



Social media as a platform in academic library marketing: A comparative study



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ARTICLE INFO

Keywords:

Facebook
Social media
Library marketing
Quantitative study

ABSTRACT

Social media like Facebook have become popular tools for different organizations like libraries in marketing practice. To build relationships with library users, libraries hope social media can engage its user communities actively with their collections, services, and activities. This paper aims at evaluating the effectiveness of using social media as a platform in marketing through a questionnaire on the Facebook page of the University of Hong Kong Libraries (HKUL), comparing the perspectives of students and faculty members. Both the current situation of HKUL's Facebook page and the reasons affecting users' interest and participation in the page are evaluated, in order to suggest better strategies for the library to deal with the needs of library users in the future. Other university libraries can also gain new insights from the study.

This research has the following key findings: 1. The marketing practices of HKUL's Facebook page generally did not receive adequate attention and reactions from users; 2. Students were more engaged than faculty members in HKUL's Facebook page, as students use more varieties of library services than faculty members; 3. User needs, social media content, and interactions generally affected user acceptance of the library's Facebook marketing.

Introduction

Marketing refers to “effective management by an organization of its exchange relationship with its various markets and publics” (Kotler, 1972, p.12). Johnson (2014) defines the term of marketing from a library context, which is to determine the wants and needs of the user communities, to develop the products and services to respond, as well as to encourage users and potential users to take advantage of those products and services. Therefore, building relationships by connecting users to the library would be critical in the marketing practice. Through public engagement and liaison work with user communities, it enables two-way interactions between libraries and their users by allowing libraries to communicate its collection policies and services, as well as enabling their users to express needs and offer feedback. Furthermore, these marketing activities can help ensure the collections and services satisfy the needs of users, and arouse the awareness of the users (RUSA, 2010).

With the advancement of information technology nowadays, different social media tools, such as Facebook, Instagram, YouTube, WhatsApp, and LinkedIn, are becoming more and more popular among different internet users, which include both individuals and various

types of organizations. These tools allow people to contribute content, as well as to communicate, interact, and exchange views and ideas (Garoufallou, Siatiri, Zafeiriou, & Balampanidou, 2013). When it comes to the usage of these social media tools in libraries, the purposes do not only confine to the search of books and journals, but also include interaction and knowledge sharing between libraries and the communities (Fong et al., 2020). Video sharing sites like YouTube provide a way to “experiment and to advertise services, resources, locations, which can be especially useful for incoming students or new faculty members who can watch such videos weeks before they arrive on campus” (Little, 2011). Social networking tools like Facebook also provide a fast-spreading method for advertisements and promotions of libraries. They allow libraries to give information to the users, as well as collect views and opinions of users through their “share” and “comment” functions (Lam, Au, & Chiu, 2019).

The emergence of new social media tools has created a need for library professionals to develop new skills and competencies. Many librarians, unfortunately, do not adequately equip themselves with all of these skills, since it is not enough for them to understand how to use the social media tools (Jones & Harvey, 2016). Librarians also need to use these tools effectively by examining the behavior and culture of the user

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community (Luo, Wang, & Han, 2013). Moreover, many existing studies nowadays emphasize the decision of libraries staff in using social media tools, but often neglect the user side when conducting their research.

The University of Hong Kong Libraries (HKUL) mentioned in its Strategic Plan (2015–2020) that collaboration is one of its core values in supporting the teaching, learning, research, and knowledge exchange of the University. Moreover, the engagement with the broader community in programs and collaborative initiatives is another key objective of HKUL. Therefore, the Facebook page of HKUL was launched in 2012. Nevertheless, the page itself does not receive much attention from the community. Until February 6, 2018, it only attracts 1104 “likes,” which is much less than some world-famous university libraries like Bodleian Libraries of the University of Oxford (32,689 “likes”) and Yale University Library (14,855 “likes”). Moreover, it has been observed that the posts of HKUL’s Facebook page seldom receive many “likes” and comments from users. Therefore, this study aims at identifying factors affecting users’ engagement to the Facebook page operated by the HKUL, as well as putting forward suggestions to raise the effectiveness of using the page in marketing by libraries.

As many research works focus on the effectiveness of social media solely from the perspective of work done by libraries, this research aims to put the focus on library users to examine factors to satisfy their needs and preferences. Moreover, we compare the users’ view of HKUL’s Facebook page with those of other university libraries to provide evidence on Facebook pages that HKUL users would welcome. Our research questions are as follows.

- RQ1. What is the current user perception of HKUL’s Facebook page?
- RQ2. What are the differences between students and faculties in their perceptions of HKUL’s Facebook page?
- RQ3. What are the factors affecting users’ interest and participation in HKUL’s Facebook page?

Literature review

Marketing and libraries

A popular definition of marketing comes from Kotler (1972, p.12), who defines marketing as “the effective management by an organization of its exchange relationship with its various markets and publics.” Since then, the definition of marketing has been further evolved and expanded. For instance, Yorke (1984, p.17) describes the act of marketing by an organization as a constant attempt to match its resources “to the needs of the market to achieve its corporate objectives.” In recent years, the focus of the relationship between libraries and patrons is reflected in the definition of marketing, which emphasizes on the values, concerns, and needs of customers (Kaur, 2009). Comparing the terms “marketing” and “promotion,” Owens (2003) states that the extra meanings of conducting market research and tailoring activities to the needs of customers can only be seen in marketing.

The concept of marketing was not included in the daily practices of librarians, probably until its introduction to non-profit organizations by Kotler and Levy in 1969. However, Renborg (2000, p.2) suggests “marketing is not a new library activity,” as Samuel Green had delivered a speech at the ALA Conference in 1876 about the improvement of relationships between libraries and readers (Green, 1876). The idea of marketing has started to arouse heated discussions and objections from the academia beginning from the 1970s, in which librarians and information specialists began to consider using marketing as a tool to accomplish the overall library objectives, as well as to raise the standard of the existing services (Koontz, Gupta, & Webber, 2006). Starting from the mid-1970s, an increase in the number of publications related to the application of library marketing can also be seen (Koontz et al., 2006). Since then, a rising interest in the idea of marketing by non-profit service providers like libraries can be observed, so it can be concluded that marketing has finally been accepted and recognized by

libraries.

Various traditional and new marketing plans and approaches are formulated since the popularity of marketing concepts. Coote and Batchelor (1997) proposed the four “marketing mix” elements, which are also known as 4Ps (product-price-place-promotion), aiming at suiting consumers’ needs in providing marketing strategies (Palmer, 2004). Many libraries have used these elements in measuring their performance, which help contribute to the development of a more effective marketing project (Garoufallou et al., 2013). More specialized “7Ps of Service Marketing mix” are later introduced to the libraries, which include three more element-Ps, i.e., people, physical evidence, and processes. In the 21st century, new library marketing approaches like “relationship marketing” and “word of mouth marketing” are being proposed, which put their focus on the relationship between libraries and their users (Balabanidou, Garoufallou, Zafeiriou, & Siatiri, 2009; Besant & Sharp, 2000).

Social media and library marketing

Social media tools are technologies that allow people to contribute contents and create a socially networked web environment (Andersen, 2007). Social media tools are being used widely by libraries to spread to a larger population of users. These tools also perform the functions of news sharing, provision of information literacy instruction, education, and service marketing (Garoufallou et al., 2013). Among different social media tools, Facebook has been one of the most popular tools among individuals and various organizations like libraries. Facebook has received huge success since its creation in February 2004 by a Harvard student (Phillips, 2011). Nesta and Mi (2011) praise the functionality of Facebook by describing it as a free and valuable marketing tool for interacting with users, as well as receiving feedback and comments from them.

Different researches have highlighted the benefits of using social media tools in marketing by libraries. Harnesk and Salmon (2010) believe these tools can broaden library exposure, modernize the library image, and strengthen collaborative work, whereas Dankowski (2013) praises low cost and ease of use of these tools. Nevertheless, the major inducement for libraries to use social media is driven by the rapid technological changes in recent decades. As the Internet provides more user-friendly interfaces and faster spread of information, information users will turn to alternative information providers if libraries do not make a greater effort in improving their services (Garoufallou et al., 2013; Morgan, 1998).

However, some scholars hold opposing views and doubt on the benefits brought by social media. Bradley (2015) believes that social media is just a different channel for doing ongoing work, since many library tasks like communication and promotion, occur before the emergence of social media tools. Also, some scholars question the incentive of using social media tools by libraries. For example, Bushing (1995) believes that librarians disagree upon library concepts, which lead to their failure in understanding marketing concepts and their applications. Nevertheless, these journals are published more than a decade ago and may not be able to explain the changing situation of libraries nowadays.

Research gap

Many researched the use of social media as a platform in marketing in recent decades. Most studies focus on the role of libraries and librarians by proposing recommendations and suggestions for them to utilize social media tools better (Al-Daihani & Abrahams, 2018; Choi & Joo, 2018; Garcia-Milian, Norton, & Tennant, 2012). However, librarians should know how to use these tools effectively by understanding behavior, culture, and etiquette of different users (Jones & Harvey, 2016; Luo et al., 2013). Although many articles mention the importance of understanding user needs in conducting a successful marketing

practice, only a few of them put their research focus on users through collecting information from them (Jones & Harvey, 2016; Phillips, 2011; Sich & Polger, 2019). Besides, most researches on the social media marketing of libraries are conducted in the West, such as Britain (Jones & Harvey, 2016) and America (Howard, Huber, Carter, & Moore, 2018; Phillips, 2011), with a few exceptions like the research conducted by Chan (2012) on Hong Kong Baptist University Library. As suggested by Garoufallou et al. (2013), more case studies of country approaches on library marketing should be carried out since different strategies are necessary for libraries in different countries and areas with different environments and cultures. Therefore, this research tends to study the use of social media from the user perspective in the Hong Kong context, to give new insights to other academic libraries.

Methodology

As mentioned in the Literature review section, since many academic journal articles nowadays put their research focus on technical aspects, this paper tries to fill the research gap by collecting information mainly from users. A quantitative survey was used as the primary source of information collected, together with other details like different figures on the Facebook page of HKUL via online observation. As clearly stated in the topic of the paper, the strategy of inquiry was a case study on the Facebook page of HKUL (which did not include Facebook pages of branch libraries like the Medical Library and Education Library). Our sampling criteria were active library users, including both students and faculty members from different backgrounds. Respondents of the survey were randomly selected to improve the diversity, including students of different academic levels as well as students and faculty members from different faculties.

The online survey was created and distributed through Google Form at the HKU Campus. Most questions were closed quantitative and scaling questions for easy answering. Nevertheless, a few open-ended questions were also included to provide insights. As Jones and Harvey (2016) conducted a preliminary survey regarding the effectiveness of social media in library marketing on library users in the UK, some of the questions were adapted in this research, including the benefits and drawbacks of connecting with the library through social media. Besides, we added questions about the user behavior of the Facebook page (such as the frequency of leaving “likes” and comments), together with methods and recommendations to increase the effectiveness of Facebook pages. We also designed questions asking respondents to compare and evaluate the Facebook contents of HKUL and the Bodleian Libraries to reflect on their actual preferences.

We used the Statistical Package for Social Sciences (SPSS) for the statistical analysis in this research. The tables in this section mostly covered mean values, *p*-values, and standard deviations (SD). *P*-values of bivariate correlations test was computed to compare whether the differences between the responses of students or faculties were significant.

Demographic information

In our survey, 101 responses were collected from both faculties and students in total during the period of data collection. Tables 1 and 2 illustrate the personal particulars of respondents. Generally speaking, most of the student respondents collected in this survey were aged under 30, while the faculty respondents spread over all age groups. There was roughly a similar gender proportion.

Result and data analysis

Personal habits of using social media and HKUL services

Tables 3 and 4 highlight some personal habits of the respondents in terms of using the services and social media of HKUL. As shown in

Table 1
Gender and age of respondents.

Age	Student			Faculty		
	Overall	Male	Female	Overall	Male	Female
18–24	23	10	13	0	0	0
25–29	28	14	14	7	4	3
30–34	10	4	6	8	2	6
35–39	5	4	1	5	2	3
40–49	2	0	2	4	1	3
50 or above	0	0	0	9	6	3
Total	68	32	36	33	15	18

Table 2
Faculty.

Faculty	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)
1. Faculty of Education	42 (41.6%)	33 (48.5%)	9 (27.2%)
2. Faculty of Social Sciences	14 (13.9%)	8 (11.8%)	6 (18.1%)
3. Faculty of Arts	13 (12.9%)	10 (14.7%)	3 (9.1%)
4. Faculty of Business and Economics	12 (11.9%)	4 (5.9%)	8 (24.2%)
5. Faculty of Science	10 (9.9%)	9 (13.2%)	1 (3.0%)
6. Faculty of Engineering	5 (5.0%)	2 (2.9%)	3 (9.1%)
7. Faculty of Law	3 (3.0%)	1 (1.5%)	2 (6.1%)
8. HKU School of Professional and Continuing Education (HKU SPACE)	2 (2.0%)	1 (1.5%)	1 (3.0%)

Table 3, among the seven services listed in the questionnaire, “searching online catalog/use online resources of the library” was the most common service being used for both student and faculty respondents, with the mean value of 4.06 and 3.73, respectively. As the scale described “4: Weekly,” it showed that most of the respondents had a regular habit of reaching the library online. On the other hand, “receive help from librarians” ($M = 2.25$) was not popular among student respondents and “participate in workshops, seminars or other events” ($M = 1.70$) was the most unpopular service among staff respondents. Notably, students statistically significant used more than staff in the use of computing facilities ($p = 0.002$), spaces ($p < 0.001$), and events of the library ($p < 0.001$).

Table 4 shows that the respondents' usage of all types of social media (like Facebook, YouTube, WeChat, and WhatsApp) were frequent ($M = 4.21$, $SD = 1.16$). Their mean score of using Facebook, on which we investigated their preferences of content design, was also high ($M = 3.82$).

Habits in using HKUL's Facebook page

Table 5 illustrates the number of HKUL's Facebook page visitors and fans among the respondents. Despite the general popularity of using Facebook and HKUL service, surprisingly, the visibility of HKUL's Facebook page was pretty low, with only 28.7% and 14.9% of respondents visited and gave “like” to the page, respectively. More students visited and gave “like” HKUL's Facebook page than faculties, but only visits showed statistically significant differences ($p = 0.022$).

Table 6 summarizes the frequency of respondents using HKUL's Facebook at the post level, which was generally very low. “Browse the page” ($M = 1.38$) and “comment posts” ($M = 1.08$, near to “never”) were the most and least frequent activities, respectively. Student respondents used the posts significantly more than faculties for all activities ($p < 0.05$), except that both groups very rarely commented on the posts.

Effectiveness of HKUL's Facebook page

Table 7 shows how much the respondents agreed that Facebook was

Table 3
Habits in using services of the HKU libraries.

Services	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. Visit the HKU libraries	3.28	3.37	3.10	0.121	0.862
2. Borrow/return books or other library materials	2.78	2.78	2.79	0.962	0.743
3. Use computing facilities of the library	2.78	3.03	2.24	0.002	1.182
4. Use spaces of the library	2.96	3.32	2.21	< 0.001	1.191
5. Search online catalog/use online resources of the library	3.95	4.06	3.73	0.191	1.161
6. Participate in workshops, seminars or other events	2.18	2.41	1.70	< 0.001	0.780
7. Receive help from librarians	2.23	2.25	2.18	0.711	0.799

Notes: Scale - 1: never; 2: seldom; 3: monthly; 4: weekly; 5: daily; 6: more than once a day.

an effective way for HKUL to promote its services. The result shows that respondents generally took a neutral stance on using the Facebook page as a way of HKUL's promotion. Nevertheless, student respondents significantly agreed more on the effectiveness than faculties ($p = 0.015$).

In Table 8, respondents were asked to evaluate different types of information that appeared on HKUL's Facebook page in terms of their attractiveness. Again, respondents generally took a neutral stance in general (mean values range from 3.0 to 3.4). Among the seven items listed, "news about reading" was considered the most attractive ($M = 3.40$), whereas "university news" the least attractive ($M = 3.07$). Compared with faculties, student respondents considered all types of information more attractive, and five out of seven items show significant differences ($p < 0.05$).

Tables 9 and 10 provide the respondents' ratings of the benefits and weaknesses of connecting HKUL through Facebook. Table 9 shows that the three most well-received benefits of connecting HKUL via Facebook were "awareness of new resources" ($M = 3.65$, $SD = 0.818$), "promotion of events/activities/competitions" ($M = 3.63$, $SD = 0.880$), and "keeping up to date with general information regarding library services" ($M = 3.54$, $SD = 0.911$). Compared with faculties, student respondents considered all these benefits stronger, but only three out of twelve factors showed significant differences ($p < 0.05$).

Table 10 shows that the three most prevalent weaknesses of connecting HKUL via Facebook were "a lack of interest or willingness to engage will render it ineffective" ($M = 3.47$, $SD = 0.855$), "staff may not use it well and so updates missed or feel ineffective" ($M = 3.24$, $SD = 0.814$), and "potential for too much or unwanted info/spamming" ($M = 3.12$, $SD = 0.930$). Compared with students, faculty respondents significantly disagreed connecting the library via Facebook would cause "blurring of boundaries between university and personal life/breach of privacy" ($p = 0.022$).

Evaluation of social media content

Table 11 compares the popularity between the Facebook post content of HKUL and Bodleian Libraries of the University of Oxford, after inviting the respondents to examine both pages. Both student and faculty respondents considered the content of Bodleian Facebook (72.3%, $N = 73$) more attractive than that of the HKU Facebook (27.7%, $N = 28$).

Table 12 shows the criteria affecting the respondents' ratings of the content. The three leading criteria in affecting the attractiveness of Facebook contents were "eye-catching presentation" (54.5%),

Table 4
Habits in using social media.

Social media	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. Social media, such as Facebook, YouTube, WeChat, WhatsApp, etc.	4.21	4.29	4.03	0.269	1.160
2. Facebook	3.82	4.00	3.45	0.058	1.307

Notes: Scale - 1: never; 2: monthly or less; 3: weekly; 4: daily; 5: more than once a day.

Table 5
Visitors and fans HKUL's Facebook page among the respondents.

Items	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. Visit HKUL's Facebook page	29 (28.7%)	24 (35.3%)	5 (15.1%)	0.022	0.455
2. "Like" HKUL's Facebook page	15 (14.9%)	12 (17.6%)	3 (9.1%)	0.218	0.357

Table 6
Frequency in using HKUL's Facebook page.

Activities	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. Browse the page	1.38	1.47	1.18	0.009	0.630
2. Leave "likes" to posts	1.19	1.25	1.06	0.019	0.484
3. Share posts	1.12	1.16	1.03	0.047	0.407
4. Comment posts	1.08	1.10	1.03	0.229	0.366

Notes: Scale - 1: never; 2: monthly or less; 3: weekly; 4: daily; 5: more than once a day.

Table 7
Facebook page as an effective way for HKUL to promote its services

Items	Overall (n = 89)	Student (n = 65)	Faculty (n = 24)	P-value	SD
Facebook page as an effective way for HKUL to promote its services	3.17	3.31	2.79	0.015	0.920

Notes:

- (1) Scale: 1: strongly disagree; 2: disagree; 3: neutral; 4: agree; 5: strongly agree.
- (2) Respondents choosing the option of "unsure" were excluding.

"interesting message" (42.6%), and "clear message" (42.6%). There were no statistically significant differences between the student and faculty respondents.

Table 8
Attractiveness of information types appeared on HKUL's Facebook page.

Items	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. E-resources recommendation	3.22	3.34	2.97	0.017	0.756
2. Library event	3.26	3.34	3.09	0.134	0.820
3. Library notice	3.29	3.51	2.82	< 0.001	0.898
4. Library recruitment	3.18	3.44	2.64	< 0.001	0.865
5. News about reading	3.40	3.50	3.18	0.033	0.708
6. Printed collection recommendation	3.36	3.49	3.09	0.012	0.743
7. University news	3.07	3.13	2.94	0.148	0.738

Notes: Scale - 1: very unattractive; 2: unattractive; 3: neutral; 4: attractive; 5: very attractive.

Discussion and suggestions

Current user perception of HKUL's Facebook page (RQ1)

In general, our results were aligned with the previous findings by Lam et al. (2019), which suggested that the general popularity and visibility of HKUL's Facebook page were low. Less than one-third of respondents visited the library page, and only 14.9% of them were the followers of the pages. Nevertheless, respondents were passively engaged in the library's Facebook posts as they rarely "like," comment, or share posts. As shown in Tables 9 and 10, although respondents generally agreed that the use of library Facebook could be beneficial, some issues such as a lack of attractiveness, shortage of technical staff, and too much spamming might hinder them from participating in the HKUL's Facebook page actively.

Differences between students and faculties in their perceptions of HKUL's Facebook page (RQ2)

Students and faculty members have different perspectives on Facebook adoption for promoting HKUL services. As shown in Tables 5 and 6, compared with students, most of the faculty members were not active followers of the HKUL's Facebook page, and they seldomly engaged in the Facebook page activity. Moreover, as shown in Table 7, students significantly agree more on the effectiveness of library Facebook use than faculty members. One possible reason could be related to the user behavior of the library. As shown in Table 3, students used more than faculty members in terms of computing facilities, spaces, and events of the library. Therefore, more students than faculty staff were interested in receiving different types of library information (see Table 8) and more likely to agree on the advantages of library Facebook use (see Table 9). On the other hand, "searching online catalog/use

Table 9
Agreement of benefits of connecting the library via Facebook.

Benefits	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. Access to research materials/resources	3.42	3.51	3.21	0.061	0.765
2. Alternative to college systems such as email	3.30	3.31	3.27	0.846	0.819
3. Awareness of new resources	3.65	3.81	3.33	0.010	0.818
4. Can connect with other users and share information	3.42	3.47	3.30	0.350	0.828
5. Can connect with the library without having to go into it	3.43	3.49	3.30	0.316	0.853
6. Easier/immediate/speedier access to information	3.39	3.46	3.24	0.250	0.905
7. Finding out about resources including reviews and recommendations	3.47	3.56	3.27	0.110	0.831
8. Get study and revision tips	3.43	3.53	3.21	0.084	0.853
9. Improved communication - can personally connect with HKUL, ask for help and make recommendations	3.46	3.46	3.45	0.994	0.855
10. Increased visibility of the library, makes it more appealing and modern	3.51	3.60	3.33	0.134	0.867
11. Keeping up to date with general information regarding library services	3.54	3.71	3.21	0.011	0.911
12. Promotion of events/activities/competitions	3.63	3.78	3.33	0.017	0.880

Notes: Scale - 1: strongly disagree; 2: disagree; 3: neutral; 4: agree; 5: strongly agree.

online resources of the library" was the most common service being used by faculty respondents, which indicates that their main purpose is acquiring knowledge information for research. These findings may imply a mismatch between the information provided by HKUL's Facebook Page and the needs of the faculty members (Wójcik, 2019).

Table 10 shows another interesting finding that faculties were more likely to disagree with the use of library Facebook would cause "blurring of boundaries between university and personal life/breach of privacy." In contrast to the finding by Park (2010), faculty respondents had less concern over privacy exposure and more open-minded to social media. It seemed that the image of teacher authority might not be prevalent in the context of an international metropolis.

Factors affecting users' interest and participation in HKUL's Facebook page (RQ3)

We discuss the effectiveness of marketing by HKUL's Facebook page from the following four perspectives affecting users' interest and participation and give suggestions accordingly: i) needs of users, ii) contents of social media, iii) interactions, and iv) marketing through channels besides the Facebook page itself.

User needs

As mentioned in our literature review, marketing emphasizes user needs and views (Owens, 2003; Reynolds, 2003; Yorke, 1984). However, from the result of this survey, it can be concluded that the marketing practices of HKUL's Facebook page did not meet our respondents' needs and preferences adequately. Kumbar (2004, p.4) mentioned that many librarians "are not comfortable with marketing processes," and they took a "passive stance" towards users and their information needs. This is in line with our respondents, who agreed that "the staff may not use it well" was one of the weaknesses of library Facebook adoption (see Table 10). HKUL should take measures from the users' perspective when creating its posts. Focus groups and library surveys can act as two feasible and manageable measures for libraries to have a better understanding of their users by obtaining first-hand data from them (Fong, Au, Lam, & Chiu, 2020; Jones & Harvey, 2016). By organizing focus groups, a platform for the exchange of ideas between library staff and users can be provided. By distributing library surveys, it allows the library to obtain data for systematic and in-depth analysis (Sin & Kwon, 2017). Such activities focusing on the use of social media enable libraries to know better the behaviors and preferences of their users and help librarians formulate strategies and plans of social media tailored for their users (Lam et al., 2019).

On the other hand, libraries should not neglect services in which users seem to be less interested. For example, our results show that "receive help from librarians" was an unpopular library service among student respondents. The lack of popularity does not necessarily mean

Table 10
Agreement of weaknesses of connecting the library via Facebook.

Weaknesses	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)	P-value	SD
1. A lack of interest or willingness to engage will render it ineffective	3.47	3.40	3.61	0.222	0.855
2. Blurring of boundaries between university and personal life/breach of privacy	2.89	3.03	2.61	0.022	0.937
3. Could be a distraction to students or be abused by them	2.76	2.81	2.67	0.443	0.918
4. Could be exposed to trolling/cyber-bullying	2.75	2.81	2.64	0.335	0.853
5. Information might be irrelevant or annoying	2.94	2.87	3.09	0.243	0.870
6. Limited period of use – students only in university for a few years	3.03	3.04	3.00	0.813	0.877
7. Not as effective as current systems and will have impacts on physical space usage	2.91	2.93	2.88	0.813	0.928
8. Not everyone is on or can access	3.06	3.10	2.97	0.482	0.892
9. Potential for too much or unwanted info/spamming	3.12	3.06	3.24	0.318	0.930
10. Staff may not use it well, and so updates missed or Facebook feed ineffective	3.24	3.19	3.33	0.390	0.814
11. Uncool, lack of credibility	2.89	2.91	2.85	0.733	0.904

Notes: Scale - 1: strongly disagree; 2: disagree; 3: neutral; 4: agree; 5: strongly agree.

the service itself useless, but it may also be caused by a lack of promotion of the service (Fong et al., 2020). Such results imply that HKUL should promote the role and importance of librarian help to the users in terms of helping their teaching, learning, and research, where social media like Facebook can be a good platform in doing so.

Content of social media

Content of social media can also contribute to the marketing of libraries as users can be attracted and connected through the information, which may create a sense of belonging to the libraries. Ideas and responses can also be generated through the discussion of content, which leads to the formation of social capital and social network (Fong et al., 2020). However, it seems that HKUL did not create content that can capture the attention of users. Table 8 shows that “news about reading” was the most attractive information on HKUL’s Facebook page, and Table 9 shows that “awareness of new resources” was the best-received benefit of connecting HKUL via Facebook. Nevertheless, based on our observation, among 81 posts on HKUL’s Facebook page from August 2017 to July 2018, there were no posts recommending e-resources or the printed collection and only three posts about reading news. In contrast, resources recommendation and news about reading frequently appeared on the Bodleian Facebook page, such as some interesting facts about the Harry Potter series. Notably, as the Bodleian Libraries is one of the scenes in the Harry Potter films, such posts not only increase people’s understanding of Harry Potter, but can also be a measure to promote the library itself.

The media type of posts was another important factor in attracting users. As shown in Tables 11 and 12, the majority of respondents opined that the content of Bodleian Facebook was more appealing and attractive because of criteria like “eye-catching presentation,” “interesting message,” and “clear message.” For example, the post of Bodleian Libraries with piles of books and the fun facts about library operations that we showed to the respondents drew their attention. Thus, the Bodleian Libraries showed efforts in designing a post that can catch the attention of users. In contrast, although the post of HKUL was clear, including all the essential information of a public lecture, the text-only message without a picture was not interesting to our respondents. The post is not eye-catching because it used only black and white colors without providing illustrating images or photos. Besides the use of full-time professions, better artist content design may also be archived by part-time arts and design student helpers and interns (Lo et al., 2016).

Table 11
Popularity of HKUL and Bodleian Facebook contents.

Items	Overall (n = 101)	Student (n = 68)	Faculty (n = 33)
1. Bodleian Library Facebook (Content A) https://www.facebook.com/bodleianlibraries/posts/1448755635146693	73 (72.3%)	51 (75.0%)	22 (66.7%)
2. HKUL Facebook (Content B) https://www.facebook.com/hkulib/posts/1614847761969405	28 (27.7%)	17 (25.0%)	12 (33.3%)

As suggested by Lam et al. (2019), photo-type posts or video-type posts were more effective than text-type posts to gain better attractiveness. Therefore, HKUL may incorporate more visually appealing graphics or videos when creating posts.

Besides, there can be many possibilities for content sharing. EBSCO (2019) outlines new arrivals and upcoming events as possible ways for engaging with social media users and keeping posts interesting. This is also supported by Landis (2010), who claimed that users could look smarter by sharing the posts that contain a unique or interesting value. Jones and Harvey (2016) think that users’ needs and interests can be satisfied when users contribute content to the social media of libraries. Besides, libraries can develop their own social media policy to ensure the quality and regulate the standard of contents contributed by library staff and users. In the Bodleian Libraries (2020), they provide concise policies that cover the scope, audiences, access conditions, and editorial process online.

On the other hand, as many respondents of the survey believe that “potential for too much or unwanted info/spamming” is an important weakness of connecting the library through Facebook, libraries should avoid posting content unnecessary and not useful to users. Not only may too much “junk” information harm the image of the Facebook page and reduce the level of effectiveness in marketing, but also users may complain about their privacy protection (Hung et al., 2007).

Interactions

One of the critical elements in the concept of marketing is the establishment of relationships and interactions. In line with Kotler’s (1972, p.12) emphasis on the “exchange relationship with its various markets and publics,” new library marketing approaches like “relationship marketing” and “word of mouth marketing” has been proposed in recent decades (Balabanidou et al., 2009; Besant & Sharp, 2000). Nevertheless, from our results, it seems that the interactions between the HKUL and its users on its Facebook page were far inadequate. Although many respondents regularly used various services of HKUL, only a few of them visited or gave “like” to HKUL’s Facebook, and almost no people ever commented on HKUL’s Facebook posts. Our follow-up checking of HKUL’s Facebook page reveals that most posts received < 10 “likes.”

Firstly, we suggest that libraries can use casual language and friendly information tools to create a friendly and positive atmosphere for users (Garoufallou et al., 2013; Phillips, 2011). Many researchers

Table 12
Popularity factors of Facebook contents.

Items	Overall	Student	Faculty	P-value
1. The presentation is more eye-catching	55 (54.5%)	34 (50.0%)	21 (63.6%)	0.197
2. The message is more interesting	43 (42.6%)	29 (42.6%)	14 (42.4%)	0.983
3. The message is more clear	43 (42.6%)	25 (36.8%)	18 (54.5%)	0.098
4. The message is more useful	32 (31.7%)	22 (32.4%)	10 (30.3%)	0.837
5. The tone of the message is better	31 (30.7%)	23 (33.8%)	8 (24.2%)	0.318
6. Others	5 (5.0%)	3 (4.4%)	2 (6.1%)	0.738

propose the introduction of training sessions on library marketing practices like effective communication techniques and usage of social media tools to librarians (Nurdin Mohamedali, 1999; Schmidt, 2006). The Bodleian Libraries have illustrated a good example by making a joke when posting the library notice about replacement and upgrade of lighting,¹ which is an excellent method in drawing people's attention and revitalizing the image of the Libraries.

Secondly, as highlighted in the results of the survey, a major weakness of connecting the library through Facebook is that the "staff may not use it well, and so updates are missed or felt ineffective." Therefore, libraries should adjust the posting frequency and time when creating posts. Besides posting on a frequent and regular basis, investigations should also be conducted in libraries to know when the users are the most active (EBSCO, 2019).

Moreover, librarians can take the initiative by engaging themselves in the discussion of Facebook pages, which can be easily done through participating in giving "likes," sharing, and commenting posts using their personal account (Fong et al., 2020; Lam et al., 2019). Burkhardt (2010) recognizes the discussion of Facebook pages by librarians as a way to influence conversations and proposes some general guidelines for the librarians to comment on posts, e.g., replying to negative feedbacks by addressing the problems and try to keep users staying positive.

Furthermore, libraries can set goals in evaluating the performances of social media in marketing. Some objective criteria, such as the number of likes, shares, and comments of posts, can be measured and used for benchmarks (Lam et al., 2019). Besides, these goals should be achievable as well as humble at the beginning, as it is impossible to attract too many followers at an early stage of a campaign (Burkhardt, 2010).

Marketing through multiple channels

As social media has been evolving quickly, librarians may need to understand the trend and choose suitable social media platforms (Swan, 2019). Besides Facebook, it is also essential for the libraries to consider other channels for successful marketing comprehensively. Table 10 shows that some respondents found "a lack of interest or willingness to engage" as one of the limitations of connecting the library via Facebook, and also opined that Facebook caused information overload because of its feed mechanism. Therefore, libraries may also consider using other social media tools besides Facebook; for example, there has been an increasing trend of using visually appealing Instagram among the young generation (Statistia, 2019). Although HKUL has accounts on major social media platforms like Twitter, Instagram, and YouTube, the level of visibility and popularity of these platforms is even lower than that of Facebook (Fong et al., 2020). As a result, libraries need to take appropriate marketing measures on these social media platforms as well.

Furthermore, libraries can follow some of the current trends of social media for marketing, such as video streaming (ProQuest, 2017). Libraries should take advantage of the engagement features by

interacting with people through broadcasting live videos with the help of tools like Periscope, Facebook Live, and YouTube. Libraries can broadcast live videos of popular events held in the libraries such as talks of celebrities and famous authors.

Last but not least, all marketing practices of libraries through social media would still be meaningless if there is a lack of library events and innovative services or if they are unattractive (Wójcik, 2019). Therefore, events receiving immense popularity, such as lucky draws, exhibitions, and book talks, could be organized continuously and consistently.

Conclusion

Modern libraries have been putting increasing emphasis on marketing to satisfy users' needs and facilitate interactions between libraries and users. In the Internet age nowadays, social media seems to be an "easy" tool for librarians to promote their services and collections. Nevertheless, many libraries find it difficult to utilize social media in marketing. This paper tries to provide insights into the topic of marketing through social media using the case of HKUL's Facebook page. From the data collected, it can be concluded that HKUL's Facebook page generally has low popularity and visibility. Several reasons affect the popularity of the page, such as a lack of interesting topics and unattractive presentation can be identified. Based on the feedback of the respondents, recommendations aiming at raising the level of effectiveness in marketing, such as avoiding unnecessary content, using causal language, and streaming videos of popular events are proposed. We hope this research contributes to academic and other libraries for some insights to improve their marketing on social networks.

Limitations and further studies

Some potential limitations can be identified in this research. In terms of data size, more responses could be collected for more comprehensive analysis across different programs and study levels. Interviews with librarians and library users could further enhance the comprehensiveness of the study by exploring more reasons and preferences. Besides, some of the recommendations suggested in the discussions section may have their limitations. For example, the personal engagement of librarians in sharing and commenting posts on social media and expanding multiple marketing channels may increase their workload. We are investigating how volunteers and interns can be recruited to solve this issue, especially employing the concept of virtual community participation (Deng, Gao, & Chen, 2019). Besides, we are interested in the use of social networks to promote particularly emerging technology-intensive library services such as maker-space (Liang, Lu, Liu, & Su, 2019; Maceli, 2019) and three-dimensional printing (Radniecki, 2017). We are also studying the role of social marketing of library services under pandemic and disaster situations (Chiu et al., 2010).

Author statement

The research were reviewed and approved by the Faculty Review Board delegate according to the guidelines of the Human Research

¹ <https://www.facebook.com/bodleianlibraries/videos/1540524885969767/>

Ethics Committee of the University of Hong Kong.

Declaration of competing interest

None.

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