IMPACT OF CLOSED-LOOP GIFT CARD PROMOTIONS BY BUSINESSES

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ABSTRACT

At their inception, gift cards were sold by businesses to customers to give as gifts to others. More recently, gift cards are beingused strategically by businesses to manage and transform their relationships with customers. Of particular interest here is the closed-loop gift card that can only be redeemed at the business whose name is on it. This analysis discusses the impact of closed-loop gift card promotions and evaluates the impact of these promotions ontotal spending, lift and redemption rates.

Keywords: Gift cards, promotion, consumer behavior, retail

1. Introduction

Most consumers are familiar with the concept of a gift card because they have been given one as a gift, have purchased one to give as a gift, or perhaps they have simply seen the loaded rack of cards available for purchase at a local retailer. A recent survey estimates that 90% of U.S. consumers either purchased or received a gift card in the preceding 12 months (Gentry 2008).These cards can be regarded as cash and valued accordingly.

While gift cards may ease the burden of shopping for special occasions, their usage has expanded considerably in recent years, growing from $19 billion in sales in 1999 to $97 billion in sales in 2010 (Odell, 2012). With the increasing popularity of digital gift cards, this rapid growth in sales is likely to continue (Airoldi, 2012). At their inception, gift cards were sold by businesses to customers to give as gifts to others. More recently, gift cards are being used strategically by businesses to manage and transform their relationships with customers.

There are many ways in which gift cards can be used by these businesses. The cards of interest here are “closed-loop” cards, meaning that they can only be redeemed at the business whose name is on them. In contrast, “open-loop” cards are linked to a major credit card and can be used anywhere that the credit card is accepted (Barker 2005).The closed-loop gift cards are divided into five categories below, but since there are numerous variations, purposes, and restrictions associated with these cards, they may not all be fully captured here:

Cash Hold Gift Cards
The scenario described earlier in which a gift card is purchased by a customer is the most common example of a cash hold gift card. In addition, some stores issue in-store credits on a cash hold gift card when the customer returns merchandise without receipt or after a certain period of time has passed. Other than holding the equivalent of the item's value on the card to be used toward a future purchase, the customer receives no added value for this card. The retailer, however, is assured that the money will not be spent elsewhere.

Discount Gift Cards
This is very much like a coupon. One example is a card given by Bath and Body Works for $5 off a future purchase of $30 or more.

Games of Chance Gift Cards
With this type of card, customers are given a card containing an unknown cash amount toward their purchase at the business. To learn the amount (if any) on a given card, customers often are required to visit the store and/or make a purchase. Victoria's Secret has used this particular approach successfully during recent holiday shopping seasons.

Earned Gift Cards
These are in some way earned by the customer through their previous purchases. One company that employs this practice is Office Depot who offers 3% cash back rebates on office supplies to members of their loyalty program in the form of a gift card. Another example is Toys R Us who has given $10Toys R Us gift cards to customers who spend $75 or more during a certain period of the holiday season.

"Gift" Gift Cards
These are gifts to existing customers and/or targeted new customers to encourage return or first visits to the business issuing the card. LL Bean included such gift cards in a recent holiday catalog. Unlike the Discount Gift Card, no spending threshold is required for redemption.

As noted, some of these categories of gift cards are similar to coupons or rebates. Substantial research has been done concerning the use of coupons and rebates by businesses and their effectiveness (Lu and Moorthy, 2007; Neslin and Shoemaker, 1983; Zhang, et. al., 2000).Little has been done, however, to investigate the use of gift cards by businesses as a marketing strategy to both manage and transform the relationship between a business and its customers.

The data on which this analysis is based included promotions involving the latter two categories of gift cards: Earned Gift Cards that are like a rebate, but earnings are accrued automatically at the point of sale and no further action by the customer is required other than redemption; "Gift" Gift Cards that are given as gifts to customers by the businesses. The latter has some similarity to coupons, but is designed to be regarded by customers more like cash and redemption is not restricted to a particular item. Note that other than the cost of printing and/or distributing the card, these cards have little cost associated with them unless they are redeemed by the customer. These types of cards are perceived by the recipient as a reward or a gift given to them by the business. They are valued like cash, but they can only be spent at that business establishment.

Businesses interested in using gift cards for marketing promotions do not have to develop and manage these in-house. These services can be outsourced to companies like American Express, Smart

Clixx, Stored Value Solutions, and First Data. The latter two, Stored Value Solutions and First Data, controlled about 80% of the market in 2007(Veverka 2007).

The entire gift card industry is relatively new and as such accounting standards, legal restrictions, and best practices are still evolving. A new association known as the Retail Gift Card Association (RGCA) has been announced that is dedicated to the issues associated with closed-loop gift cards. Their goals include providing a unified voice representing these cards, providing current information on their use and management by businesses, establishing a set of pro-consumer best practices, and providing more information about the cards' usage by customers (Jakobson 2009).

The most typical businesses that participate in these types of card promotions are retailers and restaurants. Others include grocery stores, hotels, casinos, and airlines. These businesses use such promotions hoping to increase sales, strengthen their brand, increase loyalty with existing customers, and attract new customers. But do businesses really understand the impact of these gift card promotions? The analysis in this paper attempts to answer this question.

2. Data

Much of the information that is available about gift card usage and associated spending behavior has been obtained through surveys (Harris 2005).For this analysis, the authors had the unique opportunity to work with a client in the gift card management business to evaluate actual data on gift card usage and customer spending behavior. Of particular interest to the client was the impact of the issue count of cards and the impact of the issue amount of cards. (The name of the client and its customers is confidential.) The database on which the analysis is based includes almost 8 million issued gift cards and 5.25 million redeemed gift cards during a three year period from 2007-2010 for 9 businesses representing 24 distinct promotions. Note that since the data only includes purchasing behavior for customers redeeming gift cards, a comparison to the purchasing behavior of customers without gift cards is not possible. The data were stored in a DB2 relational database and the data were mined using SQL. The data include the following variables:

Table 1: Original data

VARIABLE	DESCRIPTION
Client Name	
Type of Promotion	
Issue Count	number of cards issued in the promotion
Issue Amount	total dollar amount issued on cards
Cards Redeemed	number of cards redeemed
Card Issue Value	value of card at time of issue
Total Spending	total spending when card redeemed
Redeemed Amount	dollars redeemed on issued gift card
Average Ticket Amount	average purchase amount per ticket for a specific business

Additional variables created included:

Table 2: Transformed data

VARIABLE	DESCRIPTION
Lift Amount	spending above card issue amount
Lift Percentage	lift amount divided by card issue amount
Redemption Rate	percent of cards redeemed
Issue Amount as a Percentage of Average Ticket	issue amount of card divided by average ticket amount

3. Hypotheses

One of the factors that affects coupon redemption rate is the coupon amount. The higher the coupon amount, the higher the redemption (Reibstein and Traver, 1982). One would expect a similar relationship to hold for gift cards and it is explored in hypothesis 1.

Hypothesis 1
Gift cards with higher values have higher redemption rates.

A recent study suggested that using gift cards for promotion is most profitable by high-margin businesses that are visited infrequently for discretionary spending (Khouja, et. al. 2011). While the redemption rates for luxury retailers (marketing products like jewelry, automobiles, furniture) may be low, the lift is likely to be high. These issues are explored in hypotheses 2 and 3.

Hypothesis 2
Redemption rate for gift cards issued by luxury retailers is lower than redemption rate for non-luxury retailers.

Hypothesis 3
The lift amount for gift cards issued by luxury retailers is higher than the lift amount for non-luxury retailers.

If non-luxury retailers are visited by customers for staple items and lower priced items, then one might expect that the lift percentage on higher issue value gift cards would be lower than the lift percentage on lower issue amount gift cards because the entire purchase transaction could be covered by the higher amount card.

Hypothesis 4
For non-luxury retailers, lift percentage on cards with higher issue value is lower than lift percentage on cards with lower issue value.

The client expected that issue count and issue amount would be positively correlated with spending, lift amount, and redeemed amount, but wanted to know the significance and the magnitude of the relationships. Each of these relationships was examined individually.

Hypothesis 5a
Issue count is significantly and positively related to total spending.

Hypothesis 5b
Issue amount is significantly and positively related to total spending.

Hypothesis 6a
Issue count is significantly and positively related to lift amount.

Hypothesis 6b

Issue amount is significantly and positively related to lift amount.

Hypothesis 7a

Issue count is significantly and positively related to redeemed amount.

Hypothesis 7b

Issue amount is significantly and positively related to redeemed amount.

4. Analysis and Results

When examining descriptive statistics for the data, it became apparent that there were particular promotions that unusually skewed the results. Some of the promotions were offered by retailers selling luxury items. Very few cards were redeemed for these promotions, but the lift for those that were redeemed was extraordinarily high. For another promotion, the amount issued on the card was quite a bit larger than the typical ticket price of a purchase transaction. Thus there were multiple redemptions for a single gift card, leading to a redemption rate of over 100% and lift that was not captured on the series of purchase transactions. Thus, the summary statistics in Table 3below reflect ranges and averages including all promotions in the dataset as well as ranges and averages for the dataset excluding the promotions just discussed. These promotions did not offer $10 or $5 cards, so the modified statistics were not necessary for those categories.

The lift is the difference between the amount spent and the amount issued on the card. This is the "extra" revenue generated through the redemption of the card. When considering the modified data set, the lift ranges from 14% to 686% with an average of 382%. The redemption rate on cards reflects the percentage of cards issues that are redeemed. Again on the modified data set, the redemption rate ranges from 9% to 98% with an average of 50%.

Table 3: Descriptive Statistics

	Range (all)	Range (subset)	Average (all)	Average (subset)
Lift/Issue Amount	14% to 39900%	14% to 686%	7265%	382%
Redemption Rate	.25% to 221.58%	9% to 98%	47%	50%
Lift Percentage on $10 card	14% to 183%	Na	162%	na
Lift Percentage on $5 card	279% to 934%	Na	541%	na
Redemption Rate on $10 card	39.29% to 91.62%	Na	62%	na
Redemption Rate on $5 card	18.17% to 39.28%	Na	31%	na

Cards with an issue value of $10 had an average lift rate of 62% and cards with an issue value of $5 had an average lift rate of 31%. Based on these descriptive statistics alone, businesses would likely be impressed with the impact of gift card promotions. It was also possible, although not reported here for confidentiality reasons, to summarize this information for each business and each promotion. Prior to this analysis, this type of report had not been available to the client or its customers.

A series of regression models were evaluated to determine the nature and significance of the relationships proposed in the hypotheses. The presence of the luxury retailers and the retailer with repeat purchases for a single gift card skewed the model parameters, but did not alter the significance of the relationships studied.

Table 4: Summary Results for Hypotheses 1 - 7

Hypothesis	Response Variable	Explanatory Variable	Rsquared	Equation
1	*Redemption Rate	Card Amount in $ Card Amount (high = 1, low = 0)	.52 .49	Redemption Rate = -0.03 + 0.07 * Issue Amount Redemption Rate = 0.27 + 0.41*High
2	Redemption Rate	Luxury (1) Non-luxury (0)	.29	Redemption Rate = 0.62 - .57 * Luxury
3	Lift Amount	Luxury = 1 Non-luxury = 0	.99	Lift Amount = $24.51 + $9,776.90 * Luxury
4	*Lift Percentage	Card Amount (high = 1, low = 0)	.28	Lift Percentage = 7.41 - 4.73 * High
5a	*Total Spending (per promotion)	Issue Count	0.78	Total Spend = -$5,640,256.98, + $51.77 * Issue Count
5b	*Total Spending (per promotion)	Issue Amount	0.78	Total Spend = -$5,145,943.12 + $ 5.16 * Issue Amount
6a	*Lift Amount (per promotion)	Issue Count	0.87	Lift Amount = $73,024.87 + $ 3.72 *Issue Count
6b	*Lift Amount (per promotion)	Issue Amount	0.87	Lift Amount = $80,351.02 + $0.37 *Issue Amount
7a	*Redeemed Amount (per promotion)	Issue Count	0.99	Redeemed Amt = $22,311.91 + $4.03 *Issue Count
7b	*Redeemed Amount (per promotion)	Issue Amount	0.99	Redeemed Amt = $30,235.65 + $0.40 * Issue Amount

Those models that included the modified data set (excluding the luxury retailers and the retailer with repeat purchases) are identified by an asterisk next to the response variable in Table 4 above.
These relationships are interpreted below.
1. For each additional dollar of card issue value, the redemption rate is expected to increase by .07. (p = .0016) Cards with higher relative value are expected to have redemption rates that are .41 more than cards with smaller relative value. (p =.0024) Hypothesis is supported.
2. The redemption rate for cards issued by luxury retailers is expected to be 0.57 less than the redemption rate for cards issued by non-luxury retailers. (p = .007) Hypothesis is supported.
3. The lift amount for cards issued by luxury retailers is expected to be $9,776.90 higher than the lift amount for cards issued by non-luxury retailers. (p = .000) Hypothesis is supported.
4. Cards with higher relative value are expected to have lift percentages that are 4.73 percent lower than cards with smaller relative value. (p = .035) Hypothesis is supported.
5a. For each additional card issued in a promotion, total spending is expected to increase by $51.77. (p = .000) Hypothesis is supported.
5b. For each additional dollar issued in a promotion, total spending is expected to increase by $5.16. (p = .000) Hypothesis is supported.
6a. For each additional card issued in a promotion, lift is expected to increase by $3.72. (p = .000) Hypothesis is supported.
6b. For each additional dollar issued in a promotion, lift is expected to increase by $0.37. (p = .000) Hypothesis is supported.

7a. For each additional card issued in a promotion, redeemed amount is expected to increase by \$4.03. (p = .000) Hypothesis is supported.
7b. For each additional dollar issued in a promotion, redeemed amount is expected to increase by \$0.40.(p = .000) Hypothesis is supported.
Because most of the cards issued were @ \$10 in value, it is not surprising that for hypotheses 5a and 5b, 6a and 6b, and 7a and 7b one slope in the pair is about a multiple of 10 of the other. If various card values had been issued for a given promotion, then this would not be as consistent.

The results for hypothesis 3 seem somewhat strange since the lift amount for the luxury retailers is so incredibly high. This is likely due to the fact that the average ticket price for the luxury retailers in this dataset are very high as well. In an attempt to address the disparity in the average ticket price across the luxury retailers and the others in the data set, the hypothesis was restated as follows.
Hypothesis 8

Card issue value as a percentage of average ticket amount is positively related to the redemption rate.

Thus, a final regression was run using the card issue value divided by the average ticket price to estimate the redemption rate. A strong positive relationship was found there as well.

Table 5: Summary Results for Hypothesis 8

Hypothesis	Response Variable	Explanatory Variable	R squared	Equation
8	Redemption Rate	Issue Amount as a Percentage of Average Ticket Amount	0.73	Redemption Rate = 0.23 + 1.21*Issue as Percent of Average Ticket

8. For each additional percentage of card issue value/average ticket price, redemption rate is expected to increase by 1.21%. (p = .000) Hypothesis is supported.

While the slopes are meaningful and informative here, it must be noted that the promotions included in this data set were primarily targeting the existing customer base. If gift cards had been sent primarily to potential new customers, the slopes would likely be quite different.

Much of this analysis confirmed what the client had suspected, but the relationships are now statistically verified and quantified. As with couponing, the higher the value of the gift card, the higher the expected redemption rate. As management suspected, issue counts and issue amounts are the driving forces of the impact of these gift card promotions. Each is positively and significantly correlated with total spending, lift, and redeemed amount. Since issue amount is a fairly consistent factor of is count, however, they really represent the same thing in this data set.

Little thought had been given by the client to the differences in consumer usage of gift cards for luxury retailers versus non-luxury retailers. The results showing lower redemption rates and higher lift for luxury retailers are intuitive and useful. Further, it was observed that redemption rates were highest when the card issue value was 14% or more of the average ticket price. This offers important guidance when businesses are deciding on the appropriate issue values for the gift cards in a promotion.

4. Summary and Future Direction

The use of closed-loop gift cards is increasingly being used for marketing promotions, yet little empirical evidence is available to substantiate the impact of such promotions. In this analysis, the impact of gift cards earned by customers and gift cards given as gifts to customers by businesses were evaluated using actual transaction data. The evidence provided strongly supports the claims that gift card promotions lead to more revenue for businesses. This is especially relevant for businesses during this downturn in the U.S. economy when fewer customers are shopping and eating in restaurants.

During this analysis it became apparent that there are important distinctions in the effects of promotions across some customer types. In addition, there were not enough types of gift card promotions in the data set to be able to evaluate possible distinctions across promotion types. With an expanded number of businesses and types of promotions in the data set, it would be possible and revealing to investigate how these relationships differ across customer types, across promotion types and across industries.

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