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Using online advertising to increase the impact of a Library Facebook page

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Title - Using online advertising to increase the impact of a Library Facebook page

Purpose - This paper examines the effectiveness of using online advertising on the social networking site Facebook in encouraging university students to connect with their library's Facebook page

Design/methodology/approach - A two-month paid Facebook advertising campaign was conducted. Using the tools provided by Facebook Adverts, the campaign was targeted only at current students at the university who were not already connected with the library's Facebook page. At the conclusion of the campaign, the statistics recorded by Facebook Adverts were used to assess how effective the advertisement had been in attracting new connections.

Findings - The campaign statistics showed that the advertisement was shown frequently to the targeted user group, and that the click through rate for the advertisement was high. Furthermore, the advertisement accounted for over half of the new connections made to the library's Facebook page during the campaign period.

Research limitations/implications – It is impossible from statistics alone to determine how the advertising was received by users. An area of further research would be to survey the opinion of students on the use of social network advertising in marketing academic libraries.

Originality/value - While previous studies have examined using Facebook as a free tool for marketing libraries, this paper explores the potentials of paid advertising on social networks. Given the finding that such advertising can have a significant positive impact for a relatively small financial outlay, practitioners could consider this as another means to build their own library's brand in a cost-effective manner.

Keywords Marketing, Social networks, Facebook, Online advertising, Hong Kong

Paper Type Case study

Introduction

The social networking site Facebook has become an important part of the lives of many university-aged students. Academic libraries have recognized this, and it is now common for libraries to have their own Facebook pages. Much has been written in the library science literature about how Facebook can be used in the library environment. Although many have expressed concerns that students might not welcome librarians in their online social networking space, Bietila *et. al.* (2009, p.14) have suggested that librarians “should not be dissuaded from exploring the site and capitalizing on the promise that social networking tools offer for new and exciting library initiatives”. Librarians have indeed explored using Facebook in a variety of creative ways, including personal librarian Facebook profiles, Facebook groups, and Facebook pages. However, there is one Facebook feature that has thus far been overlooked – paid social network advertising. This involves using the information provided by Facebook users to construct their individual profiles to target advertising at specific groups. While of obvious benefit to commercial organizations, this functionality could also be of potential benefit to libraries in their marketing efforts.

With this in mind, the present study set out to gauge the effectiveness of a small-scale Facebook advertising campaign, and to assess value for money. Cost is a critical factor to consider in library marketing initiatives, which may partly explain why paid Facebook advertising has not been previously reported on. Therefore the study was designed to discover whether a small advertising budget could have a meaningful impact. As the library where the study was conducted already had an established Facebook presence, the goal of the advertising campaign was to increase the number of students who chose to connect (become “fans”) of the library’s Facebook page. Statistics automatically collected by Facebook were used to assess the success of the campaign. It is hoped that the results of this study will provide guidance to librarians on whether such a campaign might be of benefit to their own libraries.

Background

Hong Kong Baptist University (HKBU) is a mid-sized government-funded university with an enrolment of 8,300 students. In common with their peers around the globe, many students at HKBU are enthusiastic Facebook users. Aware of the popularity of the platform through the observation of students using library computers, in 2009 librarians at HKBU considered the possibility of establishing an HKBU Library Facebook page. It was suggested that this would be a good way to increase

the visibility of the Library and its services, and provide an additional means for users to communicate with the Library. Setting up and maintaining a test page proved to be straightforward. However, there was some concern that students might be resistant to the use of Facebook for academic purposes. It was therefore decided to launch a one-semester pilot.

HKBU Library's Facebook page was officially launched at the beginning of September 2009. The launch was advertised through an e-announcement to all students and faculty. An extensive promotion campaign was implemented for the pilot, including weekly updates for the page with unique content, photo albums, and competitions. It was hoped that this would encourage user interaction with the page. The page exceeded expectations for the number of connections made, with over 400 Facebook users choosing to become "fans" of the page within one month of the launch. However, the level of interaction was disappointing, with very few users actually posting messages or otherwise contributing to the page. After a review of the pilot project conducted in December 2009, it was decided to maintain the page but not devote further significant resources to producing major unique content updates. Instead, regular minor updates would be made, keeping the page up to date but absorbing little in the way of staff time.

In March 2010, a review of how the Library was marketing its services was conducted. One of the proposals put forward was to harness the Library's established Facebook presence by posting Library announcements on Facebook in addition to the Library website. This would make announcements more visible to students who may not visit the website regularly, but were fans of the Library Facebook page. Library announcements are also made through the University's e-announcement system, but are often lost amongst the announcements made by the other units of the University. Facebook could provide another means to bring important announcements regarding Library services to the attention of the university community, with minimal extra effort involved.

Although active promotion of the page ceased with the conclusion of the pilot, the number of fans steadily increased. By July 2010 the total stood at 570. While this fanbase was significant, it was felt that the number was still quite low relative to the overall enrollment of the University. To increase the marketing value of the Facebook page, the librarian responsible for the page decided to experiment with using Facebook advertisements to attract new fans.

Literature Review

Facebook is certainly not new to academic librarians. Charnigo and Barnett-Ellis

(2007) report becoming aware of the nascent phenomenon as early as 2005. This is not surprising given that Facebook began life as a service exclusive to college students, faculty, and staff. It has since been recognized that the platform is probably here to stay, with Graham *et. al.* (2009, p. 236) suggesting that social networking and Facebook in particular should not be seen as passing fads. Chu and Meulemans (2008, p. 84) went so far as to predict that social networks would eventually become as indispensable to academic libraries as e-mail or the Internet. The trend towards ubiquity has certainly continued over the past couple of years. Since lifting the restrictions requiring users to be affiliated with a college or university, Facebook has surpassed the 500 million active user mark (BBC News, 2010).

As the functionality of Facebook itself has rapidly changed and evolved, librarians have utilised the platform in a number of different ways. Institutional profiles were prohibited by Facebook in its early days, so many initial efforts such as those reported by Mack *et. al.* (2007) focused on librarians promoting their own individual profiles to students. However, Chu and Meulemans (2008) note that students may be hesitant to make such a personal connection with librarians. This problem could be circumvented by the use of Facebook Groups, which Xia (2007) looked at as a way to market library services. He suggested that librarians could play a functional role in the organization of such groups. In 2007 Facebook introduced a feature called Pages, which allows organizations to promote themselves with a permanent, customizable page (Ganster and Shumacher, 2009). Facebook users can choose to become “fans” of such pages, and thereby make a connection to the organization in question. For libraries, this has the advantage of obviating the need for a (possibly uncomfortable) personal connection between user and librarian.

Miller and Jensen (2007) offered advice on how libraries can best make use of their Facebook presence. They suggest that success depends on an understanding how the News Feed (a core Facebook feature) operates. Essentially, whenever a page is updated (with a brief news item, photo album, interesting link, etc.) this is displayed in the News Feed of all the fans of the page. It has been asserted that students rarely seek out information on Facebook, rather they allow Facebook to bring information to them via their News Feed (Miller and Jensen, 2007, p.19). Thus having access to the News Feed of their users can become a powerful marketing tool for the library, as many students have developed a habit of checking their Facebook account on a daily basis. Once a student is a fan of the library’s page, library updates will regularly be brought to their attention.

It logically follows that the usefulness of a library’s Facebook page in this regard is determined by the number of students that choose to become fans (and therefore have messages from the library delivered to their News Feed). Although Secker (2008)

was writing about personal librarian profiles, her comment that Facebook becomes more useful the more friends you have holds true for institutional pages as well. There are limitations as to what libraries can do in this regard. Ganster and Schumacher (2009) give a detailed account of how they marketed the Facebook page created for the University at Buffalo Libraries. Measures such as placing a link to the page on the library website produced desirable results. However, Graham *et. al.* (2009) found that traditional library marketing tactics such as handing out flyers at student events and introducing the library's Facebook presence at instructional sessions were generally unsuccessful. The authors go on to note that it is difficult to promote a library's Facebook efforts without paying for Facebook advertisements.

That statement implies that such advertising would be effective. However, the usefulness of libraries using online advertisements on social networks to promote their Facebook pages, or indeed to promote any library service, is not a topic that has been addressed by the existing library science literature. Some guidance can be found in the marketing literature. For example, Neff (2009) indicates that some evidence exists suggesting that even relatively small expenditure on social network advertising can produce good results. Furthermore, social networks give advertisers a great deal of information about their users. Todi (2008) noted that this information allows advertisements to be targeted and customized to an extent not previously possible in online advertising. Nevertheless, these authors were writing from a commercial perspective. It cannot be assumed that these advantages will hold true for the marketing of an academic library's Facebook page. The present study therefore set out answer the following question: Would a small-scale Facebook advertising campaign be a cost-effective way to attract more fans to an existing academic library's Facebook page?

Methodology

The process of setting up a small advertising campaign to promote a page in Facebook is fairly simple and intuitive. There are three major steps: designing the advert, targeting the advert, and configuring the pricing and scheduling options.

Designing the advert was straightforward as all adverts in Facebook must conform to a standard layout. There is a specific option to promote Facebook content, so it was a simple matter to select the HKBU Library Facebook page as the page to be advertised. The only creative input required was a short text message (limited to 135 characters) and an eye-catching image to be displayed in the advert box. The advertisement is quite small, and is usually displayed along with others of the same dimensions. Facebook users may see which of their friends has likes the

advertisement, and have the opportunity to “like” it themselves. A screenshot of how the advertisement appeared on Facebook is presented as Figure 1 below:



Figure 1

The next step was to set targeting options for the advert. This is one of the key advantages of the platform, as Facebook profiles often hold a large amount of information about each user. This allows for precise targeting of advertising. Using the options under “Education & work”, it was possible to target those users who had indicated that they were current students at HKBU. Furthermore, it was possible to use an option under “Connections on Facebook” to exclude from the campaign those users who were already fans of the HKBU Library Facebook page. The advert was thus set to be displayed only to a narrow target audience of the Library’s choosing. Facebook’s system even provides an estimate of the number of users who match the specified criteria. In the case of this campaign, the number was 920.

Scheduling the duration of the campaign was the next part of the process. The advertisement can be made to run continuously, or for a set period. It was decided to start the campaign at the beginning of August 2010 when first year students arrived for orientation, and run it through the end of September 2010. It should be noted that the schedule chosen during campaign setup is not set in stone. Facebook advertising campaigns can be paused or resumed at any time, so it is possible to micromanage the timing of campaigns for maximum effect.

Finally, pricing options need to be considered. There are two broad pricing

options, Pay for Impressions and Pay for Clicks. The former is used to build brand awareness, while the latter is used to have users click through to a destination page. As the goal of the campaign was to increase the number of fans (which requires users to click on the advert) the Pay for Clicks options was selected. This meant that a charge would only be levied if a user actually clicked on the advert. It was hoped that a high proportion of those who clicked would also become fans of the page. Indeed, it is even possible for users to directly become a fan by clicking on the provided button within the advert without visiting the page itself (this is of course counted as a click for the purposes of calculating advertising charges).

Perhaps the most challenging aspect of the campaign set up process to understand is the auction system Facebook uses to allocate adverts. In essence, all advertising campaigns bid against each other to have their adverts shown to users. Each campaign therefore specifies a maximum bid, in other words the most that they are willing to pay for one click. The form indicated that successful bids for the specified user group ranged from HK\$1.96 (US\$0.25) to HK\$3.48 (US\$0.45). The form will usually suggest a bid that lies at the mid point of this range. A maximum bid of HK\$2.72 (US\$0.35) was duly set. Another important setting is the daily budget, which for this pilot campaign was set at the minimum level of HK\$10. This ensures that the amount available for advertising is never exceeded.

The campaign was allowed to run for exactly two months (1 August 2010 – 30 September 2010) with no changes being made to the advertisement itself or to the targeting and pricing options during the period. Facebook provides a number of different statistics for tracking the performance of advertising. These metrics were used in evaluating the effectiveness of the advertisement, and are explained in the following section.

Findings

Facebook's Adverts Manager allows the performance of an advertisement to be tracked in great detail. A myriad of statistics are available, including aggregated demographics of Facebook users who clicked on the advertisement, their likes and interests according to their Facebook profiles, and more. However, for the purpose of the present analysis only those data relevant to answering the question of how effective the campaign was in attracting new fans to the Library Facebook page are considered.

Given the attention that the issue has received from the media in recent years, Facebook privacy concerns cannot be ignored in any discussion of the use of the data presented here. As the results of this study were being analyzed, it was surprising just

how much information about Facebook users was being made available to advertisers, and the extent to which Facebook tracks the activities of its users. This may cause unease in a profession that champions data privacy rights. However, the data provided by Facebook is aggregated and anonymous. In this form, it arguably provides librarians with extremely useful insights into their users, without compromising their individual privacy.

Clicks and Impressions

Period*	Unique impressions	Unique Clicks	Unique CTR
August 2010	1,170	96	8.205%
September 2010	1,247	83	6.656%

* Statistics for the full campaign were not available for this dataset

Table 1 – Campaign statistics for unique clicks and impressions (NB data for the full campaign were not available)

“Clicks” is a measure of how many times the advertisement was clicked on during the period, while “impressions” refers to the number of times the advertisement was presented to users in the targeted user group. These two figures are used to calculate the click through rate (CTR), which is simply a measure of what percentage of those users exposed to the advertisement actually clicked on it. The data presented in Table 1 are the “unique” subset of these metrics as recorded for the HKBU Library campaign. This strips out repeat showings of the advertisement to the same user account and repeat clicks of the advertisement by the same user. The unique statistics provide a clearer picture of exactly how many users were reached by this advertisement.

The number of unique impressions was broadly in line with expectations, as during the campaign setup it was indicated that there were about 920 Facebook users affiliated with HKBU that were not already fans of the Library’s Facebook page. The higher figures recorded for unique impressions during the campaign itself probably reflected additional Facebook users identifying themselves as HKBU students. Perhaps these were first year undergraduates updating their Facebook profiles as they began their studies during August and September.

The unique CTR was impressively high for both months, with a rate of 8.2% and 6.7% being recorded for August and September respectively. As a comparison, in 2009 the overall CTR for all online advertising in Hong Kong was 0.17% (DoubleClick, 2009). This is indicative of the power and potential of targeted social advertising, where the user is more likely to be presented with advertisements

that are of interest to them. There was, however, a noticeable decline in the CTR in September as compared with August – the number of clicks went down even as the number of impressions went up. One possible interpretation of this data is that the advertisement was getting stale. Users who have ignored it even after hundreds of viewings are unlikely to be enticed to click by the same advertisement in the future. This suggests that it would be prudent to regularly update the advertisements used in any future advertising campaign.

Period	Total Impressions	Social impressions	Social %
August 2010	373,370	329,339	88.21%
September 2010	276,856	250,794	90.59%
Full Campaign	650,266	580,133	89.21%

Table 2 - Selected campaign statistics for total and social impressions

Table 2 provides some additional data on the exposure of users to the advertisement. The raw impressions figure is strikingly high, and indicates that the average user was presented with the advertisement hundreds of times. While the purpose of this campaign was to attract fans to the Library Facebook page, the number of impressions achieved suggests that Facebook advertising could be a powerful tool in building the HKBU Library brand among students.

Another interesting metric is the number of “social impressions”. Facebook leverages its social network by placing social endorsements into adverts. For example, if one of their Facebook friends has already become a fan of the HKBU Library Facebook page, a user will see the sentence “[friend’s name] likes this” incorporated into the advertisement (Facebook, 2010). This type of peer endorsement is potentially far more persuasive than any advertising slogan the library might produce. The data show that the majority of impressions delivered by the campaign were social impressions, which might partially account for the high CTR.

Conversions

Period	Spent (HKD)	Conversions	Cost per conversion (HKD)
August 2010	\$253.6	29	\$8.74
September 2010	\$208.88	26	\$8.03
Full Campaign	\$462.48	55	\$8.409

Table 3 - Campaign conversion statistics

Although useful for evaluating the performance of the advertisement in terms of reach and attractiveness, statistics for clicks and impressions do not directly measure how many fans were attracted as a result of the campaign. To determine this, it is necessary to refer to the “conversions” statistics. Conversions are actions that users take in relation to an advertising campaign. As becoming a fan of the page was the only action available for the HKBU Library page, each recorded conversion for the campaign represents a new fan. It should be noted that this figure does not only include users who directly clicked on the “Like” button in the advertisement. Also included are those users who clicked on the advert, viewed the page itself, and then decided that they liked the page. This detailed tracking of user actions is again only possible because of the social networking infrastructure that a Facebook advertising campaign operates within.

In total, 102 new fans were recorded over the two-month campaign period. The data in Table 3 reveal that the advertisement accounted for 55 of those new fans, with a cost per conversion of HK\$8.409 (US\$1.08). This suggests that the use of Facebook advertising effectively doubled the rate at which new fans were being added to the Library Facebook page. The overall cost can be considered very reasonable indeed, especially as it also includes the less tangible benefit of hundreds of thousands of advertisement impressions.

Conclusion

This study set out to explore the cost-effectiveness of using online advertising to promote an academic Library Facebook page. The results indicated that the advert was shown often to the target audience, enjoyed a high click through rate, and ultimately had a significant impact on the number of fans attracted to the Library Facebook page. This was achieved for a modest total outlay of less than US\$60. As library budgets are always under pressure, this relative inexpensiveness makes social network advertising all the more attractive as a marketing solution. Though comparisons with traditional library marketing efforts are difficult to make, the results of this study support Neff’s (2009) contention that even a very small budget for social network advertising can bring disproportionately large benefits. The ability to scale the size of a Facebook campaign according to size of the budget available is another advantage over traditional marketing campaigns.

However, the present study is limited by the fact that it relies on statistical data alone to judge the success of the advertising campaign. There is no way to tell how students actually felt about the presence of Library advertising in Facebook. It is quite possible that some students may have had a negative reaction to the presence of the

Library in their social networking space. Alternatively, the constant repetition of and exposure to the Library advertisement may have annoyed some students. Perhaps the image of the Library experienced a net reduction in the eyes of many students rather than the increase that was the goal of the campaign. A future study might set out to ascertain what impact advertising the library in this way actually has on students, perhaps through surveys or focus groups.

Another possible area for further research would be to explore the use of Facebook advertising to promote specific Library events or services. The campaign described in this study was a relatively simple one-advertisement campaign. Facebook supports multiple advertisements in a single campaign, or multiple campaigns can be run simultaneously. Instead of one generic advertisement for the Library, a series of different advertisements could be produced, each showcasing individual Library services. Facebook's targeted advertising model could potentially be of use in making sure the particular advertisements each user sees are as relevant as possible. The high number of impressions generated by the campaign examined by this study (over 650,000) suggests that such advertising could be effective in raising student awareness of Library services. Future studies might test this hypothesis. Another possibility would be to test whether advertising specific Library-organized events on Facebook could be useful in increasing attendance. Facebook has a feature called Events which allow users to indicate their intention to attend a function on Facebook. As many libraries often commit significant resources to their events, any means to increase their impact warrants further investigation.

With over 680 fans, the HKBU Library Facebook page has become a useful tool in the marketing of the Library. Updates about the Library's myriad events, services, and activities are regularly posted to the page. These include items on the Library's video-on-demand service, its personal calendar application, events in a newly established Learning Commons, and more. All of these items are delivered into the News Feed of the Facebook page's fans, which many students will check multiple times per day. As the number of fans continues to grow, this has the potential to become a powerful means to build the Library's brand among students.

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