classification numbers and alphabetical order. However, many library materials were not in their designated places. The absence of dedicated staff for organizing books and the occasional lack of awareness among librarians about collection arrangement pose challenges. Furthermore, there is a lack of shelving for completed collections, hindering the efficiency of information retrieval[5] at INSTIDLA's library. Users often face difficulty finding the materials they seek, reflecting the need for improved shelving practices and increased awareness among library staff. Consequently, this study aims to investigate the "Effective Utilization of Classification and Shelving Systems in Meeting Information Retrieval Needs at INSTIDLA."

METHOD

The researcher conducted an Internship at INSTIDLA, where the researcher actively participated in the internship and conducted research in the library. This research employs a qualitative descriptive research design, aiming to depict a situation or occurrence as it is. The goal is to accurately describe the characteristics of an individual, situation, phenomenon, etc., which are the subjects of the study. According to Arief Subyantoro[6], qualitative descriptive research is a method that utilizes qualitative data and elaborates on it descriptively. This type of research is often used to analyze social events, phenomena, or conditions.

As per Sumadi Suryabrata[7], data collection techniques or methods are systematic processes for gathering, recording, and presenting facts for a specific purpose. In this study, data was collected from primary and secondary sources. Primary data is directly obtained from the source without intermediaries and can include objects, sites, or human subjects. On the other hand, secondary data is collected indirectly from the source, usually from documents (reports, writings of others, newspapers, magazines), or through information obtained from others. Secondary data sources in this research include library research, which involves gathering data from literature or written sources to strengthen the theoretical foundation for data analysis. The study uses bibliographic materials such as books, magazines, and other electronic sources[8].

RESULTS AND DISCUSSION

Classification comes from the word "classification," the root of the word "to classify" (in English), which means grouping and placing similar objects in one place. In library terminology, classification is the systematic collection of library materials, including books and other materials, into one class or group based on similar characteristics to facilitate user retrieval[9]. According to Sukri[10], the purpose of classification is to facilitate the placement and means of retrieving library materials. In practice, the classification of library materials involves stating the subject of a book with a classification number (notation) using a classification system. The classification number can be used as the book number, indicating the book's place in the arrangement of books, and can also be used as the order of cards in the catalog and classification.

Classification is one of the activities in subject cataloging. To determine the class number of a library material, the content of the material is analyzed first. It is then conceptualized and translated into a classification scheme represented in the form of notation, resulting in the material's class number.

Shelving is the process of organizing collections that directly involves the interaction between collections and library users. In the smooth retrieval of information, shelving

activities become a key determinant of success. The success of information retrieval can be seen from users finding collections or information they are looking for in their designated places. Shelving is an activity of arranging books on shelves using specific rules. It is done to ensure that the library's collections can be utilized to the maximum by users. When library staff fails to shelve properly, users will find it challenging to locate the desired collections[11].

Effective shelving can be observed through factors related to the library. Some of these factors include user types, library types, and service systems used by the library. The service system will influence the shelving method applied in the library. Both open and closed service systems can be determined by the library type and the users who come to the library. Regardless of the service system used, the basic goal of shelving is to facilitate users in finding the collections they seek. According to Winoto[12], the shelving process performed on the library's collections will impact the success of information retrieval in the library. When shelving is done correctly, users will find the collections they are looking for through the catalog on collection shelves. The collections will be found on shelves according to the call number listed in the catalog. However, if the shelving process does not follow the specified system, it will hinder users in obtaining the desired collections.

The information retrieval system is a system that functions to find information relevant to users' needs. Information retrieval is the science of searching for information in documents, searching for the documents themselves, searching for metadata describing documents, or searching within a database[13]. One example of an information retrieval system in a library is the Online Public Access Catalog (OPAC).

Online Public Access Catalog (OPAC) is an installed catalog system that can be accessed publicly and used by users to search the catalog data to determine whether the library has a particular work, get information about its location, and if the catalog system is connected to the circulation system, users can find out if the sought-after library material is available or currently borrowed. OPAC is a technological advancement in library science, providing convenience for users and library staff in cataloging activities. According to Sulistyo-Basuki[14], a library catalog is a list of books in a library or a collection. However, regardless of the size of a library's collection, it is meaningless if relevant documents or information are not known when needed. The library catalog lists all library materials, including books, magazines, cassettes, CDs, and others on collection shelves.

Classification Process of Library Materials at INSTIDLA

According to Purwono and Suharmini[15], before library classification systems were developed, information storage was based on the arrangement of titles, main subjects, chronology, authors, acquisition order, or even the size of a document. Later, classification systems commonly used in libraries, such as Dewey Decimal Classification (DDC), Universal Decimal Classification (UDC), and Library of Congress Classification (LCC), emerged.

At the INSTIDLA Library, the classification system used is the 20th edition of DDC and the 23rd edition of e-DDC. Additionally, there are special classification systems used for specific collections, such as the Subject Heading List of Islam and the Islamic Classification System, designed for Islamic materials. Based on the scope of subjects, classification systems can be divided into general and special classification systems.

A general classification system provides or uses only its main classes and divisions, along with subdivisions. On the other hand, a special classification system provides all aspects of subdivisions up to the most specific or specialized subjects.

Regardless of whether it's a general or special classification system, the most crucial aspect is the creation of a classification system for the classification of library materials (collections) to be organized and systematically placed on shelves[16]. The class number or notation of library materials becomes a meeting point between librarians, users, and library materials. A classification system provides a means of organizing diverse knowledge into an easily understandable form. It groups various fields of knowledge based on categories or branches of science.

Librarians use the classification system to organize library materials by creating call numbers or notations based on the content of a

document. For users, the call number is a tool to find the desired information source. Therefore, the creation of a classification system must be based on these considerations[17].

The application of a classification system generally involves determining the subject first, a practice also carried out by the INSTIDLA Library. The classification of library materials can be based on book characteristics, grouping books with similar characteristics together.

At INSTIDLA, library books are grouped based on their utility. Reference books are grouped together, storybooks are grouped together, science books are grouped together, and so on. In terms of physical form, library materials include books and non-books such as magazines, newspapers, brochures, and more. Thus, library materials in book form are grouped together, all newspapers are grouped together, and so on. Library books can also be grouped more specifically based on size, such as large, thick, thin, light, or heavy.

The classification process of library materials at INSTIDLA uses the DDC 20th edition classification system translated into Indonesian, using the 10 main classes of the DDC classification chart and auxiliary tables for classification activities. The determination of the subject of a book is based on the book title, table of contents, reading some of the content, and bibliography. In determining the subject of library materials, library managers use the library subject heading list. The determination of the classification number is based on the subject and the specified chart. If the subject analysis is done correctly, and the guidelines on the classification chart are followed, the correct subject and notation are expected. Thus, the placement of library materials on shelves is accurate, and the information retrieval system, along with the process of searching for information, can be done quickly and accurately.

Figure 1. Condition of the Library Material Classification Process at INSTIDLA

Figure 2. Condition of the Library Material Classification Process at INSTIDLA

Shelving Process for Library Materials at INSTIDLA

The shelving process at INSTIDLA involves grouping library books based on the alphabetical order of the author's name and the title of the book. Books with the same first letter in the author's name are grouped together, as are books with the same first letter in the title.

The shelving method at INSTIDLA is governed by established procedures, including:

a. Orderliness of Collection Arrangement: Collections are arranged neatly, following subject and classification number. Books are shelved standing, ensuring that the spine is visible for easy reading of labels. This meticulous arrangement facilitates easy access for users.
b. Regularity of Collection Arrangement: To maintain order, shelving is performed daily. If a collection is found on a different shelf, it is promptly moved to its designated place. Regular shelving adheres to library standards and policies.
c. Accuracy of Collection Arrangement: Precision in shelving is crucial for users to easily retrieve materials. Accurate shelving significantly impacts information retrieval efficiency.
d. Clarity of Instructions on Shelves: Clear notations, in everyday language, indicating the classification of books are affixed to each shelf. This practice

ensures that users can easily locate information on every shelf.

1. The implementation of the shelving process at INSTIDLA follows specific mechanisms and guidelines: **Shelving Priorities:** Prioritization is given to:
   - Collections read/used by users at that time.
   - Collections from collection management activities, such as post-fumigation, mildly damaged materials, and materials that have been rebound.
   - New library collections.
   - Collections that have been borrowed/used by users.
2. **Shelving References:** Collections are arranged based on:
   - Type of collection (general, reference, journals/magazines, research reports, theses/dissertations, special collections, and popular magazines).
   - Classification number, from the smallest to the largest (DDC classification system 000-900).
   - Codes other than the DDC system mentioned in the collection label (call code), such as codes for research reports and theses/dissertations.
   - The first three letters of the author's name.
   - The first letter of the title.
3. **Implementation of Shelving:** Shelving is carried out meticulously and accurately based on daily, weekly (Saturday shifts), or monthly priorities and references as outlined above.
4. **Clear Shelving Targets:** Shelving activities have specific targets based on guidance and instructions from the leadership.
5. **Recordkeeping:** Detailed records of shelving activities are maintained for reporting and evaluation purposes.

Example of Collection Shelving Arrangement at INSTIDLA

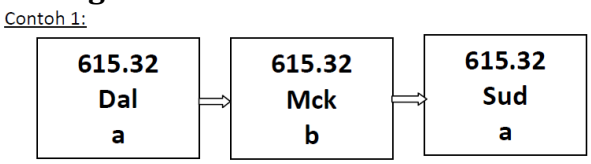

Figure 3. Example 1

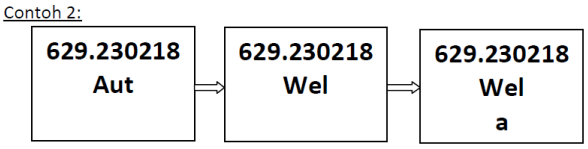

Figure 4. Example 2

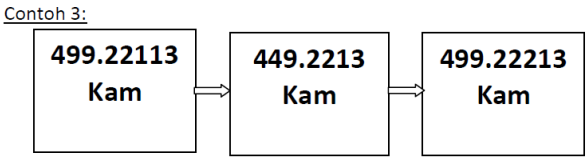

Figure 5. Example 3

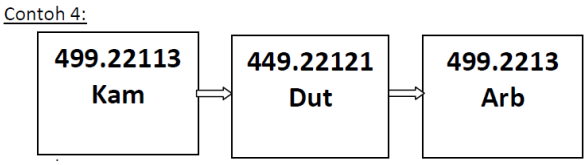

Figure 6. Example 4

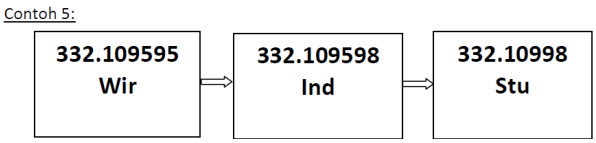

Figure 7. Example 5

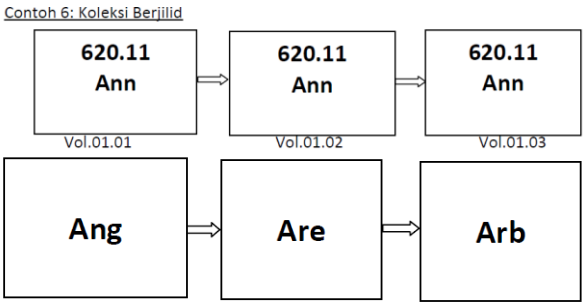

Figure 8. Example 6: Multi-volume Collection

Figure 9. The Condition of Shelving Activities for Library Materials at INSTIDLA.

Figure 10. The Condition of Shelving Activities for Library Materials at INSTIDLA.

Information Retrieval System at INSTIDLA

Information retrieval is a term that refers to the retrieval of documents or data sources from the facts owned by an information unit or library, while information searching is part of a process of retrieving information carried out to meet the needs of users for the required information, with the help of various search and retrieval tools owned by the library/information unit. The right search and retrieval processes and tools will produce accurate and useful information for users[18].

According to Sutarno N.S[19], the main purpose of the information retrieval system is to find documents that match the information needs of users effectively and efficiently, thus providing satisfaction to them, and the ultimate goal of the information retrieval system is user satisfaction. The information retrieval system is a science that functions in placing a number of documents to meet the information needs of users. The basis of the information retrieval system is the process of identifying matches between requests and representations or document indexes, then retrieving documents from a repository in response to the request. The information retrieval system fundamentally works based on the match between query terms and terms that represent documents. Another definition states that the Information Retrieval System is a process related to the representation, storage, retrieval, and retrieval of information relevant to the information needs of users. This opinion indicates that the Information Retrieval System includes a number of activities that include the process of identifying matches, representation, storage, retrieval, and searching or tracing relevant or appropriate documents, in order to meet the information needs of users.

It can be concluded that the information retrieval system is a system that is useful in calling and placing documents from/in a database according to user requests. The information retrieval system has a final goal, namely to provide information satisfaction for system users.

The information search tools used at INSTIDLA Library are electronic catalogs (OPAC) and through online access to the digital library. To find collections on the shelf, users should use OPAC to quickly, accurately, and efficiently find information. In searching through OPAC, users can enter the book title, author's name, keywords, or subjects from the documents being searched through the search box provided. After users get the classification number of the targeted library material, users can directly search for the library material on the bookshelf.

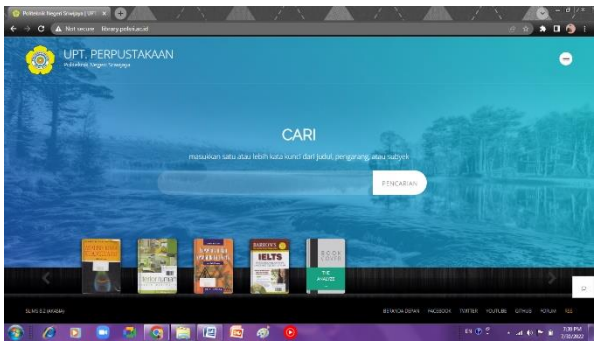

Figure 11. OPAC (Online Public Access Catalog)

Utilization of Book Classification and Shelving Systems in Fulfilling Information Retrieval Needs at INSTIDLA

The utilization of book classification and shelving systems at INSTIDLA has generally been carried out quite well, although there are still shortcomings in its implementation. The book classification process at INSTIDLA utilizes the DDC (Dewey Decimal Classification) system 20th edition and e-DDC 23rd edition version 3.3, translated into Indonesian using the 10 main classes from the DDC classification chart and employing auxiliary tables in the classification activities. Determining the subject of a book involves examining the title, table of contents, reading some content, and the bibliography. In determining the subject of library materials, the library management uses the library's subject heading list. Subsequently, the classification number is assigned based on the subject and a predetermined chart. Accurate subject analysis, following the classification chart instructions, is expected to yield the correct subject and notation. Thus, the shelving of library materials is done correctly, making the information retrieval system, along with the search or information retrieval process, easy and accurate.

In the shelving process, before the actual shelving steps, the printing and attaching of call numbers and barcodes to the books take place. The shelving process at INSTIDLA for general works follows a systematic classification order, matching the classification numbers provided on each bookshelf. Reference books, on the other hand, are organized based on code numbers, placed on shelves according to notation numbers. The shelving procedures applied by INSTIDLA align with the institution's regulations and policies. However, the process faces challenges, primarily due to the limited space available. The library building is not very large, and the continuous influx of books poses challenges. Despite constraints in available shelf space, the issue has been adequately addressed.

Information retrieval tools used at INSTIDLA include an electronic catalog (OPAC) and online access to the digital library. To locate collections on shelves, patrons are advised to use OPAC for quick, precise, and efficient information retrieval. Through OPAC, users can input book titles, author names, keywords, or document subjects into the search box. Once users obtain the classification number of the targeted library material, they can directly locate it on the bookshelf.

However, behind all the references and systems used in the book classification and shelving processes at INSTIDLA, there is still one deficiency in the application of the classification and shelving system in meeting information retrieval needs at INSTIDLA, which the researcher finds less effective. For instance, there are cases where books, previously owned and classified by INSTIDLA, have the same titles as new arrivals (successive volumes). However, the classification numbers may differ between the newly arrived books and those with the same titles that INSTIDLA previously owned. This inconsistency can hinder the shelving process and make it challenging for patrons to retrieve information effectively at INSTIDLA.

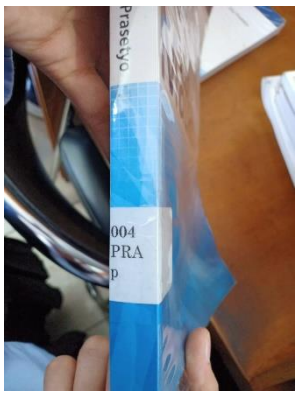

Figure 12. Example of Mismatched Book Spine Numbers and Classification Numbers at INSTIDLA, Despite Having the Same Title and Author.

To address and rectify these shortcomings, the librarian should change the classification numbers and reprocess the library materials, along with updating the bibliographic data in the OPAC for older books, to align them with the new ones (follow-up books) that have the same title. This action is essential to ensure that the shelving process is not impeded, and the information retrieval becomes more effective and efficient, thus facilitating patrons in finding library materials at INSTIDLA.

CONCLUSION

The effective utilization of the classification and shelving system of library materials to meet information retrieval needs at INSTIDLA has been carried out with a fairly good role. If the analysis of subjects can be done accurately and in accordance with the instructions provided in the classification chart, it is expected to obtain the right subject and appropriate notation. Thus, the placement of library materials on the shelves in the correct position, along with the information retrieval system and the process of searching or seeking information, can be easily and quickly accomplished. The initial shelving activity before the actual shelving stage involves printing and attaching call numbers and barcodes to the books. The shelving process implemented by INSTIDLA complies with the agreements and policies established by the library institution. In this shelving process, there are challenges that significantly hinder INSTIDLA in finding solutions. The limitation of available space is one of the challenges due to the relatively small size of the library building and the continuous influx of new books. Although there are also challenges related to the number of available shelves, these challenges can be reasonably overcome.

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