

A Case Study on the Evaluation of UNY Digital Library Services in Supporting Information Literacy of Students at The Faculty of Sports and Health Sciences, Yogyakarta State University

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ABSTRACT: This study aims to (1) assess the relevance of digital library services to the academic needs of FIKK students; (2) assess the availability and adequacy of resources; (3) analyze the implementation of digital library services; (4) assess the impact of digital library services on improving the information literacy skills of FIKK students. The research method used was a quantitative approach with an evaluative research type. The research population consisted of FIKK UNY students who used digital library services. The sample was selected using random sampling and calculated using the Slovin formula. The research instrument was a questionnaire with a Likert scale that had been tested for validity and reliability. The data were analyzed using descriptive statistics in the form of frequency distribution, percentages, and mean values to describe the utilization of digital library services based on the four components of CIPP. The results of this study indicate that UNY's digital library services have performed very well in all components of the CIPP evaluation. In the context component, a mean of 4.40 was obtained, which is classified as very good. FIKK students assessed that digital library services are very helpful in meeting their academic needs. The input component had a mean of 4.48, which is in the excellent category, reflecting that library staff have adequate competence and that the available digital facilities, including e-journals and internet access, have been able to support students' information search needs. The process component showed a mean of 4.41, indicating that the implementation of digital library services is effective; students can easily access information and obtain assistance as needed. The product component, with a mean of 4.24, indicates an excellent category, but there is still room for improvement to optimize the impact of services on students' information literacy. In conclusion, UNY's digital library services have met the information needs of FIKK students, although strengthening in several aspects is still needed to improve students' information literacy more comprehensively.

KEYWORDS: CIPP model, digital library, evaluation study, information literacy

I. INTRODUCTION

Libraries are units or departments that play an important role in supporting education as a whole. Law of the Republic of Indonesia Number 43 of 2007 explains that libraries are institutions that professionally manage collections of written, printed, and/or recorded works to meet the educational, research, preservation, information, and recreational needs of library users, thus playing a strategic role in supporting student education and learning. Article 3 also states that libraries function as vehicles for education, research, preservation, information, and recreation to improve the intelligence and empowerment of the nation. The functions of libraries as referred to in the law are as storage/deposit centers, educational centers, information centers, research centers, cultural centers, and recreational centers. The importance of the role of libraries in supporting academic and institutional activities has led to the emergence of various types of libraries tailored to the needs of their parent institutions.

Types of libraries have emerged due to diverse information needs, different reader groups, and various available information sources. University libraries have emerged in response to specific information and learning needs to meet information requirements. Regulation of the Head of the National Library of the Republic of Indonesia Number 13 of 2017 concerning National Standards for University Libraries states that a university library is a library under a university, whose main task is to provide, manage, and utilize library collections to support the implementation of the Tri Dharma of Higher Education: education, research, and community service (Indonesia, 2007). These libraries provide access to various information sources, both in print and digital form, designed to meet the academic needs of the academic community, especially students and lecturers.

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The form and role of libraries, which were originally known as physical buildings and printed collections, have evolved into digital forms. This development in role has adapted to the development of information sources, information technology, and the generation of library users. The terms conventional library and digital library emerged alongside the development of information technology and changes in the way people access information. Purwanto and Handayani (2019) state that a conventional library is a library that provides services based on printed collections and physical reading rooms, which acts as a center of literacy and supports academic activities in a traditional form. In agreement with this, Nurhayati et al. (2018) state that conventional libraries emphasize the function of storing and preserving information sources in physical form, such as books and magazines. Collection management is carried out through a detailed structured catalog system to support location-based searches. The service pattern tends to be passive, as users are required to be physically present at the library to access and utilize the available information.

In this process, the role of libraries remains relevant today. According to the International Federation of Library Associations and Institutions (IFLA) (2019), traditional or conventional libraries are still the backbone of library services in many developing countries, especially in areas with limited digital infrastructure. Conventional libraries also play an important role in maintaining the inclusivity of information services. According to the continuum of library services theory (Smith, 2018), conventional and digital libraries are not seen as two separate entities.

replacing, but rather as two ends of the library service spectrum.

A digital library is a library whose collections, whether books, images, sounds, or other media, are stored and accessed in digital form via a computer network or the internet. IFLA (International Federation of Library Associations and Institutions (2020) states that: A digital library is an organization that provides various resources, including professional staff, whose job is to select, organize, provide intellectual access, interpret, distribute, maintain integrity, and ensure the long-term sustainability of digital collections.

Advances in information and communication technology have encouraged the shift from print media to digital formats through the use of computers, the internet, and other digital technologies. Technological advances have made it easier to manage, store, and search for information more quickly and efficiently. The demand for broad access to information has also been a driving force, especially for students, lecturers, and researchers who need information anytime and anywhere without space and time limitations.

Yogyakarta State University (UNY) has responded to the developments of the digital era by introducing innovations to support the learning process. One such effort is the development of a Digital Library and E-Learning as part of the 7 in 1 project. This transformation has received continuous support through the procurement of various digital resources, such as subscriptions to reputable international journals (Scopus), e-books, and anti-plagiarism software such as Turnitin, which demonstrates a strong commitment to improving the quality of information services. Initial observations at the UNY Library show a gap between the potential of digital services and their utilization by students of the Faculty of Sports Science and Health (FIKK). Although the digital collection and infrastructure are adequate, some students have not optimized their use due to limited understanding of how to access and evaluate digital information.

Based on this, a study entitled "Evaluation Study of UNY Digital Library Services in Supporting Information Literacy of Students at the Faculty of Sports and Health Sciences, Yogyakarta State University" was conducted to identify the effectiveness of services, find obstacles encountered, and provide recommendations for improvement through the CIPP evaluation model approach. Sukarjono's (2023) research states that information literacy is an important key for students in facing academic and professional challenges in the digital era. The results of the study show that a number of students still experience obstacles in accessing and utilizing various information sources provided by the library, due to low levels of information literacy. Sukarjono also stated that libraries have a strategic role in developing students' information literacy and research skills.

The above research results indicate an urgent need to evaluate the effectiveness of library services, including available digital library services. This evaluation is important to ensure that all facilities and services provided are truly able to meet the needs of users, especially students.

Students of the Faculty of Sports Science and Health (FIKK) at Yogyakarta State University have distinctive academic activities, namely more field practice activities such as sports, fitness training, and observations related to sports and public health. As a result, access to print-based information sources is less than optimal for most FIKK students. This can also be seen from the low number of visits by FIKK students to the physical library, as reported by Sukarjono (2023) in the UNY library visitor data.

The UNY Library has provided digital library services to expand access to online information sources. These services include e-books, electronic journals, institutional repositories, and an information retrieval system that can be accessed anytime and anywhere.

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In this context, digital libraries not only function as providers of information sources but also play a strategic role as facilitators in improving students' information literacy. This study aims to evaluate digital library services in supporting the information literacy of FIKK UNY students. This role requires adequate input, both in terms of competent librarian human resources, adequate information technology infrastructure, relevant digital collections, and the promotion and information literacy strategies that have been implemented by the library.

The product or outcome of digital library services is related to improving the information literacy of FIKK UNY students. Information literacy includes students' ability to find, evaluate, and use information effectively and ethically. The results of this evaluation are expected to provide an objective picture of the effectiveness of the services that have been running and serve as a basis for future service improvements.

Research using the CIPP (Context, Input, Process, Product) evaluation model is expected to provide a comprehensive assessment of digital library services at FIKK UNY and contribute to the development of information services that are more adaptive and responsive to student needs.

II. MATERIAL AND METHODS

Type of Research

The type of research used is evaluative research using the Context, Input, Process, Product (CIPP) model, which aims to assess digital library services in supporting information literacy among FIKK UNY students. The CIPP evaluation model developed by Stufflebeam (1983) is used to provide a comprehensive framework for evaluating programs.

Research Time and Place

The research was conducted at Yogyakarta State University, specifically at the Faculty of Sports Science (FIKK). Data collection took place over a period of 3 months, from September to November 2025.

Research Target/Subject

The research population consisted of FIKK students who were users of the Yogyakarta State University digital library service. The research population included FIKK students from the 2022 to 2025 cohorts.

Table 1. FIKK Student Population for the 2022 to 2025 Cohorts

No	Program Studi	Angkatan			
		2022	2023	2024	2025
1	Pendidikan Jasmani, Kesehatan, dan Rekreasi - S1	247	296	300	325
2	Pendidikan Kepelatihan Olahraga - S1	182	229	213	203
3	Ilmu Keolahragaan - S1	114	143	130	142
4	Pendidikan Jasmani Sekolah Dasar - S1	168	191	120	125
5	Pendidikan Jasmani Sekolah Dasar - S2	21	12	24	12
6	Ilmu Keolahragaan - S2	62	29	29	35
7	Pendidikan Kepelatihan Olahraga - S2	22	20	24	27
8	Pendidikan Jasmani - S2	36	32	33	39
9	Ilmu Keolahragaan - S3	25	20	22	26
10	Pendidikan Jasmani - S3	22	21	12	26
11	Pendidikan Kepelatihan Olah Raga - S3	8	17	9	8
12	Pendidikan Jasmani Sekolah Dasar - S3	0	13	12	4
Jumlah		907	1023	928	972
Total Jumlah Keseluruhan		3830			

Table 1. FIKK Student Population from 2022 to 2025 This study used random sampling techniques to determine the research sample so that the data obtained would be more specific and representative. The results of the study can reflect the overall condition of the population because bias can be minimized. The sample requirements used in this study were determined based on certain criteria according to the needs of the study.

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Table 2. Research Sample for FIKK UNY Students

Sampel/ Subyek	Kriteria	Jumlah (Orang)
Admin Perpustakaan Digital	Telah bekerja di perpustakaan digital UNY	3
	Pekerja Tetap/ Bukan Magang	
	Domisili Yogyakarta	
Mahasiswa	Mahasiswa FIKK	200
	Mahasiswa FIKK yang terdaftar di layanan perpustakaan digital UNY	
	Merupakan mahasiswa yang aktif (bukan cuti, alumni, <i>drop out</i>)	

Research Instruments

The main instrument in the quantitative research approach to CIPP evaluation is a closed-ended questionnaire based on the Likert scale. The instrument can be divided according to the CIPP components in the following table:

Table 3. Research Instrument Grid Questionnaire for FIKK UNY Students

No.	Komponen Evaluasi	Indikator	Butir Soal	
			Positif	Negatif
I.	Context			
1	Kebutuhan mahasiswa terhadap layanan digital	Kebutuhan akses informasi akademik secara digital Relevansi layanan digital dengan kebutuhan kuliah		
2	Tujuan penggunaan perpustakaan digital	Tujuan mahasiswa menggunakan layanan digital (tugas, skripsi)		
II.	Input			
1	Ketersediaan sarana dan prasarana digital	Ketersediaan akses internet, komputer, dan aplikasi digital		
2	Kompetensi pustakawan dalam layanan digital	Kemampuan pustakawan dalam membantu akses informasi digital		
3	Kualitas konten digital (e-journal, e-book, dll.)	Relevansi dan kemutakhiran sumber digital		
III	Process			
1	Pemanfaatan layanan digital	Frekuensi mahasiswa mengakses layanan digital		
2	Kemudahan penggunaan layanan digital	Navigasi, tampilan, dan akses ke sumber informasi		
3	Interaksi dan bantuan teknis	Respon pustakawan atau layanan teknis saat dibutuhkan		
IV	Product			
1	Dampak layanan digital terhadap literasi informasi	Kemampuan mencari, mengevaluasi, dan menggunakan informasi		
2	Peningkatan efektivitas studi	Efektivitas layanan digital dalam menunjang tugas akademik		
3	Kepuasan mahasiswa terhadap layanan digital	Tingkat kepuasan secara umum terhadap perpustakaan digital		

Table 4. Guidelines for Observation and Documentation of Digital Library Service Evaluation

No.	Aspek yang diamati	Indikator	Keterangan		
			Ada	Tidak	Jumlah
1	Ketersediaan Koleksi Digital	Koleksi e-book/jurnal mudah diakses Koleksi TAS, Lapen, TDS mudah diakses			
2	Kemudahan Akses	Mahasiswa dapat login tanpa terkendala			

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3	Pemanfaatan Tutorial / Panduan	Ada Panduan Access di WEB atau bantuan pustakawan			
4	Aktifasi Pencarian Informasi	Mahasiswa aktif menggunakan fitur pencarian			
5	Pemanfaatan Knsultasi online	Mahasiswa memanfaatkan konsultasi pustakawan			
6	Pengunduhan / peminjaman / baca online	Mahasiswa berhasil pinjam dan baca koleksi digital			
7	Peningkatan Literasi Informasi	Mahasiswa menunjukkan peningkatan kemampuan evaluasi informasi			

Validity and Reliability

Validity testing was conducted using two approaches, namely content validity and construct validity. Content validity was obtained through expert judgment, which examined the suitability of the questions with the research indicators. Meanwhile, construct validity was tested using item-total correlation analysis with the Pearson Product Moment technique to see the extent to which each question was significantly related to the total score of the instrument.

The research instrument is considered reliable if it is used to provide accurate and precise information that does not differ or deviate from reality, so that the formula for measuring reliability in the instrument is the reliability test using Cronbach's Alpha method. The reliability test in this study was conducted using the Cronbach's Alpha technique, with an $\alpha \geq 0.70$ value criterion, indicating that the research instrument has a reliable level of internal consistency.

Data Collection Techniques

The CIPP (Context, Input, Process, Product) model evaluation research used a quantitative approach, with the following data collection techniques:

a. Closed Questionnaires

Questionnaires were given to respondents (FIKK UNY students) to obtain data on their perceptions, experiences, and assessments of digital library services. The questionnaire questions used a Likert scale (e.g., 1 = strongly disagree to 5 = strongly agree) to facilitate quantification.

b. Documentation

Collecting secondary data related to the number of digital collections, service usage data, available infrastructure, and library annual reports. This data was used to support the questionnaire results.

Data Analysis Techniques

Quantitative data analysis using the CIPP model was carried out with the following steps:

1. Initial Data Processing

The initial stage of data analysis began with editing, which involved checking the completeness and consistency of the respondents' answers on the collected questionnaires. This step was carried out to ensure that there was no missing, duplicate, or incorrect data. The next step is coding, which involves assigning a numerical code to each respondent's answer based on the Likert scale used, for example, a score of 1 for a strongly disagree answer to a score of 5 for a strongly agree answer. The next stage is tabulating, which involves entering the coded data into a table to facilitate the analysis process, either manually or with the help of data processing software such as Microsoft Excel or SPSS.

2. Quantitative Descriptive Analysis

After the data has been collected and tabulated, the next step is to perform descriptive statistical analysis by calculating the mean score, percentage, and standard deviation for each indicator in each CIPP component. The results of these calculations are then interpreted based on assessment categories, namely an average score of 4.21–5.00 is categorized as very good, 3.41–4.20 as good, 2.61–3.40 as fair, 1.81–2.60 as poor, and 1.00–1.80 as very poor. This analysis was conducted separately for each component of Context, Input, Process, and Product, so that the strengths and weaknesses of the evaluated digital library services could be identified.

3. Gap/conformity analysis (optional)

This analysis was conducted by calculating the difference between the scores expected by respondents and the scores obtained from the actual assessment results, using the formula: Gap = Expected Score – Obtained Score. A negative gap value indicates that the available services have not met user expectations, while a positive gap value indicates that the services have exceeded user

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expectations. Through this gap analysis, researchers can identify areas that need improvement and determine priorities for improving digital library services.

4. Interpretation & Conclusion,

The results of the data analysis are presented separately for each component of Context, Input, Process, and Product in accordance with the CIPP evaluation model. The results are presented in the form of tables, bar charts, or radar charts so that comparisons between components can be clearly seen. This data visualization facilitates the identification of service aspects that are performing well and those that require more attention. Based on these results, the researcher then draws conclusions regarding the utilization of the UNY Library's digital library services in improving the information literacy of FIKK students and determines specific areas that require improvement or further development.

III. RESULTS AND DISCUSSION

1. Sample Description

This study was conducted to determine whether digital library services meet the literacy needs of FIKK UNY students, to find out whether the digital collections provided by the library support student information literacy, to provide an overview of the services that have been provided, particularly in terms of information access, and to determine the impact of digital library services on improving students' ability to access and evaluate digital information effectively through CIPP. The sample obtained through random sampling consisted of 143 samples, comprising 61 samples from the IKOR department, 25 samples from PJKR, 39 samples from PJSD, and 18 samples from PKO. The following is a descriptive statistical table of the frequency of departmental samples from the FIKK student population who use the library's digital facilities.

Table 5. Number of Students from the FIKK Department

Departemen	Frekuensi	Persentase
IKOR	61	42.70 %
PJKR	25	17.50 %
PJSD	39	27.30 %
PKO	18	12.60 %
Total	143	100.10 %

Based on the educational level of FIKK students, the author obtained 98 samples from undergraduate students, 28 samples from master's students, and 17 samples from doctoral students. The following is a descriptive statistical table of the educational level samples of FIKK students:

Table 6. Descriptive Table of FIKK Student Levels

Jenjang	Frekuensi	Persentase
S1	98	68.50%
S2	28	19.60%
S3	17	11.90%
Total	143	100.00%

After describing the sample obtained from the population, the researcher validated the instrument by analyzing each item in the questionnaire. Construct validity was assessed using item-total correlation analysis with Pearson product moment to determine the significant relationship between each statement item and the total score of the instrument.

2. Instrument Validity

Construct validity was tested using item-total correlation analysis with the Pearson Product Moment technique to see the extent to which each item had a significant relationship with the total score of the instrument. The following are the results of the instrument validation.

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<i>Context</i>			
Item	r-hitung	Sig (2 tailed)	Keterangan
1	0.88	0.000	Valid
2	0.93	0.000	Valid
3	0.92	0.000	Valid
4	0.82	0.000	Valid
5	0.82	0.000	Valid
6	0.79	0.000	Valid
<i>Input</i>			
Item	r-hitung	Sig (2 tailed)	Keterangan
7	0.79	0.000	Valid
8	0.93	0.000	Valid
9	0.92	0.000	Valid
10	0.90	0.000	Valid
11	0.92	0.000	Valid
12	0.93	0.000	Valid
13	0.75	0.000	Valid
14	0.87	0.000	Valid
15	0.87	0.000	Valid
<i>Process</i>			
Item	r-hitung	Sig (2 tailed)	Keterangan
16	0.89	0.000	Valid
17	0.94	0.000	Valid
18	0.88	0.000	Valid
19	0.90	0.000	Valid
20	0.89	0.000	Valid
<i>Product</i>			
Item	r-hitung	Sig 2 tailed	Keterangan
21	0.82	0.000	Valid
22	0.83	0.000	Valid
23	0.84	0.000	Valid
24	0.83	0.000	Valid
25	0.87	0.000	Valid
26	0.90	0.000	Valid
27	0.85	0.000	Valid

It is known that all instruments are considered valid because all statement items, where the test results show that all items in the Context, Input, Process, and Product components have a calculated $r >$ table r and a significant value of less than 0.05, so all items are declared valid. Therefore, it can be stated that all statements are suitable for use as data collection instruments.

3. Reliability

The reliability test of the instrument was conducted using Cronbach's Alpha method with a criterion value of $\alpha \geq 0.70$. The following are the results of Cronbach's Alpha from the instrument:

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Table 8. Reliability Test

No	Item	Cronbch's Alpha	Keterangan
1	Context	0.93	Reliabel
2	Input	0.96	Reliabel
3	Process	0.94	Reliabel
4	Product	0.93	Reliabel

Based on the reliability test results, all variables in the CIPP evaluation model—Context ($\alpha = 0.93$), Input ($\alpha = 0.96$), Process ($\alpha = 0.94$), and Product ($\alpha = 0.93$)—have a Cronbach's Alpha value above 0.90. This indicates that the instrument used has very high internal consistency and is reliable for evaluating digital library services. Thus, all items in the research instrument are deemed suitable for use in data collection.

4. Quantitative Descriptive Analysis

After the data was collected and tabulated, the next step was to calculate the mean score and standard deviation for each indicator in each CIPP component. The following are the results of the descriptive statistical analysis per component:

Table 9. Descriptive Statistical Results per Component

Item	Mean	Std. Deviation	Keterangan
Context	4.40	0.71	Very Good
Input	4.48	0.73	Very Good
Process	4.41	0.77	Very Good
Product	4.24	0.68	Very Good

Overall, all components of the CIPP evaluation, Context (4.40), Input (4.48), Process (4.41), and Product (4.24) are in the Excellent category. These findings indicate that digital library services have been running very effectively, from planning, resource availability, implementation process, to the impact felt by students. After obtaining the descriptive statistics for each component, the researcher calculated the indicators for each CIPP component. The following are the results of the descriptive statistical analysis of the indicators for each CIPP component:

Table 10. Results of Descriptive Statistical Analysis of Indicators for each CIPP Component

Item	Indikator	Mean	Std. Deviation	Keterangan
Context	Kebutuhan	4.60	0.80	Very Good
	Relevansi	4.21	0.70	Very Good
Input	SDM	4.51	0.78	Very Good
	Fasilitas	4.45	0.71	Very Good
Process	Proses Layanan	4.41	0.77	Very Good
Product	Efektifitas	4.31	0.73	Very Good
	Dampak	4.20	0.70	Good

Overall, the analysis results show that all indicators in the CIPP component received a Very Good rating, except for the impact indicator, which received a Good rating. This indicates that the digital library service has been designed and implemented effectively in terms of needs, relevance, human resource readiness, facilities, and service implementation.

5. Interpretation of the CIPP Model

a. Context

Digital libraries have become an important component in supporting academic activities in higher education. At UNY, digital library services are designed to meet the information needs of students, especially those in FIKK. The mean of 4.40 is in the Excellent category, indicating that the program context, which includes student needs, user characteristics, and the relevance of service objectives, has been very well fulfilled. SD 0.71 shows that the respondents' perceptions are fairly uniform. This finding indicates that the digital library service program has been developed based on the real needs of students and is in line with the vision and

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mission of the institution. The suitability of the context reflects careful planning and responsiveness to user needs. In addition, the context includes indicators such as needs and relevance.

1) Needs

The mean of 4.60 is in the Very Good category, indicating that the digital library service is very suitable for student needs. This value is one of the highest, illustrating that students feel their academic information needs are well facilitated. The standard deviation of 0.80 shows moderate variation in perception, but the majority of respondents still rate this indicator very positively.

2) Relevance

The mean of 4.21 is also in the Very Good category, although it is the lowest score in the Context component. This shows that the objectives, content, and direction of digital library services are relevant to students' academic needs, but there is still room for improvement. The SD of 0.70 indicates that respondents' perceptions are fairly uniform.

Students need quick and easy access to various reference sources relevant to their studies. UNY's digital library service provides access to journals, e-books, and databases necessary to support learning and research. In a dynamic academic world, speed in finding the right information is crucial. Effective digital services enable students to search for information more efficiently, saving time and increasing academic productivity.

The evaluation results show that the Context component provides a strong foundation for planning digital library services, which is in line with research conducted by Muduli et al. (2025) on the importance of having digital services in libraries to improve library quality and provide digital-based services. It can be concluded that digital services have been designed based on in-depth user needs analysis and are in line with the academic vision and mission of the campus. However, it is important to note that although the Needs indicator shows very positive results, the Relevance indicator shows signs of needing improvement. Kumar (2024) states that relevance, if built with a technology strategy, can transform ordinary libraries into digital library centers. Program innovation is needed to improve relevance.

b. Input

A mean value of 4.48 indicates that the Input aspect was rated as Very Good by respondents. Input includes resource readiness, facilities, service procedures, and digital service management strategies. The highest mean value indicates that students consider the Input component to be the strongest aspect of digital library services. A standard deviation of 0.73 indicates a relatively moderate variation in respondents' answers, which means that most respondents have similar perceptions of the quality of Input. These results indicate that the resources, facilities, and service mechanisms provided by the digital library are running according to standards and meeting student needs. The readiness of the Input element contributes significantly to the overall effectiveness of the digital service program. The following are indicators of Input, namely human resources and facilities.

1) Human Resources

The mean of 4.51 is in the Very Good category, indicating that the competence of digital library staff, their responsibility, and the support they provide are considered very satisfactory. SD 0.78 indicates moderate variation in responses.

2) Facilities

The mean of 4.45 is in the Very Good category, indicating that digital facilities such as e-journal access, repositories, e-libraries, internet networks, and supporting platforms are considered very adequate. SD 0.71 indicates a fairly consistent perception.

Based on the evaluation results, the Input component shows that the readiness of human resources (HR) and facilities is in very good condition. The strength of this Input component is very important because it forms a solid operational foundation for the success of digital library services. The HR indicator shows that digital library staff are considered competent, responsive, and able to provide support in line with student needs. This describes that existing HR has adequate skills and knowledge to assist students in searching for and accessing information (Vieno et al., 2022).

HR competence is an important aspect that directly affects user satisfaction. When library staff can provide good service and help students overcome challenges in finding information, students will feel more satisfied and assisted in the learning process (Rodrigues & Mandrekar, 2020). Good facilities support students in improving their information literacy skills, which in turn has a positive impact on the learning process (William et al., 2025).

c. Process

The mean of 4.41 indicates the category of Very Good, which means that the service implementation process—including ease of access, assistance, digital literacy guidance, and the use of digital collections—is considered very effective. The SD of 0.77 is the highest, indicating that the respondents' perceptions vary slightly more than the other components.

These results illustrate that service implementation is optimal, from system access and service interaction to information literacy assistance. The variation in responses shows that although the majority are satisfied, there are still a small number of users who

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have had different experiences, so implementation aspects still need to be monitored. The following are indicators of the process component:

1) Service Process

The mean of 4.41 is in the Very Good category, indicating that service implementation—including Ease of system access, guidance on usage, staff response, and service flow were assessed as effective and user-friendly. SD 0.77 indicates a slightly higher variation in perception than other indicators, meaning that some students may have had different service experiences.

The process shows that the implementation of digital library services is effective. However, the service process shows that some students experience differences in service quality. This is normal, especially in digital systems that rely on network stability or platform speed (Knudsen et al., 2021).

These findings confirm that the service implementation process has been optimal, but consistency still needs to be strengthened so that the experience of each user is more uniform. A good service process is very important because it is the bridge between input readiness and the final outcome of the program (Kadam & Deshmukh, 2023).

d. Product

The mean of 4.24 falls into the Very Good category, although it is the lowest mean among the four variables. This indicates that the results or impact of the service—such as improved information literacy, effectiveness of digital information searches, and confidence in using digital facilities—are rated as very good but still have room for improvement. The SD of 0.68 indicates that the respondents' answers are fairly homogeneous. Although rated as very good, these results indicate that the impact of the service on improving students' digital competence can still be enhanced through additional training, diversification of digital collections, or improvement of user experience. However, in general, the service has provided significant benefits to students.

1) Effectiveness

The mean of 4.31 is in the Very Good category, indicating that digital services have proven to be effective in improving students' effectiveness in obtaining academic information.

2) Impact

The mean of 4.20 is in the Good category. This is the only indicator that has not reached the “Very Good” category. This means that digital services have a positive impact, but the improvement is not yet optimal. There is still room for improvement in terms of long-term benefits and changes in student abilities. SD 0.70 indicates a uniform perception.

The Product evaluation results show that it is in the Very Good category. However, the value in the research results shows the lowest value among the other components. This shows that even though the digital services provided by the UNY library are effective, the long-term impact of these services can still be improved. Further observation of the Product Component shows that students may still face some obstacles in optimizing the use of digital services. This could be due to a lack of understanding of the available features or a lack of promotion of the services offered (Muthusamy et al., 2023). This reflects that students have been assisted in the process of searching for academic information and literature relevant to their studies (Mahlangu, 2020).

However, it is important to consider that effectiveness is not only seen from the ability of students to use the services, but also from how often students use these services and how students integrate the information obtained into their academic activities. Therefore, there needs to be further assessment of the frequency of use and the long-term impact of using these services. Meanwhile, the Impact indicator shows that the contribution of digital library services to improving students' information literacy skills is still not optimal. More in-depth training can help students understand and use information more effectively, as well as improve students' ability to evaluate existing information sources (Blyznyuk & Kachak, 2024).

IV. CONCLUSIONS

Based on the results of the evaluation using the CIPP (Context, Input, Process, Product) model, it can be concluded that UNY's digital library services are in the excellent category and are running effectively, although there are still several aspects that need to be strengthened to improve overall quality.

1. The context evaluation shows that digital library services are very suitable for the needs of FIKK students. The high average score indicates that the program has been designed based on a strong analysis of user needs and is in line with the vision and goals of the institution. However, the aspect of relevance needs to be improved through service innovation and content alignment with curriculum developments.

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2. The Input component shows the readiness and competence of human resources, as well as highly adequate digital facilities. Library staff are considered professional and responsive, while facilities such as repositories, e-journals, and internet networks support unhindered access to information. This creates a strong operational foundation for the success of digital services.
3. The implementation of digital services is running well, as indicated by clear service flows, access speed, and technical assistance from staff. However, there is some variation in user experience due to technical factors such as network stability, so service consistency still needs to be strengthened. Overall, the service process is effective and supports the program's objectives.
4. Service outcomes (products) are in the excellent category, but are the lowest score compared to other components. This indicates that the long-term impact of the service on students' information literacy skills is not yet fully optimal. Students need more socialization, training in the use of digital features, and the development of more relevant content so that the benefits of the service can be maximized.

RECOMMENDATIONS

Recommendations from the study include:

1. Data normality tests were not conducted because this evaluation study used descriptive quantitative analysis.
2. Program evaluation studies using the CIPP model emphasize the description of program effectiveness rather than testing the relationship between variables. Therefore, normality tests, homogeneity tests, and other classical assumption tests are not necessary in this study.

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