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# The social media toll road

## The promise and peril of Facebook advertising

In the world of Facebook, can money really buy popularity? At the Montana State University (MSU) Library, armed with a small advertising budget, we aimed to find out. After two years of using the library's Facebook page as a free avenue to reach users, we decided to explore different paid routes available within Facebook. Our goals for implementing a Facebook advertising campaign were primarily to increase user awareness of library services and resources, and secondarily to understand the mechanisms of Facebook advertising. Our experiences allowed us to get a glimpse of life on the Facebook toll road.

Most libraries with a Facebook presence will be familiar with the concept of organic growth. This type of growth represents social media interaction that does not result from the aid of paid promotions or advertising. Organic growth is driven by strong content, and it results mainly from a community engaging with social media posts in the form of likes, shares, and comments. Engagement is a key metric here. Not only does it indicate positive community reactions, but when a

post receives high engagement, that post is more likely to appear in the News Feeds of friends, resulting in further engagement and the increased potential for new followers.



Figure 1. Post Highlighting WriteNight. View this article online for more detailed images.

The News Feed is the continuously updating list of status updates, likes, and other activities from people and pages that a user follows on Facebook. As the primary way users interact with content, the News Feed is an important element of the Facebook experience. In studying the News Feed and the engagement levels of different types of content, we noticed that two posting categories often result in high engagement and organic growth for the library's Facebook

page: "Library Events" (Fig. 1) and "Library Employee Highlights" (Fig. 2). We used these

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observations of organic growth categories to inform our strategy around paid growth.

Libraries with a Facebook presence may be less familiar with the concept of paid growth. In contrast to organic growth, paid growth represents social media interaction that results from the aid of paid promotions or advertising, which

on Facebook entail either an ad or a promoted post. An ad is self-created and includes a photograph, a headline, and 90 characters of text which are displayed on the pages of people who meet certain criteria pre-selected by the ad creator. Promoted Posts, which become available to

administrators of Facebook Pages with more than 400 likes, occur when a monetary investment is applied directly to an individual post. Facebook uses the term *boosting* to describe this process whereby the Promoted Post is elevated in the News Feeds of followers, ostensibly to increase visibility and engagement. Promoted Posts allow for a high level of content flexibility because any individual post can be promoted. In contrast to the more static and pre-prepared nature of ads, Promoted Posts offer a way to reach followers without the appearance of an overt ad.

During our advertising experimentation, we maintained a sensitivity to alienating our existing community with activity that could feel intrusive, commercial, or otherwise unwelcome. Existing research around social network advertising suggests that users' reactions to Facebook advertisements range from disinterested to annoyed, depending on how well-targeted ads are.<sup>1</sup> This research indicates that successful social network advertising features entertaining content that is central to users' Facebook-related initiatives. With this in mind, we aimed to create attractive

advertisements that would be relevant to specifically targeted user groups.

## Advertising campaign approach

Facebook Ads Manager is the interface used to create targeted ads and make payment decisions. Administrators simply enter text,

images, and demographic targets into provided templates and rely on Facebook's internal advertising algorithms to display ads to the targeted audience. There are both simple and advanced options for targeting ad audiences, based around the term *reach*, which is defined by the number of unique

users who will possibly see your ad. We chose to limit our ad reach by geographical region and age, targeting our ads to users 16 years of age or older and to the 12 states in the United States with at least 100 students enrolled at MSU. We identified this audience as likely to be interested in our library and responsive to our ads.

Facebook provides two payment options for ads: CPM (cost per impressions) or CPC (cost per click). CPM represents payment per 1,000 impressions, which indicates that charges incur when the ad is presented to users. CPC represents payment per click, which indicates that charges incur when users click on the ad. According to Facebook, ads are optimized with CPM so that ads will appear to those users most inclined toward the content promoted within the ad.<sup>2</sup> For CPC, Facebook will show the ad to users most inclined to click through but not necessarily to take any further action, such as liking the page or liking a post. Facebook provides the option of linking an ad to either your Facebook page or an outside website, such as the library's homepage. The CPC model is often used

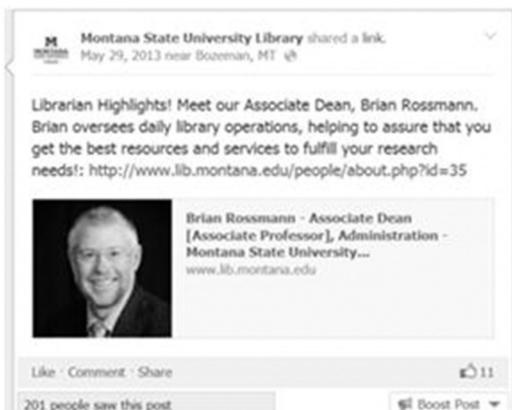


Figure 2. Post Promoting Library Employee

for linking to outside websites. With the goal to increase page likes, we chose the CPM model and linked the ad to our library Facebook page.

We committed a budget of \$300 to our advertising research. We conducted five ad campaigns of \$50 each, and one ad campaign at \$40 plus two Promoted Posts of \$5 each at different points in the academic term year. Ads can be scheduled for any length of time, limited by either a daily budget or a lifetime budget. To normalize our results, we maintained an identical ad for the one-year



Figure 3: Campaigns 1-5a

duration of our six advertising campaigns. We ran two ads concurrently during our final campaign, one with the same image and text as previous campaigns, and another with altered image and text, in order to account for the possibility of users becoming familiar and dismissive of our ad (Figures 3 and 4).

Our schedule around Promoted Posts was more ad hoc than with ads. We split \$50 among Campaign 4 and two Promoted Posts, allocating \$40 to a traditional ad and \$5 to two Promoted Posts, one promoting our digital historical photo collection and another promoting a therapy dog program in the library (Figures 5 and 6). We strategically targeted these two particular types of posts, which had also previously resulted in high-engagement and organic growth.

## Results and discussion

Our experience with Facebook advertising produced mixed results. Existing research into social network advertising has demonstrated that Promoted Posts are relatively more effective and cost-efficient than CPM ads in attracting new fans to a Facebook page.<sup>3</sup> Our

experience similarly reflected the increased value of Promoted Posts compared to ads, but we also discovered certain issues that have discouraged further investment in Facebook advertising.

The most notable issue concerns a lack of consistency, both in the Facebook Ads Manager and in the results of CPM ads. Our ad results exhibited an alarming downward trend in Likes, with an equally alarming upward trend in cost-per-reach.

- Campaign 1 yielded 154 new Likes at a cost-per-action of \$0.32



Figure 4: Campaign 5b

- Campaign 2 yielded 66 new Likes at a cost-per-action of \$0.76
- Campaign 3 yielded 32 new Likes at a cost-per-action of \$1.52
- Campaign 4 yielded 18 new Likes at a cost-per-action of \$2.12
- Campaign 5a yielded 43 new Likes at a cost-per-action of \$1.11
- Campaign 5b yielded 35 new Likes at a cost-per-action of \$1.31

We experienced a decrease in Likes from Campaign 1 to Campaign 4 of 88%, and an increase in cost-per-action from Campaign 1 to Campaign 4 of an astounding 565%. Campaign 5a and 5b showed only minor improvements, and in fact the new ad design of Campaign 5b performed more poorly than Campaign 5a.

Since public awareness of Facebook's internal advertising algorithms and systems is unknown, we can only conjecture as to why this downward trend in Likes occurred.

On the one hand, the design of our ad could have been poor. In order to account for this possibility, we altered our ad design

in our final campaign. This resulted in a negligible difference from the unaltered ad design, and was consistent with the overall downward trend in engagement over time. Both versions in fact offered only minor improvements from previous campaigns, perhaps indicating that users become dismissive of the same or similar ads

that appear repeatedly. Related research suggests that dollars spent towards advertising are likely ineffective for this reason

and that users simply tend to ignore ads.<sup>4</sup>

On the other hand, our inconsistent results could be due to alterations in Facebook's advertising structure and algorithm during our experimentation period. Such inconsistencies and uncertainties serve as a deterrent to invest further in Facebook advertising.

Frequent updates to the Ads Manager furthermore make reliability in advertising difficult.

Facebook's approach to advertising seems to be in constant flux. Over the course of one year, the Facebook Ads Manager underwent

sudden and unannounced changes that resulted in an unsettling and uncertain experience.

For example, even as we were planning our first ad, the options for payment changed from a bid-per-click model to a CPM/CPC model. After we completed our ad campaign,

Facebook added more targeted payment options, including paying per like, post engagement, and clicks to a website. While analytics reports from the Ads Manager have continually improved in their accessibility and readability, we still do not have a clear understanding of how our funds are used for ads. The steadily

increasing cost-per-action of our ad campaigns combined with the murky inconsistencies of the Ads Manager lead us to conclude

that sustained engagement through paid growth on Facebook will come at a cost higher than most libraries will be able to afford. In the face of diminishing returns and increasing costs, we see Facebook Ads as unsustainable over the long term.

While we do not see fruitful investment in ads, we observed that investment in Promoted Posts offers more positive and consistent results.

Our Promoted Post strategy focused on boosting posts from categories that had previously resulted in strong organic growth, and from there we noticed that our most successful Promoted Posts were

library events and librarian highlights, two high-engagement categories. Since a Promoted Post appears in the News Feed, it avoids the easy-to-dismiss quality of ads, which appear off to the side and away from the central

*(continues on page 434)*



Figure 5: Digital Historical Photo Promoted Post



Figure 6: Therapy Dog Program Promoted Post

purdue.edu/cgi/viewcontent.cgi?article=1004&context=dilsymposium.

Johnston, Lisa, and Jon Jeffryes. "Data Management Skills Needed by Structural Engineering Students: Case Study at the University of Minnesota." *Journal of Professional Issues in Engineering Education & Practice* (2013) accessed February 18, 2014, [http://ascelibrary.org/doi/abs/10.1061/\(ASCE\)EI.1943-5541.0000154](http://ascelibrary.org/doi/abs/10.1061/(ASCE)EI.1943-5541.0000154).

## Notes

1. J. P. Holdren, "Memorandum for the Heads of Executive Departments and Agencies—Increasing Access to the Results of Federally Funded Scientific Research," (2013), accessed February 18, 2014, [www.whitehouse.gov/sites/default/files/microsites/ostp/ostp\\_public\\_access\\_memo\\_2013.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf).

2. See our project site at <http://datainfolit.org>.

3. Jake Carlson, Lisa Johnston, Brian Westra, and Mason Nichols, "Developing an Approach for Data Management Education: A Report from the Data Information Literacy Project,"

*International Journal of Digital Curation* 8, no. 1 (2013): 204-217, accessed February 18, 2014, [www.ijdc.net/index.php/ijdc/article/view/8.1.204](http://www.ijdc.net/index.php/ijdc/article/view/8.1.204).

4. Jon Jeffryes and Lisa Johnston (2013), "An E-Learning Approach to Data Information Literacy Education," 2013 ASEE Annual Conference (Atlanta) accessed May 5, 2014, [www.asee.org/public/conferences/20/papers/6956/view](http://www.asee.org/public/conferences/20/papers/6956/view).

5. The series content is freely available at <http://z.umn.edu/datamgmt14>.

6. Jon Jeffryes and Lisa Johnston, "A Scalable Approach to Data Management Education of Graduate Students" (poster presented at the Data Information Literacy Symposium, West Lafayette, Indiana, September 22-24, 2013), accessed February 18, 2014, <http://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1004&context=dilsymposium>.

7. See the entire workshop series content at <http://z.umn.edu/teachdatamgmt>.

8. If you want to see the site as intended for students, visit <http://z.umn.edu/datamgmt14>. *ZZ*

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*("The social media...", cont. from page 430)*

course of content on the Facebook homepage. We will continue using Promoted Posts for this important reason: Promoted Posts appear as regular posts in the News Feed. This strong advantage allows us to locate important content within that space where users primarily see and interact with content.

With a limited investment in ads and with strategically targeted investment in Promoted Posts, advertising on Facebook can result in increased engagement and growth. We are skeptical of the long-term value and cost-effectiveness of ads, and therefore cannot recommend that libraries invest deeply in ads. Promoted Posts, on the other hand, offer a more consistent and cost-effective method for increasing user awareness of library services and resources.

In short, our initial experience shows that paid growth strategies should be approached with restraint and should be built on a foundation of organic growth. Social networking

through Facebook offers libraries new ways to connect with users, and advertising on Facebook offers a tantalizing but unpredictable route for reaching those users.

## Notes

1. Hemant C. Sashittal, Rajendran Srirama-chandramurthy, and Monica Hodis, "Targeting college students on Facebook? How to stop wasting your money," *Business Horizons* 55, no. 5 (2012): 495-507: 499.

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3. Christopher Chan, "Using Online Advertising to Increase the Impact of a Library Facebook Page," *Library Management* 32 (4/5): 361-370; Christopher Chan, "Marketing the Academic Library with Online Social Network Advertising," *Library Management* 33 (8): 479-489.

4. Zeljka Hadija, Susan B. Barnes, and Neil Hair, "Why We Ignore Social Networking Advertising," *Qualitative Market Research: An International Journal* 15 (1): 19-32. *ZZ*