



Patterns of Information Seeking Behavior from Leckie's Perspective in the New Normal Era

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Abstract. This research was motivated by a shift in the use of information sources which initially tended to use printed sources then developed into electronic-based sources that can be accessed anytime and anywhere by information users. The purpose of this research is to identify and describe the model of information seeking behavior of experts (lecturers) that refers to the Gloria J. Leckie model so that it is hoped that the latest model will be adapted to the conditions in the field (new normal). The method used in this study is descriptive qualitative with literature studies and field studies. The results of the study indicate that the information behavior of experts (lecturers) refers to their obligations in carrying out the tridharma of higher education which consists of education and teaching, research, and community service. The three workloads are followed by several variables that influence them, such as the characteristics of the information needs of experts (lecturers), where the sources used in the information search process tend to use the internet and have discussions with colleagues. The use of the internet and discussions with colleagues are almost daily because these steps mostly produce information that suits their needs. However, if they have not found complete information according to their needs, then the *feedback* is to review the sources of information used.

Keywords: lecturer · information needs · information seeking behavior · library · and new normal era

1 Introduction

Entering 2022, the COVID-19 disease is still a threat to the people of Indonesia due to the emergence of the latest variant, Omicron. The COVID-19 Handling Task Force on Friday (10/6/2022) at 12.00 WIB, recorded the addition of 627 new daily cases. This figure was re-registered in Indonesia after 44 days ago, Indonesia last had 600 new cases on January 27, 2022. Previously, Thursday (9/6/2022) new cases in Indonesia

were recorded as many as 556 cases in 24 h [1]. Therefore, people are still advised to use masks, maintain distance, and wash their hands to break the chain of spreading this virus.

The impact of the virus was initially very influential on the economic sector and spread to all sectors including education. The policy taken by the state regarding the education sector is to implement distance learning/online learning [2]. Thus, both students, students, teachers, and lecturers must adapt to these conditions so that learning continues as it should.

One of the impacts of this phenomenon is that most learning activities are carried out at home so that to support these activities, one must have digital literacy skills. Digital literacy in general can be defined as an individual's interest, attitude and ability to use digital technology and communication tools to access, manage, integrate, analyze and evaluate information, build new knowledge, create and communicate with others in order to participate effectively in society [3]. Based on this definition, it can be concluded that this ability is very important considering that the learning process is mostly carried out using distance learning/online learning methods.

Digital literacy is closely related to searching for information electronically so that a person requires several stages such as selecting, analyzing, and evaluating the information before it is used. Information can be interpreted as a collection of facts and data that have been processed so that they can be used in decision making [4]. However, with the rapid development of technology, there is a lot of information circulating (information overload) so that this can have a positive and negative impact on the implementation of learning because when the information referred to is inaccurate, the learning outcomes are not optimal.

In general, people tend to seek information according to their needs. For example, students search for information to help complete lecture assignments, doctors look for information related to the latest treatment methods, architects look for information related to "contemporary" home designs and so on. In searching for this information, someone must have their own pattern, including experts (professionals) in supporting their work. The experts here are lecturers of the Department of Information and Library Science who are required to carry out their main tasks well and maximally. In general, the main tasks of lecturers are closely related to the management of information that will facilitate them in carrying out education and teaching, research and community service.

To carry out this task, the lecturer must carry out several information seeking activities using both printed and electronic sources. However, since the pandemic, the level of use of electronic sources is more often used compared to manual searches for practical reasons. Therefore, researchers are interested in comparing this information-seeking habit with the Leckie model so that it is expected to bring up the latest information-seeking behavior patterns that adapt to field conditions (the new normal era).

This research is important to do considering the shift in the use of information sources which were initially limited and tended to use printed sources only then developed into electronic-based sources that can be accessed anytime and anywhere by users (lecturers).

2 Method

The research design used is a descriptive qualitative design. According to Bogdan and Taylor in Moleong, qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from people and observable behavior [5]. In line with this definition, Kirk and Miller in Moleong also define qualitative research as a certain tradition in social science that is fundamentally depends on human observations both in its area and in its terminology. Based on these two understandings, it can be concluded that qualitative research is research that intends to understand the subject to be studied, for example behavior, perception, motivation, and action in the form of words and language by utilizing various methods. The approach used in this study is a descriptive approach which only describes “what is” about a variable, symptom or situation [6]. The descriptive approach tries to find an appropriate and sufficient description of all activities, objects, processes, and people [5]. In a qualitative descriptive approach the data collected is in the form of words and pictures not numbers [7].

The subjects in this study were three (3) people are Lecturers of the Department of Information and Library Science, Padang State University, while the object is information seeking behavior of Lecturers of the Department of Information and Library Science. In qualitative research, no there is a benchmark for the number of informants so that when the number of 1 informant has met the principle of suitability (appropriateness) it can be directly used for research data sources [7]. The selection of these 3 informants is already qualified to be a source of data because the behavior of the population tends to be the same (homogeneous).

Overall, the data analysis technique carried out begins with data collection by means of document review and interviews, data reduction and sorting information according to research objectives, and drawing conclusions. As for the data validation, the researcher used triangulation method. Triangulation in credibility testing is defined as checking data from various sources in various ways, and at various times. Thus there is triangulation of sources, triangulation of data collection techniques and triangulation of time [8]. By using this technique, it is expected to produce valid data and can contribute to the development of education.

3 Result and Discussion

The information discovery model among professionals was developed by Gloria J. Leckie, Karen E. Pettigrew, and Christian Sylvian in their research “Modelling The Information Seeking of Professionals: A General Model Derived from Research on Engineers, Health Care Professionals, and Alawyers” [10]. This is based on previous studies on information discovery behavior which resulted in certain models so that it was deemed necessary to create a model of information discovery behavior that represented professionals. The term “profession” is used here in a classical sense to describe service-oriented work that has a theoretical knowledge base, demands formal post-secondary education, has overshadowing associations, has an internally developed code of ethics or other principled statement. Groups that fall within the criteria include doctors, lawyers, teachers, pastors, nurses, physiotherapists, librarians, accountants, and engineers.

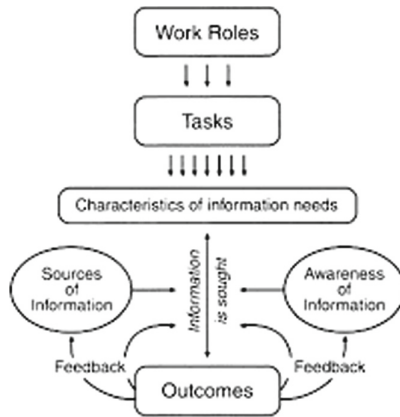


Fig. 1. Leckie's Model

This model of professional information finding behavior assumes that the roles and work tasks carried out by professionals can foster certain information needs so that they will encourage the information search process. Information retrieval is strongly influenced by a number of variables that interact with each other and can affect the results. The following is an overview of the professional information discovery behavior model (Fig. 1).

The six main factors contained in the model are connected by arrows, where all of these factors have a unidirectional purpose and are interconnected. This process starts from the top, namely the “work role” that has an impact on the “task”. Leckie et al.’s model is limited to professionals only, so the primary factors that motivate information discovery are work roles and tasks. Existing empirical studies of the need for and use of professional information indicate that professionals face a complex world of work and assume a variety of roles in their day-to-day work. Five professional roles that are often performed (more on frequency of occurrence) are service provider, administrator/manager, researcher, educator, and student. In general, information needs arise from specific task-related situations that relate to one or more of the work roles played. Information needs of professionals are influenced and shaped by several variables, including: individual demographics, context, frequency, predictions, importance and complexity.

In this model, it shows that the need for information can create an awareness of the source of information and/or information content, this is what can motivate a person to make information discovery. The most important variables of awareness of information sources are familiarity with the sources of information used, successful use of previous information, trust in information sources, information packaging, timeliness, cost, quality, and accessibility of information sources. In the “information is sought” phase, arrows point in both directions, namely towards the characteristics of information needs and outcomes. This explains that the search results found must match the information needs. And the final result of the entire information search process in the form of “outcomes” that affect most aspects of the model through a feedback loop that leads to sources of information, awareness of information, and information found. (information

is sought). Leckie et al. al. This is clearly intended to prioritize those related to work processes. Therefore, this model has limitations in the application of everyday information discovery behavior [10–12].

3.1 Roles and Duties of Lecturers in the Department of Information and Library Science

The roles and duties of lecturers in the Department of Information and Library Science refer to the Tridharma of Higher Education, namely education and teaching, research, and community service. This is in accordance with the definition of a lecturer as a professional as stated in the Law of the Republic of Indonesia Number 14 of 2005 concerning teachers and lecturers which states that professional educators and scientists with the main task of transforming, developing, and disseminating science, technology, and art through education, research, and community service.

Thus, it can be concluded that the role and work task of the Library and Information Science Study Program lecturer in the education and teaching aspect is to update the knowledge possessed through information search so as to support the learning process in the classroom. In addition, lecturers are also required to complete several administrative activities such as making BKD, SKP and involvement in several departmental committee activities. As a researcher, the lecturer plays a role in developing and updating knowledge, especially in the field of Information and Library Science by solving problems related to the scientific field, attending seminars/workshops and reading various sources of information related to the scientific field. After developing and updating knowledge in their scientific field, the role of the next lecturer is to carry out community service activities by designing activities to solve some of the problems that exist in the area according to the scientific field. This activity is expected to improve the standard of living of the surrounding community.

3.2 Characteristics of Information Needs for Lecturers of the Department of Information and Library Science, Universitas Negeri Padang

Information needs arise as a result of situations related to specific tasks associated with one or more work roles played by professionals. Studies of professional information-seeking behavior indicate that the nature of a specific profession and factors such as age, career path, specialization, and geographic location can influence the formulation of information needs [10]. This means that the demographic characteristics of the informants will affect their information needs.

In this study, demographic characteristics are divided into 4 (four) indicators, namely: 1). Age; 2) areas of specialization; 3). Last education; 4). Experience. Supported by research conducted by Gralewska-Vickery, it states that the range of information needed by scientists varies according to their career paths, where junior scientists have a narrower range of information than seniors [13].

The information most needed by informants is information to support teaching and learning activities in the classroom. Information needs arise due to the context of the problems faced by the informants, it can be concluded that the context of the problems often experienced by the informants is related to their role as an educator. This agrees

with the statement of Kriclass, Krech, Crutchfield, and Ballachey (in Saepudin, 2009) explaining that the need to solve social problems makes a person motivated to seek knowledge and find ways to solve these problems. One way to do this is to seek additional information through various sources and information media [14]. The types of problems that often arise are generally influenced by various work assignments, the reason the informant needs information is also due to support the work. From this it can be seen that there is a relationship between information needs and the types of problems faced by informants as a result of the roles and work tasks they carry out.

In meeting this need, the informants stated that they often experience the same problems in their daily work. Informants also stated that they solved the problem by referring to the previous method and combining it with the new method. The repetition of the same problem will certainly affect the time required by the informant in solving the problem. Research conducted by Lestari (2010) states that informants need 4–5 days in the information search process, it also depends on the level of complexity of the information sought by the informants, the more complicated the task, the more time is needed in the information search process [15].]. However, if the problems experienced by the informant have been repeated, it is easy for the informant to solve the problem because he has experienced it before and already knows the right way to solve it. However, if the informant has never experienced the problem, it takes a relatively long time to solve it. Starting from problem analysis activities, multiplying references and brainstorming with other experts to obtain solutions to these problems.

3.3 Sources of Information Used

The professional information discovery process by Leckie et al. is broadly divided according to the type of channel and the format of the information. The distribution of information sources includes sources of information based on the form of information including formal and informal information; sources of information based on information channels include internal and external sources of information; sources of information based on the information format include oral and written information; and sources of personal information that come from the individual himself [16]. Sources of information based on the form of information most widely used by informants are books published in the country. The reason for informants choosing books published in the country is because books published in the country use easy-to-understand language, low prices, easy access, accurate information, complete information, easy to store, and fast time. The source of information based on the channel used by the informants is the Language and Arts Faculty Library. The reason the informant chose the Language and Arts Faculty Library was that it was easy to reach because the location was close to the department. In addition, the informants also used several e-books obtained from the Central Library of the Padang State University and several scientific articles from google scholars. However, during COVID-19 and the new normal, in general, the most frequently used sources are electronic sources obtained via the internet.

3.4 Information Awareness

The next factor that influences the information needs of professionals is awareness or understanding of information sources. Professionals indirectly have knowledge of various sources of information and their perceptions of the information search process. This factor will determine the direction to be taken in the information search process. Awareness or understanding of information sources has the following variables [17]:

a. Level of Trust in Information Sources

The level of trust in the source of information can be seen from the use of the information source which is carried out repeatedly and makes the source of information as a reference material to solve previous problems. From the research findings, the sources of information that are most often used by informants are books published in the country at the Library of the Faculty of Languages and Arts, e-books and scientific articles from Google Scholar because they are valid and clear. These sources succeeded in making an accurate image with proven truth, where the informant compared the data from the information source with data from other information sources. Informants return to using information on the information source they choose at a later time when they need it in response to trust in the source of the information. These sources of information are used every day by the informants. This shows that the informants have become accustomed and succeeded in finding the information needed in the information sources they often use. If based on experience, both personal and other people's experiences, an information source is able to provide relevant information and easy access, the more likely it is that the information source will continue to be used by the user and people in the environment around the user [18].

This is in accordance with what Harris and Dewdney said, that one of the main principles of human information discovery behavior is the tendency to follow habitual patterns [19]. This pattern means that the source of information that is considered to be able to meet a person's information needs, then that person tends to use that information source in the next search process.

b. Packaging

Packaging in Leckie et al. can affect in general, especially when a professional requires information through a special medium or in a specific format [9]. In this study, all informants explained that they more often used information sources that were packaged in an easy-to-use form.

The use of language also influences the selection of information sources used by informants. Informants tend to use Indonesian-language sources of information, but if they do not find information in Indonesian, then the informants use a foreign language, in this case English, to formulate the key words.

c. Punctuality

Informants considered that the availability of information on information sources was considered to be there when needed. The availability of information on existing information sources when needed can facilitate the activities of informants as lecturers. Leckie et al. stated that whether the need is planned or not, if the need is important where the information needed must be obtained immediately or with ease

in getting it at any time [17]. However, the usefulness and usefulness of information will be reduced if the acquisition is too long. In other words, the information must coincide with the information needs.

d. Cost

Efforts in finding information are not only limited to physical and mental efforts, but behind that they must also seek costs to obtain information that is believed by informants to be the right information to support their roles and work duties as lecturers. Informants stated that they did not spend any money to find the information they wanted. This is because the information sought has been met with the sources of information available on the UNP campus. However, sometimes they also search using other channels such as iPusnas/e-resources National Library.

e. Ease of Access

Ease of access in general can be expressed as how easily something can be reached, obtained, and contracted the channel without considering the reliability of the expected quality of information [9]. Accessible sources of information help users find information and reduce the effort (time spent, cost, etc.) in their search for information [17].

In this study, the informants stated that the sources of information used were easily accessible so they were considered easy to use. This shows that informants do not need more effort to get the sources of information they need to fulfill their roles and work tasks. According to Kriclass one of the factors that influence a person to choose a particular source first compared to other sources significantly is the problem of ease of accessing sources [9].

3.5 Output and Feedback

The result of finding information is something that is the main goal of professionals in finding information. Information search results are said to reach the optimal point if the information needs identified by professionals have been achieved and the information can help solve problems in professional roles and tasks [17]. All informants stated that they will selectively select the information obtained, there is no informant who does not want to select information selectively so that in order to obtain optimal information, informants select the information they have obtained. One way for informants to select is by sorting out information that is considered appropriate to support their roles and work duties as lecturers. If one day there is no selection of information, the informant stated that he would still try to process the information obtained so that the information search results were in accordance with their needs. In Lestari's research (2010) it is stated that a complex task requires several information seeking processes, if the information need is satisfied then the task can be completed, but if the information need is not satisfied then the task cannot be completed properly [9]. Therefore, Information and Library Science lecturers select the information they have obtained to obtain optimal results.

It is possible that the information discovery process carried out by Information and Library Science lecturers is not in accordance with their information needs. If informants experience something like this, then they will repeat the process of finding information with different sources of information. The process of repeating this information discovery

is called feedback. According to Kerins (in Lestari, 2010) a complex task generally requires more than one information discovery effort, if one need has not been met, the user will repeat the information discovery process from the beginning or redefine his information needs [17]. As the second round in the information discovery process takes place, the configuration of the factors that come into play may change. As a result, there are 2 (two) possibilities, between successfully finding or not finding what you want. The final results obtained by Information and Library Science lecturers may not be the main information needs. This means, the information obtained is said to have not been maximized so that it still cannot meet its information needs, therefore the informant repeats the process of finding information with different sources of information in order to get maximum results.

4 Conclusion

The roles and tasks carried out by lecturers of the Department of Information and Library Science in order of priority are: as educators, researchers, and community service. Of the three roles, the intensity of seeking information is the highest in the first role, namely as an educator because the process of meeting information needs is carried out every day.

Characteristics of information needs of informants as a whole are based on factors of age, field of specialization, recent education and experience. Based on these factors, it can be concluded that senior informants have more and wider coverage of information needs than junior informants.

The sources of information used by the informants are printed books available at the Library of the Faculty of Languages and Arts. However, if the available information is incomplete or not appropriate, the informant uses the UNP digital library to access e-books and articles on Google Scholar. This step was carried out routinely before Indonesia was hit by the COVID-19 outbreak, but during the outbreak and the new normal era, the majority of informants search behavior using the internet such as accessing collections in digital libraries, Google scholars and even searching through iPusnas and e-resources subscribed by National Library.

In searching these sources, there were also several obstacles encountered by the informants, such as difficulty in creating keywords to find the information they needed. To overcome this, they usually look for reading material and brainstorm with colleagues to increase knowledge related to the information they are looking for.

The use of information sources is based on the level of trust in the information source, the packaging of the information source, the timeliness of the information source, the costs incurred when searching for information, and the ease of accessing the information source. The results are then processed by sorting out the information that is considered the most appropriate.

Lecturers of Information and Library Science also carry out a feedback process if the information they get in the information search process is deemed not to meet their information needs. In the feedback activity, the informant searches for information in different ways, both in terms of the search strategy and from the aspect of the source of information.

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