Influence of Students' Assessment of Online Library Services and Utilization of Digital Marketing Strategies on their Online Engagement

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Abstract: *The outbreak of the Covid-19 pandemic made a big impact towards the libraries. As face-to-face mode was constricted, the online digital marketing strategies became a tool to bridge the gap between the library and users through the promotion of online library services and resources. The study was conducted to determine the influence of students' assessment of online library services and utilization of digital marketing strategies on their online engagements. There were 820 Senior High School students who participated in the study. The study utilized the descriptive-correlational design and data were analyzed using descriptive and inferential statistics. Online survey questionnaires were used for data collection. Findings reveal that students' assessment of the online library services and extent of utilization of digital marketing strategies were generally high. The students' engagement towards online library services in terms of affective and cognitive domains were high, in contrast to the behavior domain assessed as moderate. The study found that the students' online library engagement was influenced by their assessment of online library services and their extent of utilization of digital marketing strategies. It is recommended that the librarians may assess each of the online library services to determine the satisfaction level of the students towards the services as well as continue to improve their services. The library personnel may also consider evaluating their library website as well as using other digital marketing strategies such as Email marketing and SMS mobile marketing or creating more official online accounts to LinkedIn, Viber, Snapshot, Pinterest, and TikTok to further promote their online library services and resources as well as to reach users and non-users of the library.*
Keywords: online library engagement, online library services, online library assessment, digital marketing strategies

INTRODUCTION

The government imposes strict adherence to health protocols to ensure the safety of library users and staff. Hence, during the pandemic, libraries are challenged to promote their programs and resources and realign physical services to make them available online to their communities, as well as to offer remote access to free electronic resources and support services (China Agricultural University Library, 2020). Digital formats have been created from print materials (Guo, et al., 2020). As a result, even amid the pandemic, libraries continue to support institutions (Sichuan University Library, 2020; Tongji University Library, 2020; Yunnan University Library, 2020).

The participating library staff worked untiringly to identify e-content for reading lists, upload pre-digitized resources to websites, and move face-to-face services to online, with a particular accentuation on making content available digitally. Assessments/evaluations were performed on each library staff member's ability to work remotely, additional hardware was acquired, and new tools and tasks were implemented, specifically to enable remote working. This rapid realignment illustrated the participating library's ability to respond swiftly and effectively to unprecedented circumstances.

Currently, the participating library also offers the following online services to students such as AskIRA (Information Reference Assistant), Document Delivery Service, Subject Guides, Shout'N'Share, Book Pick-up Service, Book Drop Box, Book Quarantine, IntraLibrary Loan, MS Teams Virtual Library, Library Website, Online Library Instruction Program, Webinars, and Suggest-a-Purchase Services. These services were developed to serve the school community's online learning, teaching, and research needs during the pandemic.

In the Philippines, Filipinos started to patronize digital marketing to promote the available library services and resources because they prefer using these innovative digital channels and use them alongside traditional means. Digital marketing gave the participating library endless possibilities to advertise the programs and services available and a chance to connect and reach out to the users even during this pandemic at little to no cost. The library understudy utilizes various digital marketing strategies during this pandemic, such as the Library Website and Social Media Marketing. This helps the library in giving their information (Shiri & Rathi, 2013; Neo & Calvert, 2012), to involve a crowd of people (Cavanagh, 2016; Smeaton & Davis, 2014; Rutherford 2008), to upsurge website traffic (Dankowski, 2013), and to endorse its library services to the users (Phillips, 2015). Libraries have long been the stoic pillar of research, scholarship, and community. Still, the digital age has been said to threaten the relevance of their existence. But rather than looking it that way, digital marketing has now become a technique that libraries can use to better connect with their audience in this digital age (Haugh, 2017).

The researcher was prompted to study the students' online engagement so that it can help identify which of the areas or services that the library offers to its patrons that need improvement. The study, thus, determined the influence of students' assessment of online library services and utilization of digital marketing strategies on their online engagements applied by the library understudy. This study helps the library personnel to understand the importance of the prospect of building virtual presences on various common social media and digital landscapes by incorporating simple digital marketing techniques strategically to distribute messages, to spread availability of the different online library services and resources, and to ensure their continued success as an information center even during this time of the pandemic.

THEORETICAL AND CONCEPTUAL FRAMEWORK

This study assumes that students' assessment of online library services and utilization of digital marketing strategies significantly influence their online library engagement. This study is anchored on the Technology Acceptance Model (TAM) which considers the following dimensions of engagement: (a) affective, (b) cognitive, and (c) behavioral towards assessment of online library services: (a) ease of use and (b) usefulness along with the utilization of digital marketing strategies. This model revealed that people prefer to embrace technology when it is effective and purposeful, but only when it is also simple to use.

In this Technology Acceptance Model, people prefer to embrace technology not only when it is effective and purposeful, but also when it is also simple to use. This model was developed by Ajzen and Fishbein (1980) which examines the convenience and practicability of incorporating digital technology in library services such as social media, websites, applications, or computer-based technology towards users' engagement. TAM was initially intended to elucidate behavior concerning computer utilization (Davis et al., 2014), but it has since been adapted to measure the adoption of modern technology. People accept or reject various technologies, and their research revealed that people would employ something to make their job easier. Even if technology is simple to use, it is less likely to be adopted if it is not effective.

The first independent variable considered in this study is the students' assessment of online library services in terms of Ease of Use and Usefulness. Davis et al. (2014) developed a subject model to explain how people accept digital technology when performing tasks. They identified two fundamental beliefs that influence information systems (IS): ease of use and usefulness.

Ease of use refers to the degree to which using a certain technology would enable the user to use it effectively in terms of physical and mental effort. It includes the simplicity in availing any online library services. On the other hand, usefulness refers to how a student believes that using availing online library services will improve the quality of their academic works. Furthermore, TAM has emerged as a powerful and salient model

that can be used to forecast likely services usage by measuring users' engagements after they are exposed to the services, even for a brief period, via training, prototype, or mock-up models.

TAM is frequently used to investigate how technological advancements are applied in various contexts of information systems (IS) (Chuttur, 2009). The number of libraries that use online services increases due to its ease of access, marketing of materials, and interaction with library users (Fasola, 2015). From the study of Joo and Choi (2015), the TAM was used to conduct research on the factors that influence undergraduates' selection of online library resources in the United States. They found out that the perceived usefulness and ease of use influenced behavior toward using online library resources. As a result, there is a high demand for these technologies.

The other independent variable being considered is digital marketing strategies used by the participating library in terms of the Library Website, and Social Media Marketing. Digital marketing is the component of marketing that every library uses to promote different available resources and online library services that students can avail remotely in the safety of their homes.

The Library Website is one of the digital strategies commonly used and known as one of the essential promotional tools to announce and update any kind of news or services to the users. The participating library website comprises all available library services, library resources, news, and updates and is linked to their Online Public Access Catalog (OPAC). It became the one-stop place for users during this pandemic on behalf of the library. Qutab and Mahmood's (2009) guideline examination of library websites promotes the concept of user-centered marketing, implying that websites must be focused on meeting user needs rather than administrative needs. Links to the website also help create multichannel connections and increase the value of the information (Andreasen & Kotler, 2008; Ayres & Jacobs, 2004; De Sáez, 2002; Rowley, 2016).

Library websites usually hold several searchable databases to over a hundred. These online databases are commonly referred to as "Electronic Resources". It allows people to search the library's OPAC, scholarly articles, business data, and a vast range of data from a wide number of information sources, each with its own set of search engines. A library website is also a type of multichannel marketing because it informs people about what the library does. Although it is widely acknowledged that a library's website is a vital part of its digital marketing (De Sáez, 2002; Roy, 2002; Schmidt, 2007; Wilson, 2004), there are several concepts of how websites can be evaluated (Basu, 2002, Hernon & Calvert, 2005; Manuel et al., 2010).

Another digital marketing strategy that is being used is social media marketing; it is an internet-based tool that is widely used by libraries to create their profile pages and to contribute and share content with users, but it is also used to support social interactions with their users in real-time or asynchronously (Boyd & Ellison, 2007; Bertot et al., 2012; Carr & Hayes, 2015). As a low-cost marketing tool, it can improve efficiency,

interactivity, user feedback, community engagement, sense of community, and so on (Charnigo & Elliz, 2007; Rutherford, 2008; Fernandez, 2009). Libraries were able to use social media marketing to provide information about their organizations (Neo & Calvert, 2012; Shiri & Rathi, 2013), engage with their communities (Rutherford, 2008; Smeaton & Davis 2014; Cavanagh, 2016), boost website traffic (Dankowski, 2013), and advocate for the library (Phillips, 2015).

According to Cole, et.al. (2010), having a strong identity across multiple social platforms is an excellent strategy for effective digital marketing. Multichannel marketing can be defined as any method of promoting the personnel, the services, and the library. The adoption of social media is now a communication tool for libraries. It serves as an innovative channel between libraries and users, informing them about library resources and services. The participating library has Facebook, Instagram, and Twitter accounts in which the library staff posts on a weekly basis the online library resource such as ebooks, e-journals, and even printed books, along with trial databases and online events in which users can join.

In a study conducted by Weerasinghe and Hindagolla (2021), the researchers discovered factors influencing university librarians' acceptance of social media sites by implementing the TAM. According to the findings, the two factors (perceived usefulness and perceived ease of use) were significant predictors of social network site acceptance. Trust was discovered to have a significant unintentional effect on librarians' desire to use social networking sites. This study contributes to the theoretical distinctiveness of the intersecting fields of library science, social networking sites, and the technology acceptance model, which have received less attention in the literature.

The dependent variable considered in this study is the extent of students' engagement in online library services. Online student engagement has three domains which are affective, cognitive, and behavioral. The affective domain concerns how much a person prefers the object of thought; the cognitive domain concerns a person's specific perceptions of the object; and the behavioral domain concerns the individual's reactions and participation to activities (Akpena, J. E., 2019).

Theorists such as Shaw and Wright (1967) recognized the significance of the affective part by considering it as constituting the online engagement, while the cognitive part, involving the individual's perceptions, promotes an explicative facility while it is the behavioral domain itself that persuades a person to act.

According to a dyadic view, the affective, cognitive, and behavioral domains work through various psychological approaches. It merits more careful consideration in digital technology, not only for honing the measurements in TAM constructs but also for its potentially powerful influence on technology implementation and the diffusion of IT-enabled innovation in organizations (Yang, H., & Yoo, Y., 2004). These domains serve a social purpose; they are delicate, malleable, and contagious, and people affect

each other's behaviors by confirming or denying them through connections and mutual exposure. By better understanding which aspect of the domains is more persuasive in the technology integration process, one can support organizations' attitudes toward digital technology adoption.

In this study, the affective domain embodies the emotional aspect of the students' engagement towards the online library services, where like or dislike (as manifestations of feeling) may be shown. It is related to their feelings or attitudes towards the online library services and can be attributed to the emotional component of engagement. Sinatra, Heddy, and Lombardi (2015) reported that both negative and positive emotions can facilitate activation of online engagement.

Moreover, it also includes emotional reactions to people in the educational context such as peers and teachers, or to the educational institution itself, the subject matter or discipline, or the tasks that students are expected to do. In summary, emotional engagement includes interest, values, and emotions (Fredricks, Blumenfeld, & Paris, 2004).

Another online engagement that is considered in this study is the cognitive domain. It is characterized as believing, knowing, or perceptual, and involving perceptions towards the online library services. Cognitive engagement is the active process of the student in learning the online library services. Bowen (2005) stated that this type of engagement is the most fundamental form of engagement. This was supported by Fredricks, Blumenfeld, and Paris (2004) who identified cognitive engagement as students engaged in the learning process to comprehend complex ideas and master difficult skills. It is related to what students do and think to promote learning. Bowen (2005) continued by referring to the process as students "paying attention to the learning" and becoming "engaged learners". It is often linked with concepts such as motivation to learn, values and beliefs, metacognition and self-regulation, and strategy use and effort (Fredricks, Blumenfeld, & Paris, 2004; Greene, 2015).

Furthermore, the behavioral domain describes the individual's actual use of online library services. How students think and behave about the available online library services is just as important as any other factor influencing the library's performance and future (Chegwe & Anaehobi, 2015). The success or efforts of the online library services depends not only on how well the services work, but also on how well it is received by its intended users, which is reflected in students' behavior. Positive behavior contributes to its success, while negative behavior only detracts from the merits of the online library services because it translates into its low use or non-use. Therefore, one factor in the successful implementation of online library services is students' acceptance, which in turn might be greatly influenced by their behavior (Babayi, Abba, & Aliyu, 2019).

Many digital marketing researchers have used the TAM, which has been enhanced to make it more complicated and relevant to today's environment. TAM is still regarded as a leading model for explaining user behavior toward technology, and the original model is still widely used and understood. The investigation used the theory and concepts cited in this section to assess the perception of online library services, the use of digital marketing strategies, and the relationship between these factors and students' online engagement. Figure 1 on the following page depicts the schematic presentation of the study.
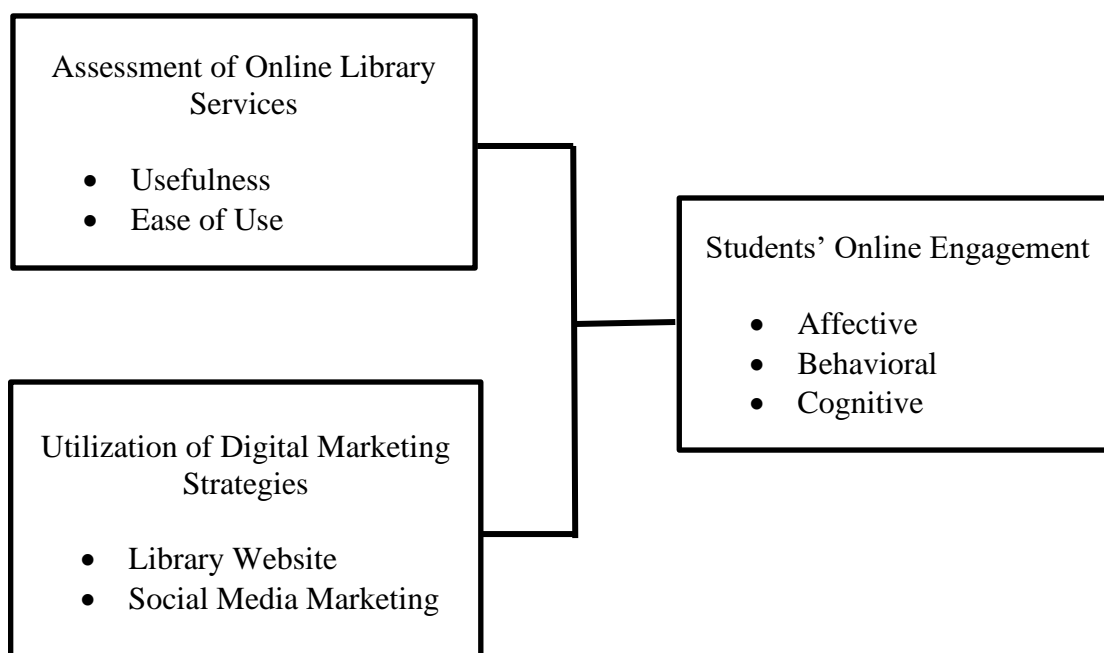

Figure 1 –Schematic Diagram of the interplay of the variables of the study

Objective of the Study

The study aimed to determine the influence of students' online library services assessment and digital marketing strategies on their online engagements.

METHODOLOGY

This study utilized the descriptive-correlational design. This design allowed comparison, contrast, and uncovering of relationships between existing non-manipulated variables in the study (Best & Khan, 2005). The researcher deemed it as an appropriate research design since it describes the influence of students' online library services assessment and digital marketing strategies on their online engagements
The researcher used a Google Form which included Consent Forms for the parent and a letter to the participants with a data privacy statement in full compliance with the provisions of RA 10173, "Data Privacy Act of 2012." The online survey questionnaire

used in the study was adapted from various research instruments. Eight-hundred twenty (820) SHS students participated in this study out of 2099 population. This study employed convenience sampling. The participants were selected as respondents since they were asked to evaluate the library's digital marketing assessment for the school year 2021-2022. As most participating students are under 18 years old, they were not enforced or obligated to join.

The instruments were first pilot tested to fifty-three (53) selected students from Grade 11 and Grade 12 who were not participants in the actual study. Cronbach Alpha Coefficients were employed to ensure the reliability of the instrument. The items under the students' assessment of the online library services yielded a Cronbach alpha of 0.959 for Usefulness and 0.967 for Ease of Use. The items under the students' extent of utilization of digital marketing strategies yielded a Cronbach alpha of 0.931 for Library Website and 0.970 for Social Media Marketing. Lastly, the items under the students' extent of engagement in online library services yielded a Cronbach alpha of 0.940 for Affective, 0.934 for Cognitive, and 0.952 for Behavioral Engagement.

In analyzing the data, problems 1, 2, and 3 used frequency, percentage, weighted means, and standard deviation to determine the students' assessment of online library services, their extent of utilization of digital marketing strategies, and the students' online library engagement. For problem number 4, Multiple Regression was used to determine the influence of students' assessment of online library services and digital marketing strategies to their online library engagement.

RESULTS/FINDINGS

Table 1 presents the regression analysis of the influence of the participants' assessment of online library services and digital marketing strategies on their online library engagement.

Table 1. Regression Analysis of the Influence of Participants' Assessment of Online Library Services and Utilization of Digital Marketing Strategies on their Online Library Engagement

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	.207	.090		2.304	.021
Utilization of Marketing Strategies	.464	.039	.473	11.99**	.000
Assessment of Online Library Service	.406	.043	.370	9.38**	.000
Model Summary					
R = .812 $\quad$ R^2 = .660 $\quad$ Adjusted R^2 = .659 $\quad$ F = 792.18** $\quad$ p = .000					

**significant at 0.01 level

The figure presents the regression analysis of the influence of the participants' assessment of online library services and digital marketing strategies on their online library engagement. Data show that the whole model is significant (F = 792.18, p = .000), with 65.9 percent of the variability in their online library engagement as being accounted for by a combination of their utilization of digital marketing strategies and assessment of online library services. Specifically, for every unit increase in their utilization of digital marketing strategies, there is a corresponding .464 increase in their online library engagement (B=.464, t=11.99, p=.000). Furthermore, for every unit increase in their assessment of online library service, there is a corresponding .406 increase in their online library engagement (B=.406, t=9.38, p=.000).

Thus, the null hypothesis, which stated that the students' assessment of online library services and utilization of digital marketing strategies do not influence their online library engagement, is rejected. There are sufficient data to show that students who highly assessed their online library services, and who utilize the digital marketing strategies to a great extent are also highly engaged.

The utilization of marketing strategies plays a part in fulfilling the students' needs and demands. The participating library utilizes two digital marketing strategies: library website and social media marketing. The data show that student frequency of online visits to both the digital marketing strategies may imply that the librarians should conduct a SWOT analysis to improve the present available strategies as well as testing out other digital marketing strategies to help the students become more aware of the available online resources and services. Coordinating with fellow staff, faculty moderators, Academic Heads, and other school personnel may also help to further disseminate library information. Students expect acknowledgment, consideration, and appreciation for their individual information needs.

Assessment of online library services is considered a tool for the library to determine how the library is serving the needs and expectations of its students effectively and efficiently. As well as identifying the strengths and weaknesses of the online library services to recommend ways of supporting and improving the quality of online library service being delivered. Library personnel is expected to understand students' rapidly changing demands better. Thus, in educating information literacy, the library has a critical role in providing the students with adequate online library services and improving their information literacy abilities through online resources.

From the results, there is sufficient evidence that the students' assessment of online library services and utilization of digital marketing strategies significantly influence their online library engagement. This indicate that the library offers good services and is currently having a good standing toward their students as the results show an improvement in the students' online library engagement. Recently, the library was also rated as the highest in terms of school services in the Flexible Learning Survey conducted by the participating school. CHED's definition of Flexible Learning means "blended", combining simultaneously online and face-to-face/in-person modes.

DISCUSSION

The study determined the influence of students' assessment of online library services and the utilization of digital marketing strategies on their online engagements. The study was participated by eight-hundred twenty Senior High School students enrolled in the School Year 2021-2022. This study used the descriptive correlational research design with a modified online survey questionnaire using Google Form as a data-gathering tool. The instrument's validity was ensured through panel review, and reliability was tested using Cronbach's Alpha Coefficient. Data were analyzed and interpreted using descriptive (frequency, percentage, mean and standard deviation) and regression analysis.

Based on the analysis of the data gathered, the following were the findings:
1. The students' assessment of the online library services in terms of usefulness and ease of use is generally high.

2. The students' extent of utilization of digital marketing strategies considering the library website and social media marketing were rated as generally high.
3. The students' engagement towards online library services in terms of the affective and cognitive domains were rated high, while the behavior domain was rated as moderate.
4. Students' assessment of online library services and the utilization of digital marketing strategies significantly influence their online library engagement in terms of affective, cognitive, and behavioral domains.

CONCLUSION

Even in this time of pandemic, the library continues to play an active role in engaging the library users by providing library services online. The researcher's assumption that the students' online library engagement is influenced by the quality of the online library services and their extent of utilization of digital marketing strategies is confirmed. This may imply that students who have high assessment and utilization of the digital marketing strategies are also highly engaged with the library services online. Despite the challenges of the moderate students' frequency of online visits to the digital marketing strategies, the library shows that it continues to work hard to maintain and improve online library services to continue to enrich the quality of the services and exceed the user engagement.

The study confirms that the Technology Acceptance Model (TAM) is regarded as a leading model for explaining user behavior toward technology. It showed that the TAM can influence student engagement in terms of attitude, cognitive, and behavioral dimensions. Student online engagement was viewed as an outcome of the library's effort as well as a critical component of the library's contribution to the scholarly and academic life of the institution. Through creative and innovative approaches, the library continually develops library services and utilizes other digital marketing strategies to help students in their library-specific for their holistic academic learning.

RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are hereby endorsed:

1. The library personnel may
   a. conduct an assessment on the students' satisfaction level of each of the online library services as well as continue to improve the library services that students have not yet availed of or has low utilization.
   b. propose additional online library services that students may find useful for their academic needs for the next school year such as SHS student works repository, apps-based access to library materials and programs,

and lending machines or kiosks available near the faculty area and at the guard house.

c. consider evaluating the library website considering the special needs, competences, and behavior of the students. What students may generally want when accessing a website is either to find a specific information (looking for online databases, reading library guidelines, or checking out newly processed titles) or to perform a specific activity (a catalogue search, accessing online databases, or asking an inquiry through AskIRA).

d. use other digital marketing strategies such as Email marketing and SMS mobile marketing as well as possibly create more official online accounts to LinkedIn, Viber, Snapshot, Pinterest, and TikTok to further promote their online library services and resources as well as to reach users and non-users of the library. To continually promote their library website and social media accounts in each class/section, school event, webinar, or session. The library personnel may also consider creating a Digital Marketing Calendar to create relevant designs, plan and track upcoming marketing initiatives.

e. create more short/long video tutorials, library guides, online brochures, and how-to guidelines using Microsoft Sway to help students learn how to effectively and efficiently use the library services that students may have not yet availed of, as well as coordinate with more faculty moderators to have other Information Literacy Sessions during their asynchronous classes.

2. Future researchers may find other variables for the students' assessment of online library services and consider other digital marketing strategies that the library may utilize.

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