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Hula Island: Strategic Decisions Involving Costs and Benefits of Internet Advertising Programs

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Authors note: The views expressed in this document are those of the authors and do not reflect the official policy or position of the Department of Defense or the U.S. Government

INTRODUCTION

Hula Island is a boutique Internet shop, not a brick-andmortar store, specializing in hand-painted glassware and Hawaiian-themed products.¹ Its customers are primarily women between the ages of 30 and 50 whose household earnings are above the national average. Hula Island caters to a unique niche market, providing its customers with a combination of artsy products, custom glassware, and vivid pictures at comparatively low prices. They also offer a generous return policy. To encourage impulse purchases, most items are priced between \$15 and \$30 with a very small markup. An extensive analysis of the company's customer list shows that, on average, each new customer will generate approximately \$3.50 in immediate profits and \$25 in lifetime profits (the lifetime profits include the immediate profits).

The owner, who refers to himself as the Chief Coconut of Hula Island, has strong industry contacts and can usually obtain inventory items a month or so before the company's competitors. As a result, Hula has a comparatively loyal customer base. Most customers consider the company's hand-painted glassware products as collectible art objects. For instance, many customers collect the annual Lolita® Wicked Witch wine glass.² Hula's best customers collect and display sets of specialty glasses—the "Sister Wife," glass for

example—along with holiday-themed glasses for Halloween and Christmas. The wine glass shown in Figure 1 is one of its best-selling products.

Figure 1: An example of a Hula Island product, the "Rich Witch, Too" Wine Glass by Lolita.

Hula is a small business with approximately \$300,000 in annual sales and roughly \$48,000 in annual profits. Table 1

presents a simplified version of Hula's monthly income statements for the fiscal year ended May 31. The monthly sales numbers show a moderate degree of seasonality: 38% of annual sales occur in November, December, and January. But above-average sales also occur in September (end of summer) and April (Halloween and Christmas preorders). It may appear surprising that customers will preorder Halloween and Christmas products in April, but many customers are avid collectors and know that Hula will ship the preordered items a month earlier than competing companies.

The company has no long-term debt, and the owner—the Chief Coconut—will not consider taking on debt to fund advertising campaigns. One important element is that the owner relies on company profits to pay his own rent. Every month, he takes \$2,000 as a personal distribution knowing it will restrict the company's ability to expand or to advertise. After the \$2,000 monthly distribution, Hula is close to breakeven in most months. A comparatively small miss in sales can lead to a monthly loss.

INTERNET ADVERTISING CAMPAIGNS

Figure 2 shows the steps leading to an Internet purchase on HulaIsland.com. The initial stage of an Internet advertising campaign is to place an advertisement or send an e-mail that attracts a customer's attention. A well-placed advertisement will generate customers who click on the advertisement leading them to the company's website. Tracking the number of clicks captures the essence of advertising. The advertisement is supposed to generate clicks, which also means eyeballs that look at the company's website. Once eyes are on the website, the company is responsible for enticing the customer to purchase its products. Thus, one measure of success for an advertising campaign is the number of clicks generated.

Once customers are on the website, they may identify products or categories they find interesting and look at multiple pages. Customers who are well-matched to the site will look at many pages. The average number of page views per visitor is another measure of campaign success because a large number of page views indicates that a good customer match has occurred.

Table 2: Costs and Predicted Outcomes for each **Advertising Option**

Costs	Option 1 Monthly Online Magazine	Option 2 Affiliated Retail Store	Option 3 Search Engine Auction
Variable	\$0.00	\$0.25/click	\$0.005/click
Fixed	\$500	\$50	Auction
Outcomes			
Expected Clicks	1,550	5,780	84,000
Average Page views	20	5	1.5
Percentage of Clicks Converted	7.00%	3.00%	0.14%

The final and most important measure of success is the number of customers who purchase a product. This is known as converting. For purposes of this case, consider conversion as a purchase by a new customer. An advertising campaign is only going to be successful if Hula can generate enough profits (short- or long-run profits) from the converted customers to cover the advertising cost. Conversion is measured in several ways, including advertising cost per conversion and conversions as a percentage of clicks.

INTERNET ADVERTISING OPTIONS

Hula has extensive, successful advertising campaigns directed at its existing customers. Customers routinely receive coupons and notifications of new products and sales from the Chief Coconut. He feels that he has the correct mix of advertising to retain his current customers. But now the Chief Coconut is interested in growing the customer base by attracting new customers. Increasing the number of collectors will provide a greater revenue cushion and move the company away from breakeven in most months.

The Chief Coconut has successfully run Internet advertising campaigns in the past. In May 2015, he was

Figure 2: Steps Leading to an Internet Purchase

Attract Customers → Click on Site → Browse Site → Purchase Product (Convert)

considering three different approaches that have worked for him previously: (1) purchase an advertisement in a monthly online magazine, (2) purchase a pay-per-click advertisement on an affiliated retail store's website, and (3) purchase a search engine advertisement in an auction. Table 2 summarizes the costs and predicted outcomes for each approach. The conversion percentages shown in Table 2 reflect expected conversions by new customers. While the cost of each option is known once the contract is signed, the number of clicks, number of page views, and conversion rates are only estimates. As with all advertising, there is substantial uncertainty about the outcome of each campaign. Each campaign will almost surely generate different actual numbers.

1. Purchase an advertisement in a monthly online magazine.

The first option is an Internet version of a classic advertising technique. Hula could purchase an advertisement in a monthly online magazine. Two possibilities would be Hawai'i Magazine® or Everyday Party® Magazine. Online magazine advertisements require a fixed cost of \$500 and have no click-through costs. Each advertisement yields a fairly low rate of 1,550 monthly clicks, though potential customers are well-matched to the site, as shown by the high number of page views (20) and the highest conversion rate of the three options (7%) (See Table 2).

2. Purchase a pay-per-click advertisement on an affiliated retail store's website.

The second option is to purchase an advertisement on the website of a very large online store. The website would likely generate a very large amount of traffic that could possibly be attracted to Hula's product offerings. For instance, the retail store may have generic wine glasses; Hula Island could purchase an ad that would offer Hawaiian-themed wine glasses.

The hard part for these campaigns is to find the right search level for the advertisement. Customers usually start on a retailer's website at the homepage and progressively narrow their search results through a "search tree." For instance, a customer might click on the homepage; then patio, lawn, and garden; then outdoor décor; and finally tiki torches. If the advertisement level is too high in the search tree (i.e., patio, lawn, and garden) the ad will not generate much interest. Conversely, if the advertisement level is too low in the tree (i.e., tiki torches) it will not have much traffic. Therefore, Hula places its advertisements at an intermediate product category level (i.e., outdoor décor or party supplies).

A pay-per-click advertisement that runs for a month on an affiliated retail store has a small fixed cost of \$50, and Hula

pays \$0.25 for each click. The typical advertisement generates 5,780 monthly clicks. Customers have a moderate number of page views (5) and a moderate conversion rate (3%) (See Table 2).

Purchase a search engine advertisement in an auction.

The final option is to participate in a search engine advertising auction. Many high-traffic Web search engines hold auctions where they sell the right to place an ad next to the outcomes of search terms (e.g., Google Adwords). For instance, they could auction off the right to place an advertisement on the outcome page when a user types in "Hawaiian vacation." In order to make this option comparable to the others, we assume the auction provides one month of advertising next to the outcomes of search terms.³ Selecting the search term item is difficult. At one extreme, Hula is the number one search outcome when "tropical glassware" is typed into most major search engines. It would not make sense to purchase an ad if you are already on the outcome of the search. At the other extreme, bidding on "Hawaiian vacation" would be fruitless since major travel agencies are going to bid large amounts for the ad, and Hula does not have much to do with vacations. After experimenting, management found that the search term "Hawaiian souvenir" is usually within Hula's price range and provides an acceptable amount of traffic.

In addition to paying the final auction price, Hula must pay \$0.005 for each click-through. Showing up on a search engine search generates a large number of monthly clickthroughs (84,000). Yet few customers are well-matched as evidenced by the low number of page views (1.5) and the low conversion rate (0.14%) (See Table 2).

The Chief Coconut is considering his options for increasing Hula's customer base. Interesting challenges include forecasting costs, revenues, profits, and return on invested resources associated with Internet advertising. Further, the company does not have unlimited cash with which to invest in advertising, and the cash flow throughout the year is inconsistent from month to month.

SUGGESTED DISCUSSION QUESTIONS

Prepare a report to the Chief Coconut of Hula Island that discusses the following:

1. Recall that Hula's management believes that each customer generates \$3.50 in short-run profit and \$25 in lifetime profit. Calculate the advertising cost per conversion for Internet advertising Options 1 (Monthly Online Magazine) and 2 (Affiliated Retail Store). Calculate the total expected profit from each option (short-run and lifetime), as well as the ratio of total profit to advertising cost (short-run and lifetime). To determine the benefits of an advertising campaign, should Hula Island use the profit on the first sale or the expected lifetime profits? To choose between advertising campaigns, should Hula Island use the total expected profits or the ratio of total expected profits to advertising costs?

- 2. Using your answer from Question 1 (either short-run or lifetime, total expected profits, or the ratio of total expected profits to advertising costs), determine the winner of the comparison between Options 1 and 2. Advertising Option 3 is different from the other two options in that the auction determines the fixed advertising cost. Assume Hula wins the search engine auction with a bid of \$105. Which advertising option (1, 2, or 3) would you recommend to management?
- 3. Prepare a cash budget for Hula Island on a monthly basis for the period June 2014 through May 2015. Perform the calculations on an incremental basis (i.e., determine the increase or decrease in cash for each month). The following information will allow you to structure the cash budget: The cash coming in each month is approximately one-half of the current month's sales and one-half of the previous month's sales. The cash out for each month has several parts. Each month Hula pays cash for invoices approximately equal to the cost of products sold in the prior month. Rent of \$2,000 is a fixed cost paid during the same month it is incurred. Variable costs are paid each month. They consist of part-time labor costs that average \$1.25 per order and shipping and taxes that average \$4.10 per order. Finally, the owner takes \$2,000 a month as a personal distribution.
- **4.** Although Hula Island is profitable on an annual basis, the company has a very tight budget and a small margin for error. The owner is always concerned about being able to pay his monthly bills. Should the focus of the analysis be accrual accounting, or should it shift to cash accounting?
- 5. Hula Island will only pay for an advertising campaign out of current cash. Given your understanding of Hula's market, when would be the best time to conduct a single advertising campaign? Why?
- 6. Should Hula Island run multiple advertising campaigns of potentially different types over the course of a year? Why or why not?

ENDNOTES

¹Hula Island is a real company that can be found at www.hulaisland.com. The qualitative features of this case reflect Hula Island's business environment, but the numbers are modified to preserve confidentiality.

²The current glass is "Wicked Witch, Too," the seventh wine glass by Lolita.

³Search engines also auction advertisements with prices that vary by season, day of week, and time of day.

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Table 1: Hula Island Income Statement—Entire Year Ended May 2015	Sland Income	Statement—	-Entire Year E	inded May 20	115							
Unit Sales		13,926										
Revenues		\$292,446										
Less:												
Rent		24,000										
S500		146,227										
Labor		17,408										
Shipping and Taxes	es	27,097										
Profits		\$47,714										
Average profit/order	der	\$3.43										
Hula Island Inco	Hula Island Income Statement—By Month	—By Month										
	June*	yluly	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Unit Sales	731	981	973	1,301	959	1,245	2,359	1,700	820	692	1,218	840
Revenues	\$15,351	\$20,601	\$20,433	\$27,321	\$20,139	\$26,145	\$49,539	\$35,700	\$17,850	\$16,149	\$25,578	\$17,640
Less:												
Rent	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
S900	2,676	10,301	10,217	13,661	10,070	13,073	24,770	17,850	8,925	8,075	12,789	8,820
Labor	914	1,226	1,216	1,626	1,199	1,556	2,949	2,125	1,063	961	1,523	1,050
Ship/Taxes	2,997	4,022	3,989	5,334	3,932	5,105	9,672	0/6′9	3,485	3,153	4,994	3,444
Profits	\$1,764	\$3,052	\$3,011	\$4,700	\$2,938	\$4,411	\$10,148	\$6,755	\$2,377	\$1,960	\$4,272	\$2,326
*The previous month's sales (May sales) were \$17,010.	sales (May sales) were .	\$17,010.										