

Mapping Resource Allocation Patterns: An Exploration of Subscription-Based Online Resources of Selected Philippine State Universities and Colleges

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Abstract

As higher education evolves, academic libraries in Philippine state universities and colleges (SUCs) face increasing demands to provide online resources and services that support new academic programs and information needs. This study examines how Philippine SUCs allocate and share subscription-based resources, using Wang and Chan's (2011) Theory of Instinctive Information Sharing as a theoretical framework. A needs analysis was conducted using data on the population and academic programs of the SUCs; subscription patterns and resource needs for their online subscriptions; and the utilization of identified library resources and services. Data were collected through a survey administered using Google Forms. Findings indicate that academic libraries have adapted to information and communication technologies and have included subscription-based online resources in their collections to support the information needs of their stakeholders. The study underscored that SUCs should (1) prioritize subscriptions relevant to the institution's needs, (2) encourage collaborative initiatives for resource sharing, (3) secure additional funding from government agencies, and (4) increase patron familiarity with available resources through training and awareness programs.

Keywords: Academic libraries; Electronic resource management; Higher education institutions; Resource allocation; State universities and colleges; Subscription-based online resources.

INTRODUCTION

Libraries play a critical role in supporting education through instruction and research, particularly in access to appropriate resources and services. This is paramount to the success of educational institutions. As such, libraries play a vital role in supporting and fostering education, research (Ullah & Usman, 2023), and the entire learning experience of students and faculty in state universities and colleges (SUCs). As higher education evolves and diversifies, the need for curated resources and services increases, and libraries need to adapt to changing paradigms and factors such as adequate information and communication technologies (Mubofu

& Chaula, 2023); sufficient financial resources (Kasim et al., 2023); formal agreements and written rules and legislation (Barretto & Dessai, 2021), among others, are considered essential in the design, implementation, and evaluation of such resources.

Academic libraries in higher education serve as foundations for learning and research, functioning not only as custodians of resources but also as dynamic institutions that nurture information literacy. SUCs are also instrumental in cultivating an environment where resource sharing is not only practiced but also optimized to enhance the learning experience of academic communities. Recognizing this inherent nature of library functions and services, academic libraries rally on

providing resources demanded by a specific community of higher education institutions, as espoused in the concept of Library 5.0, which emphasizes user-centered, technology-driven, and collaborative library services. Building on this assertion, library services and funding models may need to be reviewed and revisited to accommodate evolving resource demands and collaborative initiatives. It should also be noted that an encompassing, unified policy should be put in place.

Amid this unprecedented shift, SUCs are witnessing changes in resource allocation, driven by the ever-changing needs and diversity of academic programs and scholarly disciplines, the provision of online resources, and the attention of library staff. Charting the online resources that SUCs have subscribed to could be a key indicator in evaluating their capacity to efficiently provide academic support for research initiatives compared to their contemporaries within the Southeast Asian region or beyond. While some programs may well be supported, others remain underserved, indicating gaps in existing online resource subscriptions that call for closer examination. Mapping subscription patterns can indicate how effectively libraries support teaching and research functions.

As a pragmatic solution and to supplement inadequate information resources, libraries opted to share assets through formally established consortia and partnerships, which, for the most part, are in proximity to one another or whose respective stakeholders share similar information needs. For instance, the Mendiola Consortium exemplifies how institutions collaborate to expand access to information resources among their academic communities. Regardless of the resource-sharing procedures employed or the clarity of economic arrangements, participating institutions have collectively agreed to extend access to information, albeit within formal or legal frameworks. However, the feasibility of implementing such initiatives on a broader national, geographic, and academic scale among SUCs remains an open question.

Despite these developments, empirical understanding remains limited of how online resource subscriptions align with academic program needs and how publisher-curated collections influence resource utilization across the SUCs. To better understand institutional readiness for resource sharing, this study employs a needs assessment survey to examine SUCs' existing subscriptions, resource needs, and collection gaps. It further analyzes institutional profiles in terms of student population and academic programs, evaluates existing subscription patterns and identified resource needs, and assesses the utilization of library services and online

resources. By doing so, the study provides an empirical basis for understanding how resource allocation aligns with institutional demands and informs strategies for resource sharing and collaborative collection development.

LITERATURE REVIEW

Academic Libraries as a Cornucopia of Online Resources

Libraries are crucial in shaping the journey of students and faculty in higher education. They serve as repositories of knowledge by offering books, journals, databases, and digital materials to support learning, teaching, and research. Libraries empower students and educators by acquiring and curating information sources to address the needs of the academe. As research hubs, libraries offer access to relevant information sources that help users explore and keep current with developments in their respective fields and engage in critical thinking (Ullah & Usman, 2023). As patrons' information needs change over time, academic libraries must track Web information resources to provide the information-seeking community with the authoritative data they need.

Preference Towards Subscription-based Online Resources

Ankrah and Atuase (2018) emphasized the importance of academic libraries adapting to the changes brought about by information and communication technologies to meet the sophisticated information needs of library users. Specifically, both authors found that postgraduate students preferred Google and other web-based databases over library online subscriptions. Compared to free Web resources, information in subscription-based online resources has undergone the rigors of publishing to ensure authority and accuracy. This includes reviewing and evaluating information sources so that incorrect material is nonexistent. Another benefit of subscription-based online resources is providing the option to utilize peer-reviewed materials, giving students accurate and authoritative information. Thus, subscription-based online resources are more reliable than the online sources found over the internet (Bell, 2007).

Following the advent of the Web, the internet has become the most readily available and widely used electronic resource among the faculty and students alike. In a survey, Oladiran and Tolulope (2019) noted that 121 students (42.3%) agreed that the internet is very helpful for accessing online databases and electronic journals. These numbers indicate a preference for online

resources. In this context, online resources are treated as electronic representations of information, including e-books, e-journals, online databases, the OPAC, digital libraries, CD-ROMs, online journal magazines, and e-learning tutors and tests. Given the dependence on the internet for information sources, mandatory utilization of subscribed online resources should be considered and supported by awareness campaigns on their availability, training on using these resources, and addressing power-outage concerns (Adeleke & Nwalo, 2017). Accordingly, perceived relevance also affects usage (Bentil et al., 2022). Mawere and Sai (2018) attributed this to the lack of proficiency in technological innovations, but training on appropriate search strategies can bridge this gap (Abogdera, 2022). This proficiency is attributed to students' belief that they are well equipped with the competencies in using online resources, but research found otherwise (Dukić & Striškić, 2015). Nonetheless, awareness is crucial to an increased patronage of these types of resources (Ankamah et al., 2024). Among others, libraries often enlist in a consortium to boost their capacity and expand library services at a reduced cost since participating institutions commit to an agreed or equal share in paying for the total amount needed to gain access to a specific collection, especially when the level of study of the students and use of online library resources are significantly related (Quadri, 2013).

Significance of a Library Consortium

As they become increasingly automated, libraries seek ways to collaborate and share resources. The adoption of technology has greatly empowered libraries to manage more resources. However, recurring economic, political, cultural, and social factors prevent libraries from functioning as they are expected. Under these circumstances, academic libraries would greatly benefit from resource sharing initiatives. This avenue for library cooperation not only enhances efficiency but also instills a sense of community among libraries, allowing better services and expanded access to information. Understanding resource sharing, recognizing the role of libraries, and acknowledging that no library is sufficient or self-sustaining ensures that bibliographic information, databases, catalogs, and more can be retrieved through sharing (Mubofu & Chaula, 2023).

In this context, other libraries continue to rely on their contemporaries for information due to limited resources. To address this gap, Chisita (2016) proposed a model on library consortia to widen access to resources. Users' demands and expectations, budget cuts, the cost of library materials (including electronic journals), and the rising cost of information resources

should be addressed. Accordingly, membership in library consortia entails navigating the intricacies of resource sharing, as Kasim and colleagues (2023) discuss. Barretto and Dessai (2021), discussing resource sharing, clarified that there is much to gain from implementing resource-sharing initiatives.

Although difficulties and challenges are bound to surface, planning and implementation are key, as are the stakeholders' acceptance of the terms and conditions for onboarding subscription-based online resources. Regarding electronic resource collection development, Tran and Guo (2021) note that academic libraries have expanded their collection portfolios to include e-book chapters, where users can search and print specific portions of a material the same way they do with e-journals, at their convenience. In the face of this development, academic libraries continue to work with shrinking budgets. To improve resource-sharing initiatives among academic libraries, best practices and pragmatic perspectives gained from work experience are expected to result in evidence-based decision-making.

Based on the authors' shared experiences acquiring subscription-based online resources, libraries often move through four stages. The first stage, which primarily deals with awareness of resources, seeks to gather information about the subscription-based online resource, such as its scope and expected benefits. Consequently, the second stage involves an initial assessment and evaluation, where decision-making information and feedback are critical. Publishers can provide temporary access to their subscription-based online resources through trial periods, enabling library patrons to gain first-hand knowledge of the resource's features, interface, and benefits.

After the library and its stakeholders have made an informed decision through dialogue on which subscription-based online resource to acquire, the library can initiate the third stage: negotiation. Like the second stage, this phase focuses on dialogue to discuss access, user training, technical support, and how to maximize the resource for the university. However, it occurs between the library and the publisher. Lastly, the fourth stage encompasses payment and the process of onboarding the resource in the library. In this stage, information on the license, budget changes, recurring costs, notification to the requestor, and the subscription's renewal date is important. These stages alone show the complexities of fully implementing subscription-based online resources in any given library.

Related literature suggests gathering evidence before adopting subscription-based online resources, citing

that a user needs analysis, along with research evidence, local evidence, and professional knowledge, should be employed to fit the locale (Mustafa & Abdullah, 2022). The collective scope and coverage of a library consortium or resource-sharing initiative vary depending on the institutional preferences of the participating libraries. This context provides an opportunity to examine a frame of reference wherein a distinct academic library shares its subscription-based online resources with multiple partner libraries. Expanding on this position, it is necessary to understand the determinants that prompt a library to share its resources with others.

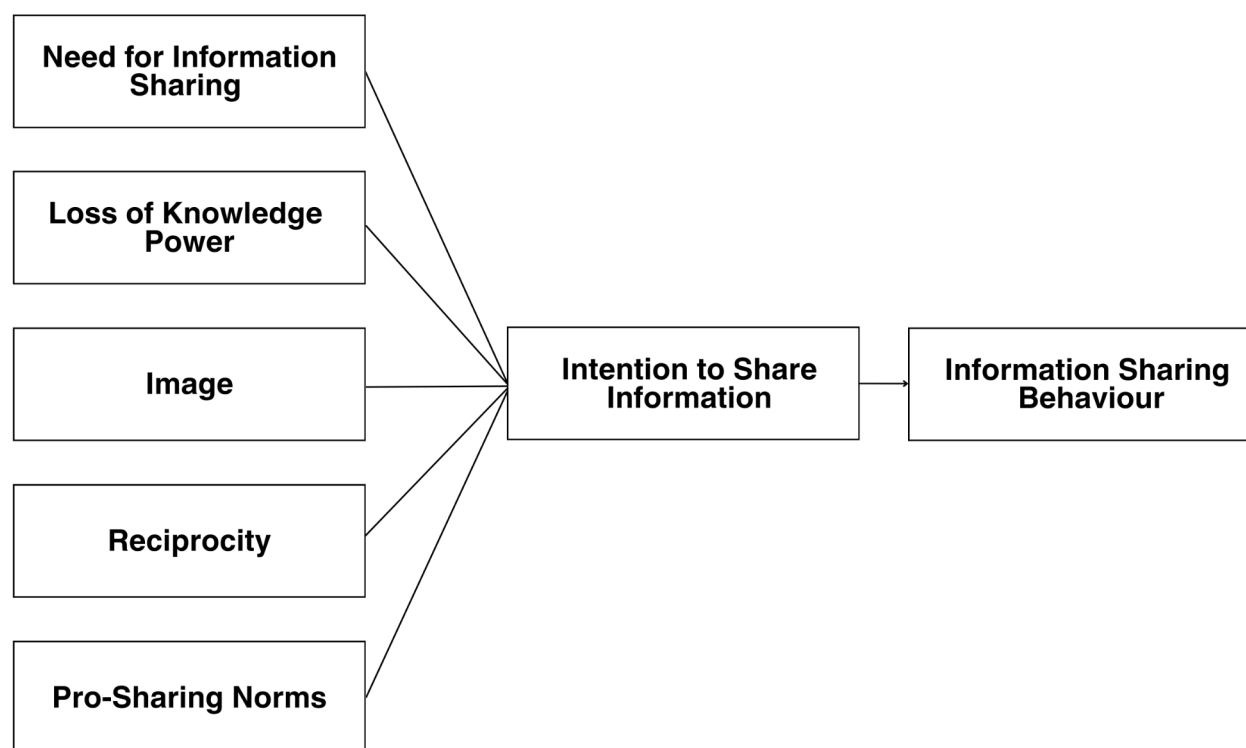
Theory of Instinctive Information Sharing

In clinical psychology, biology, and communication, human beings are literally and figuratively programmed to share information (Baek et al., 2017; Barasch, 2020; Vellani et al., 2024). Consistent with this predisposition, observed patterns of human action show varying information-sharing behaviors across social and cultural contexts. Wang and Chan (2011) presented a model that reflects a person's natural inclination to share information through elements such as the need for information sharing, loss of knowledge power, image, reciprocity, and pro-sharing norms.

Although these assertions pertain specifically to individual human behavior, this study suggests that libraries, as organizations, may display similar patterns in information sharing as an extension of human behavior (Jones, 2007; Lansdale, 1988). Since the word information in the literature and model has been used without strict regard for semantics, common library resources, regardless of their format, can be treated as carriers and media of information. For example, sharing its resources can improve a library's reputation among other libraries and educational institutions. The need for information sharing, on the other hand, can be construed as part of a library's mandate, obligation, and institutional values to lend or provide access to its resources between libraries that seek much-needed support from their contemporaries.

In contrast to the two previously mentioned elements, loss of knowledge power is perceived as a negative outcome, as it would require the donor library to distribute resources to recipients, which could otherwise remain solely available to it. Resources, once shared, reduce the essence or idea of exclusivity, prompting libraries to rethink decisions about resource sharing. Pro-sharing norms may constitute imagined or realized resource-sharing protocols in any given environment and type of library. This may take the form of a strong

Figure 1. *Wang and Chan's Model of Instinctive Information Sharing*



adherence to document delivery services among like-minded libraries. Lastly, reciprocity refers to equal or desirable exchanges of resources between donor and recipient libraries, wherein the mutual benefit of interchanging resources can be concluded through bilateral or multilateral agreements. These contributing scenarios, in part or in whole, reflect a library's information-sharing behavior. However, these assertions are yet to be explored and require further research in the context of Philippine libraries.

Understanding the model and premise behind Instinctive Information Sharing presents beneficial solutions for libraries that openly seek to share their resources as well as those that wish to engage in resource-sharing initiatives. Nonetheless, further investigation and analysis may still be needed to determine the specific resources a library requires. To address this dilemma objectively, libraries are highly encouraged to consult their stakeholders, students, and faculty body to obtain sound technical advice on collection development and resource sharing and to capitalize on its full potential (Riesen, 2023).

METHODOLOGY

This study employed a descriptive quantitative research design using an online survey administered through Google Forms. The questionnaire consists of three (3) parts: a) demographic profile of SUCs, including institutional population and academic programs; b) data on the online electronic subscriptions currently subscribed to, and the subscriptions identified as needed; and c) utilization rates of library services and resources across academic disciplines. The researchers developed the questionnaire and had it content-validated by the Section Head and the University Librarian. Their feedback improved the clarity and relevance of the questionnaire. No pilot testing was conducted.

The study employed total population sampling, targeting all 122 SUCs listed on the Commission on Higher Education (CHED) website. Invitations were sent, and follow-ups were conducted as necessary. Ethical considerations were observed through informed consent, voluntary participation, and confidentiality of responses. Data collection occurred between July and September 2023, resulting in responses from 19 institutions, yielding a response rate of 15%. Data were analyzed using frequency distribution, percentages, mean scores, and ranking to determine subscription status, perceived usefulness, and resource utilization patterns.

FINDINGS

Profile of the Participating Institutions

Table 1 presents the distribution of participating SUCs per region and their respective estimated population. The data contextualizes the *need for information sharing*, wherein the estimated number of daily users can be used to justify establishing a resource-sharing protocol. The demography provides a definite number of potential beneficiaries that will directly make the most out of accessible online resource subscriptions once an agreement or partnership has materialized. The Western Visayas (Region VI) had the greatest number of respondents with four (21.1%) institutions. No participation is recorded for Region V (Bicol Region), Region X (Northern Mindanao), Region XI (Davao Region), and Region XIII (CARAGA).

Regional Profile

In addition to identifying the estimated total number of constituents within a given SUC, it is imperative to determine the overarching discipline or subject of the academic programs being offered, regardless of whether they are at the undergraduate, graduate, or postgraduate level, as indicated in Figure 1. Among the disciplines offered across the 19 SUCs, the majority offer Science and Technology degrees, with 17 institutions. This is followed by Social Sciences and Law, as well as Agriculture, each with 14 institutions, totaling 73.7%. Management and Economics, along with Health and Medicine, are similarly ranked as the third most-offered programs by field and discipline, with 13 institutions or 68.4%. Ten (10) institutions indicated that they offer programs related to the Arts and Humanities, totaling 52.6%. Additionally, individual programs such as veterinary medicine, engineering, architecture, IT, and tourism were offered by one institution each. Some institutions share programs such as engineering and graduate programs, ICT, HRM, food technology, biology, education, forestry, fishery, etc., in various combinations.

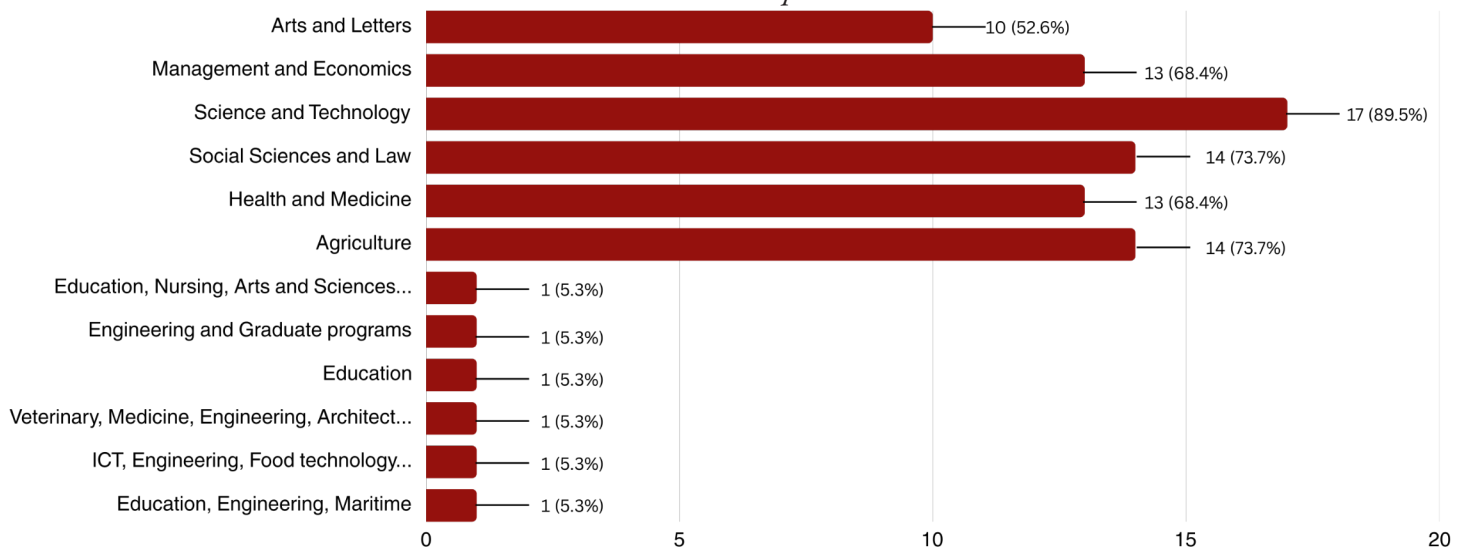
Enumerating the academic programs offered by participating SUCs enables libraries to complement them with appropriate online resource subscriptions. With a more intentional approach, libraries inclined toward organizing resource-sharing initiatives can select specific content, collections, and inclusions within a specific subscription that partner libraries can access when transacting with authorized vendors or publishers. The data captures the spectrum of disciplines that academic libraries in SUCs are obliged to sustain, which in turn sets an encompassing and similar precedent for

any SUC that wishes to organize a library consortium within its regional enclaves or otherwise. Below is the graph presenting the results and information of the

overview of how different academic fields are distributed among the institutions:

Table 1. *Population of the participating SUC (N=19)*

Region	Institutions	Estimated Population	Estimated Daily Users
Region IV-A - CALABARZON	Laguna State Polytechnic University	22,000	400 (1.8%)
Region IV-B – MIMAROPA	Occidental Mindoro State College	19,000	100 (0.5%)
NCR – National Capital Region	Eulogio Amang Rodriguez Institute of Science and Technology (EARIST)	15,000	300 (2%)
Region VI – Western Visayas	University of Antique – Main Campus	15,000	300 (2%)
BARMM – Bangsamoro Autonomous Region in Muslim Mindanao	Mindanao State University	14,000	500 (3.6%)
Region XII – SOCCSKSARGEN	Sultan Kudarat State University	13,105	180 (1.4%)
Region VI – Western Visayas	Aklan State University	13,000	1,000 (7.7%)
Region VIII – Eastern Visayas	Southern Leyte State University	11,000	200 (1.8%)
Region VI – Western Visayas	Iloilo Science and Technology University	10,696	223 (2.1%)
Region VII – Central Visayas	Cebu Normal University	10,000	3,000 (30%)
CAR – Cordillera Administrative Region	Ifugao State University	10,000	800 (8%)
Region II – Cagayan Valley	Isabela State University	10,000	200 (2.0%)
Region IX – Zamboanga Peninsula	Basilan State College	9,000	2,000 (22.2%)
Region III – Central Luzon	Pampanga State Agricultural University	8,000	1,000 (12.5%)
Region XII – SOCCSKSARGEN	Cotabato Foundation College of Science and Technology	6,000	50 (0.8%)
Region I – Ilocos Region	Pangasinan State University	6,000	950 (15.8%)
Region VIII – Eastern Visayas	Samar State University	6,000	200 (3.3%)
Region VI – Western Visayas	Northern Iloilo State University	5,559	380 (6.8%)
BARMM – Bangsamoro Autonomous Region in Muslim Mindanao	Sulu State College	5,000	200 (4%)

Figure 2. *Academic Programs by Field and Discipline (N=19) Utilization of Library Resources Based on Field and Discipline*

Using a six-point scale (1- *Mostly used*, 2 - *Frequently Used*, 3 - *Moderately Used*, 4 - *Occasionally Used*, 5 - *Rarely Used*, and 6 - *Least Used*), respondents rated the utilization of library resources based on their alignment with the programs offered within their SUCs. Table 2 presented an opportunity to evaluate resource use across academic disciplines, namely the Arts and Humanities, Management and Economics, Science and Technology, Social Sciences and Law, Health and Medicine, and Agriculture.

Table 2 shows resource utilization by library patrons, regardless of format. Science and Technology had “Most Used” (5), “Frequently Used” (3), “Moderately Used” (9), “Occasionally Used” (1), Rarely Used (0), and “Least Used” (1). The results indicate that Science and Technology resources are useful and that most participating respondents currently offer academic programs in their respective academic institutions, as evidenced in Table 1. On the other hand, the resources

on Agriculture showed the following results: “Mostly Used” (2), “Frequently Used” (1), “Moderately Used” (1), “Occasionally Used” (5), “Rarely Used” (5), and “Least Used” (5). This result indicates that resource usage in the Agriculture discipline is poor, even though 14 institutions have indicated that they are offering academic programs within this discipline. This suggests that the same institutions lack sufficient online resource subscriptions that cater to Agriculture. Between Science and Technology and Agriculture, varied patterns of utility are also shown in the Arts and Humanities, Management and Economics, Social Sciences and Law, and Health and Medicine. Considering this outcome, the hypothesis that participating libraries will exhibit a significant utilization rate for their library resources based on the same field and discipline of the academic programs their SUCs offer indicates a nonreciprocal circumstance in several disciplines, such as Agriculture and Health and Medicine.

Table 2. *Resources used by Library Patrons (By Academic Discipline) (N=19)*

Scale	Most Used	Frequently Used	Moderately Used	Occasionally Used	Rarely Used	Least Used
Arts and Humanities	3	2	4	3	4	3
Management and Economics	2	4	3	4	3	3
Science and Technology	5	3	9	1	0	1
Social Sciences and Law	5	5	0	4	2	3
Health and Medicine	2	4	2	2	5	4
Agriculture	2	1	1	5	5	5

Online Subscriptions

Table 3 shows that 11 institutions (57.9%) are subscribed to single sign-on (SSO) systems such as OpenAthens and Shibboleth, while the remainder indicate otherwise. This indicates institutional readiness for user accessibility and authentication. Investing in SSO platforms supports seamless access to resources within and beyond the institution. These platforms can accommodate library consortia, allowing the participating universities to access any given online resource subscription simultaneously. Academic libraries that have successfully adopted a common SSO platform can therefore reduce their individual subscription costs.

Table 4 presents the list of electronic resources subscribed to by the institutions. It shows the subscription status, perceived utility, and subscription needs for academic electronic resources.

- Philippine E-Journals, a platform that hosts journal titles published by numerous HEIs in the Philippines, reported a mean perceived usefulness score of 4.1, the highest among the included online resource subscriptions in this study, wherein 8 institutions (42.11%) have indicated that they are currently subscribed to the platform, yet 73.7% report a necessity for this subscription. Although Philippine eJournals can clearly be considered a multidisciplinary subscription owing to the journal titles it indexes, the inability to subscribe suggests that the overall subscription fee outweighs the library's expressed needs.
- Elsevier (Mendeley, ScienceDirect, SciVal, Scopus) – with a mean perceived usefulness score of 3.7, only 15.8% of institutions are subscribed to these resources, while a significant 52.6% express a need for this subscription.
- EBSCO Academic Search Ultimate – with a mean perceived usefulness score of 3.6, 36.8% of institutions have subscribed to this resource, while an additional 4.1% indicate a need for it.
- ODILO – 10.53% of institutions have subscribed to ODILO, with a perceived usefulness score of 3.3, and 26.3% of the institutions have identified a need for this subscription.
- Gale – although 10.53% of institutions have subscribed to this resource, there is limited information on the perceived usefulness of

the content or the extent of the subscriptions needed.

This pattern appears consistent across other databases, demonstrating the percentage of institutions with active subscriptions, their corresponding perceived usefulness scores, and the percentage of institutions that still need and are yet to acquire subscriptions.

Table 3. *Frequency distribution of subscriptions to Single Sign-On Systems (N=19)*

Subscription Status	Count
Yes	11 (57.9%)
No	8 (42.1%)

DISCUSSION

This study found that most SUC libraries have only one to six online subscriptions but expressed a desire to acquire more. The low number of online subscriptions has created noticeable gaps in education, sciences, computing, engineering, and agriculture. Although there is no exact number of online resource subscriptions that libraries are required to subscribe to in the Philippines, there is a general notion that available electronic resources should be sufficient to support the academic programs offered in an HEI. In this case, although the participating respondents indicated that they have existing subscriptions, library administrators have explicitly stated that they are continuously searching for more opportunities to access and integrate online resource subscriptions, suggesting that they still lack additional resources.

Based on the findings, there is a high demand for online resources in the fields of science and technology, health and medicine, and agriculture. It can be surmised that online subscriptions such as Philippine E-Journals, Elsevier (Mendeley, ScienceDirect, SciVal, Scopus), ProQuest Dissertations & Theses Global, Wiley Online Library, and Turnitin are perceived as the most useful, although considered to be multidisciplinary, was due to the reason that the indexed journal titles, articles, available content, and inclusive features or tools are found adequate and reliable to support the research and academic needs of the respondents. Additionally, these resources offer flexibility in accessing numerous local and international publications. Because some resources are irrelevant to the academic programs offered in an institution, OpenAthens, Statista, and CCP Encyclopedia of Philippine Art, Digital Edition are among the least-known online subscriptions. Having identified the online resource subscriptions seen as

Table 4. *Library subscription assessment summary (N=19)*

Subscription-based Online Resources	Number of Institutions with subscription	Mean score on the perceived usefulness of the subscription	Number of Institutions in need of subscription
Philippine e-Journals	8 (42.11%)	4.1	14 (73.7%)
Elsevier (Mendeley, ScienceDirect, SciVal, Scopus)	3 (15.8%)	3.7	10 (52.6%)
EBSCO Academic Search Ultimate	3 (15.8%)	3.6	7 (36.8%)
ODILO	5 (26.3%)	3.3	5 (26.3%)
Gale	2 (10.53%)	-	-
Wiley Online Library	4 (21.1%)	3.6	8 (42.1%)
JSTOR	2 (10.53%)	3.5	7 (36.8%)
ProQuest Dissertation & Theses Global	4 (21.1%)	3.8	14 (73.7%)
ProQuest Central	1 (5.3%)	-	-
Turnitin	3 (15.8%)	3.7	9 (47.4%)
Cambridge Core	1 (5.3%)	3.3	4 (21.1%)
IG Library	1 (5.3%)	-	-
EBSCO eBook Academic Collection	1 (5.3%)	3.7	9 (47.4%)
PressReader	1 (5.3%)	3.1	3 (15.8%)
Taylor & Francis Online	1 (5.3%)	3.5	8 (42.1%)
Vital Source Bridge	1 (5.3%)	-	-
Knimbus	1 (5.3%)	-	-
Emerald Insight	1 (5.3%)	3.6	8 (42.1%)
Clinical Key Nursing	1 (5.3%)	-	-
OpenAthens	-	2.9	3 (15.8%)
EBSCO Discovery Service	-	3.3	2 (10.5%)
New York Times	-	2.7	4 (21.1%)
Statista	-	2.9	3 (15.8%)
CCP Encyclopedia of Philippine Art Digital Edition	-	2.9	3 (15.8%)
SAGE Premier	-	3.3	3 (15.8%)
Web of Science	-	3.3	8 (42.1%)
Project MUSE	-	2.8	3 (15.8%)
American Chemical Society (ACS Publications)	-	3.0	5 (26.3%)
Journal of Visualized Experiments (JoVE)	-	2.9	4 (21.1%)
Labster	-	2.8	2 (10.5%)
Springer Nature Contemporary eJournals	-	3.2	4 (21.1%)
MLA	-	3.2	3 (15.8%)
Chicago Manual of Styles	-	2.8	3 (15.8%)

advantageous and favorable among SUCs, it would be possible to limit and prioritize the acquisition of these resources when organizing or instituting a consortium, at least among SUCs. Agreeing on which specific subscriptions to share would enable participating academic libraries to pool the required financial resources accurately, thereby avoiding any buildup of unprogrammed or excess budget that would be needed elsewhere in the library or the SUC itself.

Beyond securing ample financial resources and partnerships, libraries face the predicament of whether such an endeavor is justifiable within their own institution. In this study, average daily users of library services range from 50 to 3000, with a mean of 1025.6 and a median of 800. Such resource-sharing initiatives will be highly beneficial, since several hundred students and faculty members will be able to access resources at the same time. Among these users, the average familiarity with the library's e-resources is moderate. Despite the objective of obtaining relevant information from all registered SUCs in the country, challenges in locating respondents arose because some of the contact information listed on the official CHED website was outdated. As a result, the data received and analyzed came from a limited number of respondents.

Furthermore, of the 122 SUCs contacted, only 19 SUCs responded. This low response rate relative to the number of SUCs contacted may have skewed the study's results. The findings also suggest that academic libraries should prioritize acquiring electronic resources and online subscriptions, grounded in evidence-based librarianship and empirical data (Mustafa & Abdullah, 2022; Tran & Guo, 2021).

CONCLUSION

The findings highlight the need for more strategic and collaborative efforts to develop electronic resource collections among SUC libraries. Although many institutions already maintain online subscriptions, findings indicate that existing resources remain insufficient to fully support the wide range of academic disciplines and research needs within their respective universities. The study also highlights the potential benefits of establishing library consortia and resource-sharing partnerships among SUCs. Through coordinated acquisition and shared subscriptions, libraries may reduce subscription costs while expanding access to scholarly resources for students, faculty members, and researchers. While the partial response percentage from the surveyed institutions may limit the broader applicability of the findings, the insights gathered remain valuable. The recommendations

presented are designed to address the core challenges identified and to leverage the opportunities revealed by the data. By implementing these approaches, libraries can take meaningful steps toward improvement, even amid inadequate resource sharing. The unending commitment and future research will further reinforce the groundwork laid by this study.

RECOMMENDATIONS

Prioritize relevant, need-based subscriptions.

By identifying varied and dynamic institutional data needs, libraries must adopt an intentional, informed collection development strategy. This begins with a systematic understanding of the library institution's demographics, policies and guidelines, organizational structure, and services. Drawing from best practices such as those defined by the University of Missouri (2018), appraising curricula, faculty research, thesis subjects, disciplinary trends, and symposium outcomes provides a strong structure for computing the importance of collections. Eventually, comparing this data against recognized ideals offers a meaningful initial point for creating collections that are both receptive and future-ready.

Encourage collaborative resource sharing initiatives.

The Philippine library environment mirrors the worldwide drive toward collaboration and resource sharing, as proven by the rising number of consortia acknowledged by Fresnido and Yap (2014), Verzosa (2004), and Chisita (2016). These creativities emphasize the value of institutional associations in addressing everyday challenges in professional growth, funding disproportions, technological interruptions, and misalignment between goals, objectives, and actions. As academic progress continues, leveraging consortia for online subscription sharing offers a strategic pathway to meet rising data demands and adopt reasonable access across libraries.

If a single SUC or a coalition deems it necessary to support its contemporaries by providing shared access to electronic resources, its libraries should adopt and revisit Wang and Chan's (2011) model for Instinctive Information Sharing before forming a consortium or establishing any agreement. The theory directly supports and encourages institutions to provide or sustain a resource-sharing partnership that would benefit others in need.

Secure additional government funding.

The survey's quantitative strategies provided valuable

insights into demographic profiles, academic subscriptions, and library resource procedural patterns across SUCs, disclosing a clear disparity between patrons' data concerns and the availability of the institutions' online resources. The gap highlights the urgency of developing resource allocation strategies that are responsive to each institution's distinctive background. Notably, the demand for online subscriptions is strongest in science and technology, health and medicine, and agriculture; these fields are critical to national development. However, budgetary constraints continue to hinder expansion efforts. As Duran (2021) recommends, expanding awareness of library services among larger demographic groups and pursuing external funding through grants and endowments are viable strategies to lessen financial budget constraints. While the latter may be unpredictable, both strategies offer pathways to maintain and enhance library services, ensuring that SUCs remain furnished to meet sprouting academic and research demands. To support requests to increase the library's budget intended for online resource subscriptions, endorsements from library-faculty committees, research offices, academic technical working groups, and other similar offices may be sought. These authoritative bodies must provide clear justification that underscores the demand for such resources, which are deemed fundamental to the successful delivery of research and instruction in their institutions.

Increase patron familiarity with available resources.

SUCs in the Philippines recognize the growing demand for subscription-based electronic information sources in academic settings. However, using these resources requires new technological competencies among both library staff and patrons. As Chisita (2016) notes, understanding the organization and structure of digital content is crucial for users to browse and select information effectively. Compared with common search engines, electronic resource subscriptions offer curated, trustworthy, and reliable content, which enhances research tractability and serviceability. Equipping patrons with the skills to use these tools not only improves access to quality information but also strengthens the library's role in forward-moving academic excellence. Therefore, academic libraries should invite or request training from product specialists to discuss in depth online resource subscriptions they wish to incorporate into their institution. For a more guided and targeted approach, librarians can outline distinctive information sessions for students, faculty members, and researchers.

Integrating these resources into library orientations, seminars, and conferences not only highlights their value but also empowers library users to traverse and apply them in practice. Strategic endorsements through the library guides, websites, staff engagement, and peer networks further increase access and observability. Viewed through the lens of the Diffusion of Innovations (DOI) theory, awareness becomes an essential factor influenced by access circumstances, usage objectives, library user opinions, digital learning, and challenges being encountered (Ankrah & Atuase, 2018). By adopting these attributes, libraries can foster a more well-versed and engaged user base, eventually advancing institutional goals and aspirations toward academic excellence and sustainability of data and information sources.

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