



SOCIAL MEDIA'S EFFECT ON USER ENGAGEMENT AND LIBRARY SERVICES

Sushant Chakma

Librarian

Govt. Kamalanagar College

chakma.sushant@gmail.com

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Abstract

This research explores the influence of social media on user interaction and the provision of library services in higher education. Based on a mixed-method design, data were gathered using user surveys, interviews with librarians, and social media engagement metrics analysis. It was found that social media sites, most notably Facebook and Instagram, have a great impact on communication, enhance user involvement, and enhance awareness about library services. Users actively consumed content on new arrivals and event announcements and registered high satisfaction with social media-based services. Library staff recognized the advantages of extended outreach as well as the problems of content generation and the requirement for training in digital skills. The research concludes that strategic social media use can successfully enhance user-library relations and suggests ongoing investment in staff capacity development and e-communication strategies.

Keywords: *Social Media, User Engagement, Library Services, Academic Libraries, Digital Communication, Social Media Analytics, Library Outreach, Information Services.*

1. INTRODUCTION

In recent times, social media has revolutionized the manner in which organizations interact and communicate with their readers, and libraries are no exception. With conventional library services changing during the digital era, social media platforms have become crucial tools for maximizing user involvement and taking library services across geographical boundaries. Libraries have started using sites such as Facebook, Instagram, and Twitter to disseminate information, highlight materials, publicize events, and deliver real-time support. This has not



only made library services more accessible but also opened avenues for interactive discussion and community engagement with the users.

Social media integration in library services has been proved to have the potential to engage diverse user groups, especially younger generations who are social media enthusiasts. With the usage of such digital platforms, libraries can promote increased user engagement, raise awareness about their services, and provide services suited to changing user demands. But the success of social media in meeting these objectives is subject to a number of variables, such as the nature of content posted, platform selection, and strategy for engaging with library employees.

This research will seek to examine the impact of social media on users' engagement in library services, considering the various platforms and their impact on levels of interaction, user satisfaction, and overall service quality. It is crucial for libraries to have efficient digital communication strategies not only to market their resources but also establish meaningful relationships with their users in the ever-converging world.

2. LITERATURE REVIEW

Mutuma (2024) carried out a thorough examination of tactics meant to improve patron interaction at university libraries located in Meru County, Kenya. Key elements including interactive postings, personalised material, and frequent updates were shown to be crucial in promoting user engagement on social media in the PhD research. According to Mutuma's research, libraries that used these tactics saw increases in user satisfaction and involvement.

Shahbaznezhad, Dolan, and Rashidirad (2021) examined the effects of platform type and social media content format on user engagement behaviour. In contrast to text-only postings, their research revealed that visual content—such as pictures and videos—significantly increased user engagement. Additionally, the study demonstrated that platform attributes influenced engagement trends, with some platforms being more appropriate for certain kinds of material, highlighting the need of customised social media tactics.

Rosário and Dias (2023) examined social media marketing methods, showing how companies used platform-specific strategies to maximise engagement and reach. Their study demonstrated how crucial timing, language style, and topic relevancy are to drawing in and holding on to an



audience. These observations applied to library services that sought to increase social media user participation.

Pezzuti, Leonhardt, and Warren (2021) focusses on how linguistic certainty affects social media user engagement. They discovered that highly definite communications boosted user trust and engagement, indicating that confident communication may improve the efficacy of interaction. For libraries looking to improve their social media presence via authoritative and transparent message, this result was especially pertinent.

Pradhan, Kishore, and Gokhale (2023) examined how social media influencers drive consumer engagement, emphasising the substantial impact that influencers' trustworthiness and content style have on user interactions and brand views. Libraries and other comparable organisations may be able to use influencer relationships to improve their social media presence and reach a larger audience, according to their report, which highlighted the rising significance of influencer marketing as a tactic to increase engagement.

Choi and Joo (2021) investigated the obstacles and driving forces behind public libraries' use of social media for marketing. According to their study, libraries faced challenges such a lack of staff experience, budget limitations, and a lack of knowledge about successful content initiatives, even while they acknowledged the advantages of social media in extending outreach and interacting with users. Notwithstanding these obstacles, library employees were highly motivated to use social media as a tool to promote community involvement and raise exposure.

Al Halbusi et al. (2024) examined the use of social media by Iraqi small and medium-sized businesses, highlighting the critical role that consumer interaction and social media network capabilities have in fostering effective digital engagement. According to their research, strong social media infrastructure and engaged customers were important variables affecting how well social media platforms were used. Particularly in situations with comparable resource and infrastructural difficulties, this research offered insightful information about the relational and technical elements that might potentially guide library social media initiatives.

3. METHODOLOGY

The purpose of this research was to look at how social media platforms affect user interaction and library service delivery. Both quantitative and qualitative data were gathered using a mixed-methods approach, which allowed for a better comprehension of how libraries use social



media and how patrons react to these online exchanges. Surveys, interviews, and social media analytics were all included in the process to provide a thorough understanding of the subject.

3.1. Research Design

The association between social media usage and library involvement was investigated using a descriptive and exploratory study methodology. In order to include both quantitative data and subjective experiences, a mixed-method technique was deemed appropriate for this investigation. While qualitative approaches allowed for the investigation of staff and user opinions about the efficacy of social media in augmenting library services, quantitative methods were used to collect data on usage trends.

3.2. Study Population and Sampling

Students, instructors, and library employees from three university libraries in urban regions made up the study population. To guarantee that responders from all demographic groups were fairly represented, a stratified random sample approach was used. The sample included 15 library employees who were actively engaged in social media administration or service delivery, as well as 300 library users, including faculty members and undergraduate and graduate students.

3.3. Data Collection Methods

Quantitative information on social media use, library material categories accessed, online service satisfaction, and views of social media's influence on library experience was obtained by distributing structured questionnaires to a sample of library patrons. In addition, 15 library employees participated in semi-structured interviews to learn more about how their organisations use social media. Aspects like content preparation, user engagement issues, social media campaign results, and staff impressions of user interaction on digital platforms were all covered in these interviews. A thorough grasp of user behaviour and library staff viewpoints of social media's contribution to improving library services was made possible by the combined approach.

3.4. Social Media Analytics

The official social media accounts of the participating libraries were used to gather engagement statistics, with a particular emphasis on Facebook, Instagram, and Twitter. Metrics including



follows, likes, shares, comments, post frequency, and content genres were the main emphasis of the data collecting. To find use patterns and user reactions to different digital material, historical data from the previous 12 months was retrieved.

3.5.Data Analysis Techniques

The Statistical Package for the Social Sciences (SPSS) was used to analyse the survey's quantitative data. User answers were compiled using descriptive statistics like means, percentages, and frequencies. To investigate the connections between demographic characteristics and degrees of interaction with library social media material, inferential methods such as chi-square testing and Pearson correlation analysis were used.

Thematic analysis was used to examine the qualitative information collected from staff interviews. The participants' recurrent thoughts and viewpoints served as the basis for the creation of codes and themes. These conclusions provide a thorough grasp of the potential and difficulties related to social media usage in libraries and assisted in placing the survey results in perspective.

Tools for visual data visualisation were also used to analyse social media engagement indicators. To evaluate engagement levels across platforms and time periods, identify high-performing content genres, and display trends in user involvement, charts and graphs were created.

4. RESULTS AND DISCUSSION

The results of the research on how social media affects user engagement and library services are shown in this part. Both quantitative and qualitative methods were used to analyse the data. User surveys and social media analytics were used to collect quantitative data, while semi-structured interviews with library employees yielded qualitative information. To aid with straightforward understanding, the results are arranged under pertinent subheadings. A discussion of the findings' implications for improving library services follows.

4.1. Social Media Usage Patterns Among Library Users

According to the poll, most patrons often interacted with their library's social media pages. The majority of respondents said they use social media to find announcements, information about events, and information about new arrivals.

Table 1: Frequency of Social Media Use for Library Services

Frequency of Use	Number of Respondents (N=300)	Percentage (%)
Daily	84	28.0
2–3 times a week	102	34.0
Once a week	60	20.0
Rarely	42	14.0
Never	12	4.0

According to research of the most popular content categories among library social media users, 35.3% of respondents said that they were most interested in learning about new book arrivals. This implies that consumers like upgrades that directly address their research and academic requirements. At 25.7%, event notices came in second, indicating that patrons were interested in attending workshops, seminars, and other events held by the library. Additionally, study materials and advice were very popular (18.0%), indicating a need for high-quality information that supports academic achievement. However, tutorials and how-to videos (8.7%) and regular operational updates like library opening hours (12.3%) were less popular, suggesting that while they are necessary, they may not generate as much engagement. These results demonstrate that in order to sustain high user engagement on social media platforms, libraries must give priority to academically relevant and dynamic material.

4.2. Types of Content Users Engaged With

On library social media accounts, users were asked to choose the kinds of information they thought were most interesting and helpful.

Table 2: Most Engaging Types of Library Social Media Content

Content Type	Percentage of Respondents (%)
New book arrivals	35.3
Event announcements	25.7

Study tips and resources	18.0
Library opening hours	12.3
Tutorials and how-to videos	8.7

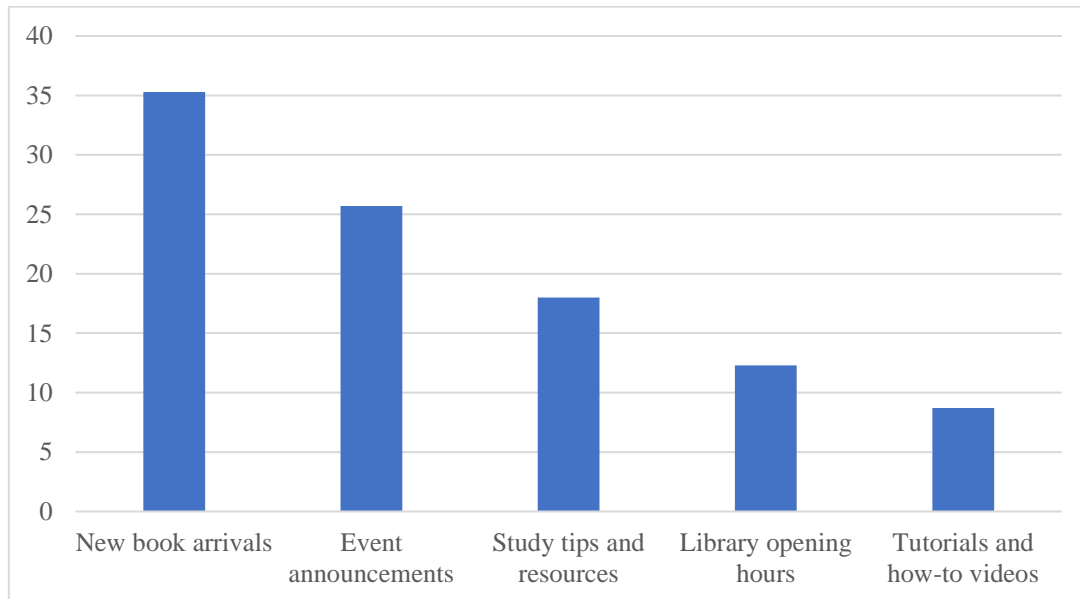


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4.3. User Satisfaction with Library Social Media Services

A five-point Likert scale was used to gauge how satisfied users were with the social networking services. The findings show that social media is usually seen favourably as a tool for library involvement.

Table 3: User Satisfaction with Library Social Media Services

Satisfaction Level	Number of Respondents	Percentage (%)
Very satisfied	84	28.0
Satisfied	138	46.0
Neutral	48	16.0
Dissatisfied	24	8.0
Very dissatisfied	6	2.0

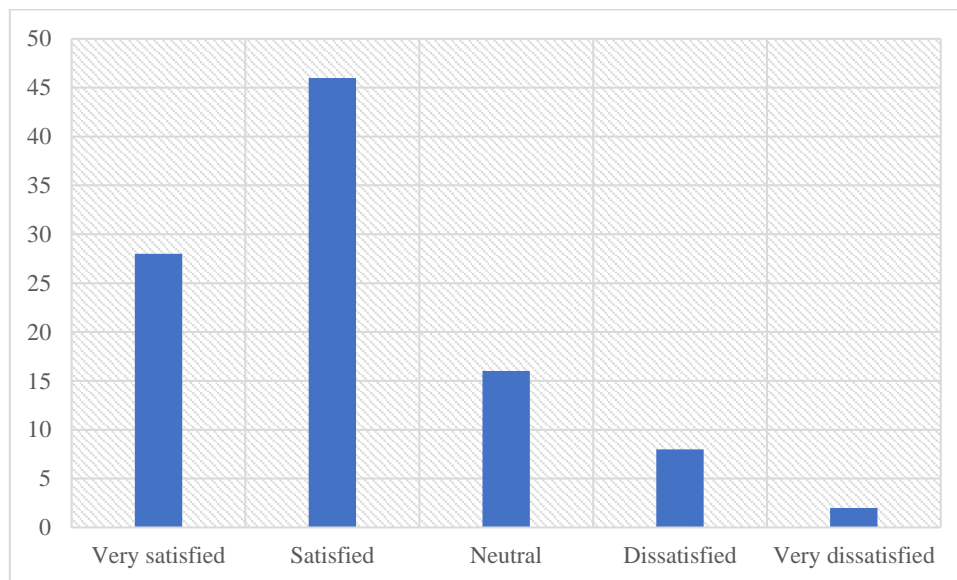


Figure 2: User Satisfaction with Library Social Media Services

According to research on user satisfaction with library social media services, respondents' opinions are mostly favourable. Overall, 74% of patrons said that they were either "satisfied" (46.0%) or "very satisfied" (28.0%), indicating that most people thought the library's usage of



social media was an efficient and advantageous way to get information and services. Negative encounters were comparatively uncommon, as seen by the low percentage of users who voiced dissatisfaction—8.0% were "dissatisfied," and just 2.0% were "very dissatisfied." In contrast, 16.0% of users expressed no opinion, which might be a result of either a lack of strong views or little engagement with the library's social media channels. All things considered, these results show that social media is a popular medium for library communication that has the ability to greatly increase user engagement when updated with timely and relevant information.

4.4. Insights from Library Staff Interviews

Three recurrent themes emerged from the thematic analysis of staff interviews: (1) more user outreach; (2) difficulties in creating and engaging content; and (3) the need for digital communication training.

4.5. Social Media Engagement Analytics

Information gathered from the libraries' social media accounts demonstrated how participation varied depending on the kind of material and platform.

Table 4: Average Monthly Engagement Metrics from Library Social Media Accounts

Platform	Avg. Monthly Posts	Avg. Likes/Post	Avg. Comments/Post	Avg. Shares/Post
Facebook	12	89	14	25
Instagram	10	112	8	18
Twitter	15	47	6	10

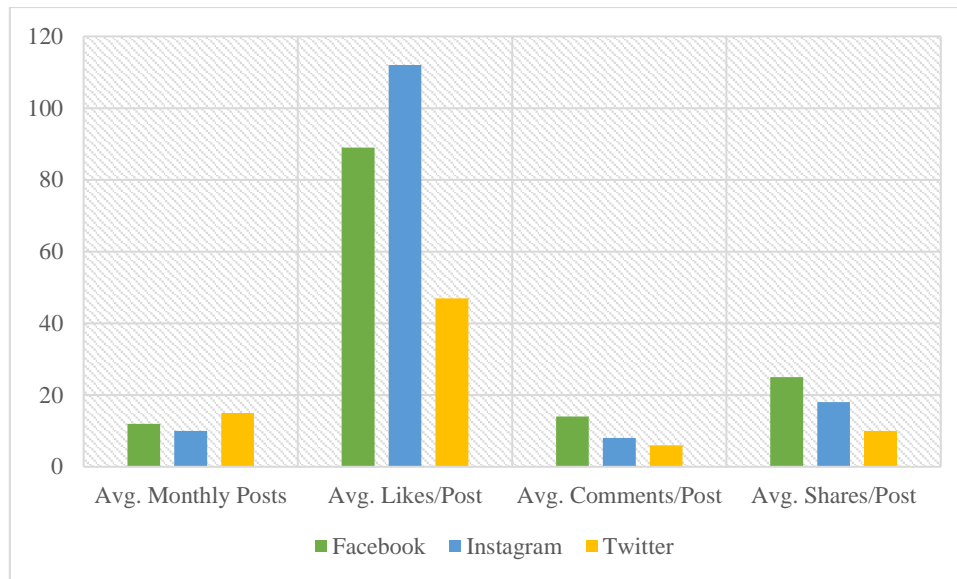


Figure 3: Average Monthly Engagement Metrics from Library Social Media Accounts

There are clear trends in how users interact with library material when social media engagement numbers from three main platforms—Facebook, Instagram, and Twitter—are analysed. Instagram had the most average likes per post (112), which suggests that users like image-based material and that it has a strong visual appeal. Facebook led in average comments (14) and shares (25) per post, although having somewhat less likes (89). This suggests that Facebook is the best platform for promoting user debates and the spread of material. With just 47 likes, 6 comments, and 10 shares per post, Twitter had the lowest interaction across all categories even though it had the greatest average monthly postings (15). This implies that, in contrast to Facebook and Instagram, Twitter could not be as good at fostering deep user interaction, even while it might be appropriate for frequent updates. These findings emphasise how crucial platform-specific tactics are to optimising the effects of social media outreach for library services.

5. CONCLUSION

According to the study's findings, social media greatly improves user engagement and the efficiency of library services by promoting interactive contact, boosting accessibility, and offering timely updates. The majority of library patrons stated high levels of satisfaction with the services they received and reported regularly using social media channels, especially for information pertaining to notifications of events and new book releases. While acknowledging the advantages of increased outreach, library personnel also pointed to obstacles including the

requirement for training and content production. According to analytics, Facebook and Instagram were especially good at increasing interaction. Overall, the results indicate that, with sustained investment in staff training and content optimisation, a well-planned, controlled social media presence may enhance service delivery and fortify library-user connections.

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Sushant Chakma
