

GROUPON SATICILARI İÇİN TEKRAR SATIN ALMA VE AĞIZDAN-AĞIZA PAZARLAMAYI YÖNLENDİREN ETKENLER*

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Öz

Grupon gibi fırsat siteleri; ürün ve servisler için yüksek indirim kuponları sağlamaktadır. Ancak bu indirimler kuponu sağlayan servis sağlayan satıcılar aleyhine sonuçlanmakta ve para kaybına sebep olmaktadır. Bu nedenle uzun vadede sürdürülebilirliğin sağlanabilmesi için tekrar satın alım ve ağızdan ağıza olumlu pazarlamanın üretilmesi gerekmektedir. Bu araştırma fırsat sitelerinde satılan servislerin, servis sağlayıcıların ve tüketicilerin özelliklerini, tekrar satın alım ihtimalini ve tüketicilerin olumlu ağızdan ağıza aktarımlarını deneysel bir dizaynla gerçekleştirilen 960 katılımcı ile incelemektedir. Tüketicilerin servis memnuniyeti yüksek olduğunda (1) ilk indirim ortalama düzeyde olduğunda daha fazla tekrar satın alım yapıldığı ve (2) Servis sağlayıcılar fiziksel olarak yakın olduğu durumlarda daha fazla ağızdan ağıza iletişim olduğu bulgularına ulaşılmıştır. Ayrıca, tüketicilerin kupon eğilimi (fiyat bilinci değil) hem fırsat kuponu alımını hem de fırsat sonrası ağızdan ağıza pazarlamayı artırmaktadır. İlginçtir ki, fiyatı kalite konusunda bir ipucu olarak değerlendiren tüketiciler, tekrar tam fiyatla satın almaya daha isteklidirler. Bu bulgular, servis sağlayıcılara tekrar satın alım ve ağızdan ağıza pazarlama üretme olasılığını artırmak için fırsatlarını nasıl fiyatlandıracaklarını ve amaç planlamaları konusunda özel tavsiyeler vermektedir.

Anahtar Kelimeler: Yüksek indirim, çevrimiçi fırsat sitesi, tekrar satın alma, fiyat duyarlılığı, kupon düşkünlüğü, fiyat kalite şeması, ilgilenim, promosyonlar, deney

Jel Kodları: M31

DRIVERS OF REPEAT PURCHASE AND WORD-OF-MOUTH FOR GROUPON MERCHANTS

Abstract

Daily deal site companies such as Groupon offer coupons for services and products with deep discounts, a practice that typically ends up in a loss of revenue for the participating merchants. Thus, the key question for long-term viability is whether daily deal consumers repeat purchase from and/or generate positive word-of-mouth for the merchants. This research investigates the deal, merchant and consumer characteristics that influence the initial purchase of the deal, the repurchase likelihood of the service at different price levels and the word-of-mouth behavior of consumers in an experimental setting with 960 participants. The results reveal that when consumers have high satisfaction, merchants are likely to get (1) more repeat purchase when they give a moderate (vs. low or high) initial discount, and (2) more word-of-mouth occurs when merchants are physically close (vs. distant) to the consumers. Furthermore, consumers' coupon proneness (but not price consciousness) increases both daily deal purchase and after-deal word-of-mouth. Interestingly, consumers who are more concerned with price as a cue for quality are more willing to repurchase at full price. These findings give merchants specific recommendations as to how to price and target their deals to improve the likelihood of repeat purchase and WOM generation.

Keywords: deep discount, online deal sites, repeat purchase, price consciousness, coupon proneness, price-quality schema, involvement, promotions, experiment

Jel Classification: M31

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Introduction

Daily deal sites have popularized deep discounts (typically more than 50% off) and extended them to all types of products and services such as health treatments and restaurants (Dholakia, 2011; Kumar and Rajan 2012). It took Groupon, one of the most popular daily deal sites, just three years to go public (IPO) from its start in Chicago in November 2008. Merchants were initially very enthusiastic about the low upfront costs and the huge traffic generation potential, but later they complained that many daily deal site consumers spent the bare minimum and never returned for more purchases (Clifford and Miller 2012). In fact, Groupon has faced declines in net income and share prices since 2011 (Cohen 2014; Linnane 2015) despite its own claims on strong repeat purchase and positive word-of-mouth (hereafter, WOM) from daily deal consumers.

Repurchase behavior after the initial deal is crucial for the profitability of merchants who promote their services on daily deal sites since merchants typically lose money on the daily deal itself (Dholakia 2011; Kumar and Rajan 2012). Indeed, a long-standing dilemma in marketing has been the power of deep discounts to gain a large number of customers instantly, but at the cost of undermining repeat purchase (Dodson et al. 1978). Besides repurchases, another key to long-term profitability for merchants is WOM generation. In addition to promoting trials, daily deals may contribute to the profitability of merchants by enhancing WOM generated by satisfied customers. These issues raise important research questions that need to be addressed to ensure the long-term success of merchants as well as daily deal sites. So, it is significant to identify which factors influence daily deal consumers' repeat-purchase from the merchants after the initial deal and the factors enhancing consumers' generation of positive WOM after the trial.

Previous literature offers rich insights on price promotions and their impact on consumer behavior (Guadagni and Little 1983; Gupta and Cooper 1992). However, the impact of deep price promotions on repeat-purchase or WOM behavior is relatively less well documented. A meta-analysis by Delvecchio et al. (2006) reveal that the impact of price discounts depend on deal characteristics; announced price cuts (similar to daily deals) lead to an increase of repeat purchase, but deep discounts (discounts over 20% - which are typical daily deals) lead to lower repeat purchases. Anderson and Simester (2004) show that deep discounts increase the repeat purchase of durable goods for first-time customers due to customer learning. In terms of WOM generation, Byers et al. (2012) find that Groupon customers do create an influential impact on WOM websites such as Yelp. However, it is still unclear to what extent daily deals in general lead to repeat purchases and positive WOM, and how these effects are influenced by deal, merchant or consumer-related factors.

This paper addresses the gap in literature with a controlled experiment that directly tests which deal factors (discount level), merchant variables (satisfaction from the

service, distance to the consumer, reputation) and consumer characteristics (price-quality schema) drive repeat purchase and WOM behavior. As Grewal et al. (2010) pointed as a future research issue the results of this study investigates an optimal level of personalization and customization that will help the pricing strategy maximize profits. We find that merchants who highly satisfy their customers should not give more than 50% discount rates. Furthermore, the results suggest that both deal sites and merchants should target coupon prone consumers to increase positive WOM. In addition, consumers who tend to use price as a cue for quality are the ones who repurchase at higher prices.

The rest of the paper proceeds as follows. First, we review the findings on daily deal sites and discounts to develop our theoretical arguments, and then drawing from these findings, we generate our predictions to be tested. This is followed by a presentation of our findings obtained from an experiment with 960 participants. Later on, we consider how our findings add to a better understanding of consumers and how they improve the decisions of merchants as well as Daily deal sites. Finally, we conclude by discussing the implications of our findings and suggest avenues for future research.

1. Conceptual Framework

Daily deal sites offer deep discounts for a product or service through a website and/or mobile application for a limited period of time (Dholakia 2011). Potential customers register with deal sites to receive offers via email and/or social networks. Once they accept the deal, consumers typically prepay to the deal site and then receive their services from merchants. The daily deal site keeps about half of the obtained revenues, which leaves the merchant with the remaining half (Kumar and Rajan 2012).

The success of daily deals from a merchant`s perspective depends on several factors. Offering deals tends to be more profitable for merchants who are relatively unknown and with low marginal costs (Edelman et al. 2011). However, cannibalization of the existing customer base by daily deal sites is an important problem (Dholakia 2011). Kumar and Rajan (2012) developed an analytical model to show that merchants` loss increases with the discount level and deals are detrimental when used by existing customers. Furthermore, deal popularity may depend on the availability of the service during the week or the weekend, the duration of the deal, absolute quantity of the deal, and whether it is limited to a certain number of consumers or not (Byers et al. 2011).

Discounts may increase later preferences through purchase reinforcement (Blattberg and Neslin 1989; Pauwels et al. 2002). For existing consumers, promotion serves as a reminder to buy the brand thereby enforcing consumers` preference for it. For first-time consumers, promotions will induce trials thereby possibly changing consumer attitudes. In both cases, promotions are likely to have positive influence on repurchase behaviors. However, discounts may also diminish repurchasing through reduced

reference prices (Blattberg et al. 1995). That is, consumers' price expectations may be lowered as a result of promotions. In addition, purchases are more likely to be attributed to the promotion if the discount is large (attribution-error). As a result, deep discounts may reduce repurchase likelihood (Del Vecchio et al. 2006).

Satisfaction with the service plays a central role in molding repeat purchase and WOM behaviors (Szymanski and Henard 2001; Alegre and Cladera 2009). We expect that satisfaction with the merchant interacts with the discount level of the deal in shaping behavioral intentions. Attribution theory (Blattberg and Neslin 1990) implies that customers may attribute their purchase of the deal to the price discount. In this case, consumers are less likely to repeat purchase and less likely to talk about the merchant. However, if they are highly satisfied with the service, they may attribute their positive service experience to the quality of the merchant. This, in turn, should positively affect their willingness to repeat the purchase of the service. Considering their high satisfaction with the service, in line with previous research (Zeithaml et al. 1990), we expect consumers to talk positively about the merchant too. In short, we expect satisfaction with the service to attenuate the harmful effects of discount rate on repeat purchases at full price. In other words, satisfaction with the service should reduce the attribution-error and enhance WOM.

H1: The higher the satisfaction level is with the service, the lower the negative effect of discount rate on (a) repurchase at full price and (b) WOM generation.

Promotions may overshadow the benefits of the brand when the brand is not well known. However, when the brand is well-established and has a strong image, consumers may attribute their purchase behavior to the brand rather than the discount. In other words, attribution error is less likely to happen when the reputation of a company is strongly established (Del Vecchio et al. 2006). Corporate reputation is a "collective representation of a firm's past actions and results that describes the firm's ability to deliver valued outcomes to multiple stakeholders" (Fombrun and Van Riel 1997, p10). It decreases customers' perceived risk of the exchange (Rose and Thomsen 2004), promises satisfaction (Berry and Parasuraman 2004), reduces price sensitivity (Hung and Petrick 2012), and drives customer retention (Devlin 1998). Hence, we expect the reputation of the merchant to affect the initial likelihood of purchases as well as repurchases. More importantly, we expect high satisfaction levels combined with high merchant reputation to further attenuate the negative impact of discount level on repurchase.

H2: The higher the service satisfaction level with the service, under conditions of known, as compared to unknown service providers, the lower the negative effect of discount rate on (a) repurchase at full price and (b) WOM generation.

Daily deal sites tend to focus on merchants that provide local services (Dube 2015). Consumers prefer stores with closer physical distance (Bell et al. 1998). Recent studies also show strong evidence for geographic proximity effects on choices of brand, place and channel (Janakiraman and Niraj 2011). In the case of deal sites, not surprisingly, we expect that consumers would prefer to buy services from physically closer locations. In addition, as mentioned before, satisfaction with the merchant is likely to enhance repeat purchase and WOM behavior. Therefore, we expect that satisfaction with the service decreases the negative impact of long distances on repeat purchase at full price. We also expect a positive impact of physical proximity and satisfaction on WOM behavior. Satisfaction with the merchant may contribute to the creation of a bond between the consumer and the merchant especially when the merchant is closely located to the consumer since the consumer is more likely to interact with a nearby merchant. Expectation of a future interaction is likely to increase WOM generation. As a result, proximity combined with satisfaction is likely to enhance WOM. In other words, we predict that:

H3: The higher the satisfaction level with the service, the lower the negative effect of distance on (a) repurchase at full price and (b) WOM.

Lay theories suggest that daily deal consumers may be highly price conscious; however, based on a survey study with 931 respondents, Dholakia (2011) showed that daily deal site consumers are not necessarily 'cheap'; in fact, these consumers are likely to tip on the full amount of the bill. Furthermore, a comparison of daily deal site users with non-users of s reveal that users have a higher income and are more likely to enjoy recommending products to friends than non-users (Dholakia, 2011). In addition, Amblee and Bui (2012) find that it is not the discount level but other factors that make up the value proposition (e.g., expiration date of the coupon, validity period, number of times others bought it) affect the purchase decision of daily deal site consumers. Hence, rather than only focusing on the price, consumers seem to focus on the whole package including the cost and the benefits of the deal.

A price-quality schema is the generalized perception that the price level is related positively to the quality level of the product or service (Lichtenstein et al. 1993, 1997). Consumers with high perception levels of the price-quality schema are willing to pay extra for good quality. Thus, if they experience a high quality service and are satisfied with it, they are likely to pay the regular price (Peterson and Wilson 1985; John et al. 1986). In contrast, consumers low in price-quality schema are likely to purchase another deep discount deal from another merchant instead of repurchasing. So, we expect that consumers who have low price-quality schemas are less likely to pay the full price and would rather switch to a cheaper alternative of an uncertain quality. In line with this, previous research has shown that consumers high in price-quality

schema are less likely to change their preferences when price is a salient factor in their decision making (Lee et al. 2008). Hence, we expect that:

H4: The stronger the price-quality schemas of a consumer, the higher the likelihood of the consumer to repurchase at full price.

We propose two moderators (reputation of the merchant and discount level) for the hypothesized positive effect of the price-quality schema on repeat purchase at full price. A merchant's strong reputation is likely to re-direct consumers' attention to quality (as opposed to price) (Dodds, Monroe, and Grewal 1991). When consumers focus on quality, they may be more willing to pay full prices. Thus, we propose that:

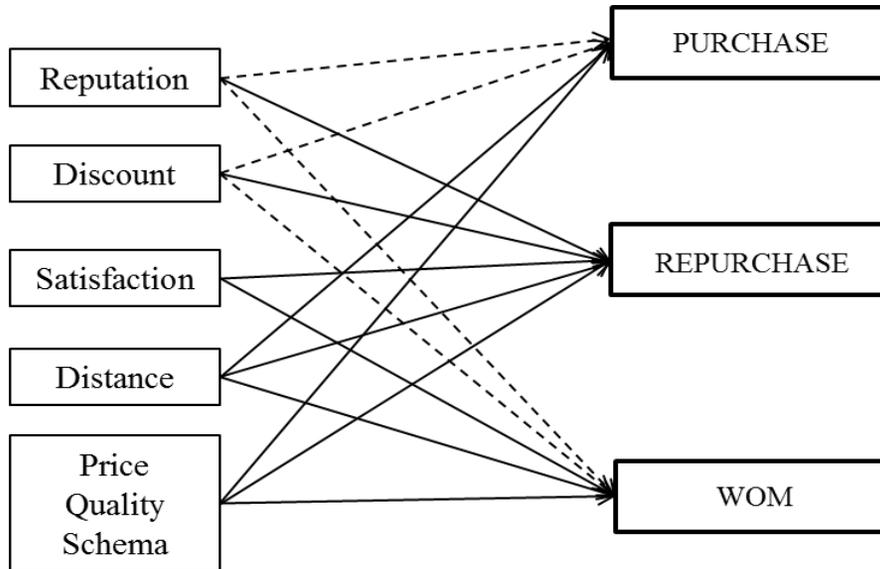
H5: Reputation increases the price-quality schema effect on repurchase at full price.

On the other hand, a deep initial discount is likely to direct the attention of consumers, especially consumers high in price-quality schema, to price (Lichtenstein et al. 1993). As a result, consumers may attribute their purchase behavior to the deep discount. Price attribution decreases consumers' willingness to pay the full price later on (Neslin and Shoemaker 1989; Winer 1986). Hence, we expect that:

H6: Discount level decreases the effect of price-quality schema on repurchase at full price.

Given the insights from the previous literature, we empirically investigate whether deal characteristics (discount level), merchant variables (satisfaction with the service, physical distance from the consumer, reputation of the company), and consumer characteristics (price-quality schema) affect repurchase at full price and WOM behaviors (see Figure 1).

Figure 1. *Conceptual Framework*



2. Method

The restaurant category was chosen as the stimulus since it is one of the most popular categories on daily deal sites (Liu and Sutanto 2012; Zhang et al. 2013).

Design. The study was a 3 (discount level: 35% vs. 50% vs. 85%) x 2 (physical distance: low vs. high) x 2 (merchant reputation: widely known vs. unknown) x 3 (satisfaction with the merchant: low vs. average vs. high) between subjects design. Discount, distance, reputation, and satisfaction were manipulated and the price-quality schema was measured.

Covariates. Four other variables were also measured since they may also affect repeat purchase and WOM behavior. Previous research has repeatedly shown the impact of product category involvement (Zaichkowsky 1985; Mittal 1995) on purchase (Shao et al. 2004), repurchase (Patterson and Spreng 1997), and WOM (Dichter 1966; Engel et al. 1969; Hennig-Thurau et al. 2003, 2004). Furthermore, perceived risk (Dowling 1986) of the deal is likely to affect repurchase behavior too. Coupon proneness (Lichtenstein et al. 1990) and price consciousness (Lichtenstein et al. 1990) were measured to separate their impact from price-quality schema. In short, in order to decrease random error in the data, we measured consumers` category involvement, coupon proneness, and price consciousness as well as the perceived risk of the deal and included these variables in the analysis as covariates.

Participants. 960 participants ($M_{age} = 33.45$, $SD = 12.02$; % 45 male) from the U.S. were recruited from Amazon`s Mechanical Turk (MTurk).

Questions and Scenarios. The study consisted of five sections. First, on a 7-point Likert scales (1 = Strongly disagree, 7 = Strongly agree), the participants answered questions adopted from Lichtenstein et. al. (1993) regarding their level of price consciousness (e.g., “the money saved by lower prices is usually not worth the time and effort”; $\alpha = .84$), coupon proneness (e.g., “I enjoy using coupons regardless of the amount I save by doing so”; $\alpha = .67$), and price-quality schema (e.g., “you always have to pay a bit more for the best”; $\alpha = .78$). They also indicated their level of involvement (Mittal 1995) in the restaurant category ($\alpha = .92$). Next, in order to measure their reference prices for a dinner at a restaurant, we asked the participants to read a short scenario about a restaurant and to indicate how much they would expect to pay per person for dinner there.

In the second section, the participants were randomly assigned to one of the 36 (3 x 2 x 2 x 3) Groupon restaurant deal ads that were created for this study (see Appendix A). The discount rate was indicated as 35%, 50%, or 85%. Distance was manipulated through the time it took the consumers to reach the merchant (10 min vs. 60 min) from their home (Raghubir and Krishna 1996). A picture of a Google map was given under the Groupon offer to emphasize the distance. As for the reputation manipulation, the restaurant was presented as an unknown or widely known restaurant (Bearden and Shimp 1982).

The third section of the study consisted of the manipulation check questions. The participants were asked to indicate how much of a discount was offered for the restaurant on a 7-point scale (15%, 25%, 35%, 50%, 65%, 75%, 85%), how many miles the restaurant is from their home or office (open-ended question), and how well the restaurant is known on a 7-point scale (1=Not known at all, 7=Extremely well-known). Then, the participants specified on a 7-point scale how likely they are to purchase the deal (1= Very Unlikely, 7 = Very Likely) and how risky they find the deal (1 = None at all, 7= Very Much).

In the fourth section, level of satisfaction with the service of the merchant was manipulated through a hypothetical scenario. In the low satisfaction condition, the participants were told that the dishes were not very fresh, bland or too spicy, the waiter was unfriendly and ignorant, waiting time was too long, interior design was terrible, noise level was high and temperature was irritating. In the average satisfaction condition, the participants were told that the dishes were of average quality though ordinary, the waiter was mediocre and somewhat helpful, waiting time was a little bit long, interior design was nothing extraordinary, noise level was acceptable and temperature was tolerable. In the high satisfaction condition, the participants were told that the dishes were fresh, creative and with an exquisite presentation, the waiter was very helpful and courteous, waiting time was short, interior design was elegant, noise level was low and temperature was just right. A manipulation check question asked

participants to rate their satisfaction level with the restaurant on a 7-point scale (1 = Very Dissatisfied, 7 = Very Satisfied).

The last section involved measurement of the two main dependent variables: repurchase at full price and WOM. On a sliding scale from 0 to 100, the participants indicated how likely they are to eat again at the same restaurant at the full price without a Groupon coupon. Then, the participants answered two questions for WOM behavior: how likely they are to recommend the restaurant 1) to friends or family, and 2) by posting in an online environment (such as Facebook, blogs, Twitter, Instagram). Since the results did not show any distinction between two WOM questions, they were aggregated for a single index of WOM behavior ($\alpha = .88$).

3. Results

3.1. Participant Demographics

13% of participants have a master's degree, 62% are college graduates, and 22% are high school graduates. 28% of participants earn up to \$1000 a month, 41% make between \$1000 and \$3000, 20% earn between \$3000 and \$5000 and 11% have an income more than \$5000 a month.

The sample consisted of 72 % (687 out of 960) deal site users (people who purchased an item or service from deal sites at least once) and 28 % (273) non-users (people who have never used deal sites). We split the users and non-users and conducted separate tests for each group. There was no difference between the non-users and users of deal sites in terms of the results. Hence, the data were combined for the analysis reported here.

3.2. Manipulation Checks

A t-test on the number of miles was conducted to evaluate if the participants differed in their perception of distance. The perceived distance was significantly different for both conditions

($t(958) = 66.10, p < .001$). As expected participants in the low distance condition reported lower levels of distance ($M_{low} = 3.71$) than high distance condition ($M_{high} = 16.43$)

Another t-test was run on how well the company was known. As expected, the results indicated that perceived reputation was significantly different ($t(958) = 64.72, p < .001$). The participants reported that the company is less known for the unknown company condition ($M_{unknown} = 2.51$) than well-known condition ($M_{known} = 6.53$). Thus, the reputation manipulation was successful.

To assess if participants from the three discount level conditions differed in their perception of discount level, an ANOVA on perceived discount level was run. The

difference between levels of perceived discount was significant ($F(2, 957) = 4510,94$, $p < .001$). Participants in the low discount level ($M_{35\%} = 2.98$) indicated lower levels of perceived discount than the participants in the average ($M_{50\%} = 3.96$) or high ($M_{85\%} = 6.88$) discount levels ($p < .001$ for both). Thus, the discount level manipulation was successful.

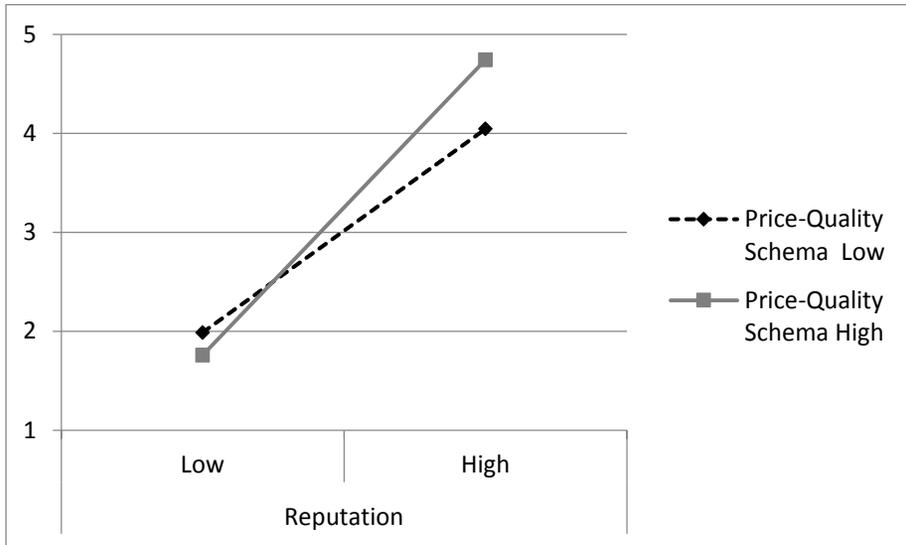
In order to assess whether participants from the three satisfaction level conditions differed in their perception of satisfaction, another ANOVA was run. The perceived satisfaction level was significantly different ($F(2, 957) = 4124.11$, $p < .001$) was significant. Participants in the low satisfaction condition ($M_{low} = 1.15$) indicated lower satisfaction than those in the average ($M_{average} = 3.65$) or high ($M_{high} = 6.84$) satisfaction conditions ($p < .01$ for both). Thus, the satisfaction manipulation was successful.

3.3. Drivers of Purchase Likelihood

To examine whether purchase likelihood differed among the conditions, a 3 (discount) x 2 (distance) x 2 (reputation) ANCOVA (with the price-quality schema as an independent variable and involvement, price consciousness, coupon proneness, perceived risk, and reference price as covariates) on purchase likelihood was run. The main effects of distance ($M_{10min} = 5.20$, $M_{60min} = 3.17$; $F(1, 924) = 34.51$, $p < .001$), price-quality schema ($F(1, 924) = 4.75$, $p < .05$), coupon proneness ($F(1, 924) = 21.03$, $p < .001$), involvement ($F(1, 924) = 23.57$, $p < .001$), and risk ($F(1, 924) = 57.94$, $p < .001$) were significant. In addition, the interaction of reputation and price-quality schema ($F(1, 924) = 5.87$, $p < .05$) was significant. No other effects were significant.

For the interaction of reputation and price-quality schema, a spotlight analysis (Fitzsimons 2008; Irwin and McClelland 2001) including only the significant variables revealed that individuals who have high (versus low) price-quality schema (one standard deviation above versus below the mean) are more likely to be affected by the reputation of the merchant when making the decision to purchase ($\beta = .19$, $t = 2.43$, $p < .05$; see Figure 2).

Figure 2. Spotlight Analysis for Reputation and Price-Quality Schema Interaction



3.4. Drivers of Repurchase Likelihood at Full Price

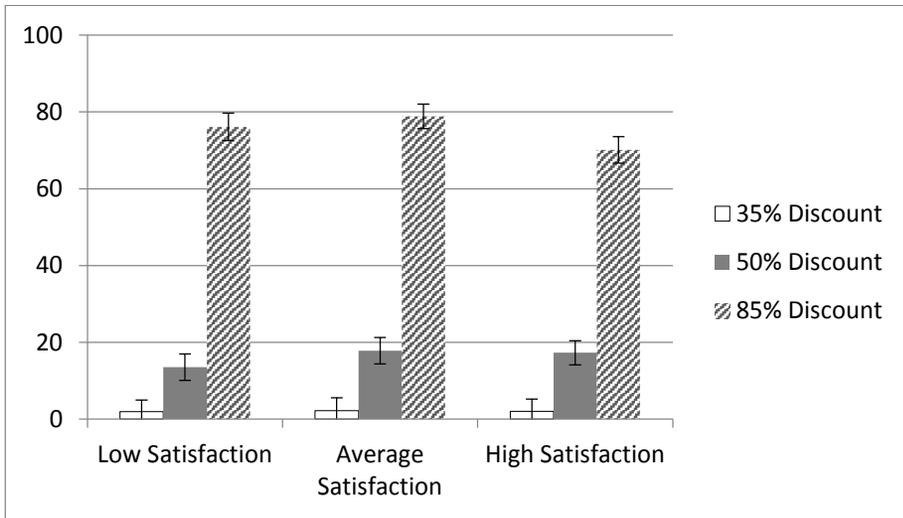
A 3 (discount) x 2 (distance) x 2 (reputation) x 3 (satisfaction) ANCOVA (with the price-quality schema as an independent variable and involvement, price consciousness, coupon proneness and reference price as covariates) on repurchase likelihood at full price was run. Only the main and the hypothesized interaction effects (the interaction between discount and satisfaction (H1a), satisfaction and distance (H3a), reputation and price-quality schema (H5), discount and price-quality schema (H6), the three-way interaction among satisfaction, reputation, and discount rate (H2a) as well as the 2-way interactions [satisfaction and reputation, reputation and discount] to test the three-way interaction) were included in the model.

The main effects of satisfaction ($M_{low} = 2.06$, $M_{average} = 16.22$, $M_{high} = 75.03$; all p 's < .001; $F(2, 921) = 1636.47$, $p < .001$), reputation ($M_{unknown} = 30.96$, $M_{known} = 31.25$; $F(1, 921) = 4.22$, $p < .05$), and distance ($M_{10min} = 34.88$, $M_{60min} = 27.32$; $F(1, 921) = 45.73$, $p < .001$) were significant. Furthermore, as hypothesized (H4), the main effect of the price-quality schema on repurchase at full price was significant ($F(1, 921) = 4.84$, $p < .05$). Consumers with higher levels of price-quality schema were more likely to repurchase at full price.

As hypothesized (H1a), the interaction between discount and satisfaction was significant ($F(4, 921) = 3.08$, $p < .05$). When there is low or average satisfaction with the merchant, consumers do not repeat purchase at full price no matter what the initial discount is (all p 's > .05). When there is high satisfaction, consumers are more likely

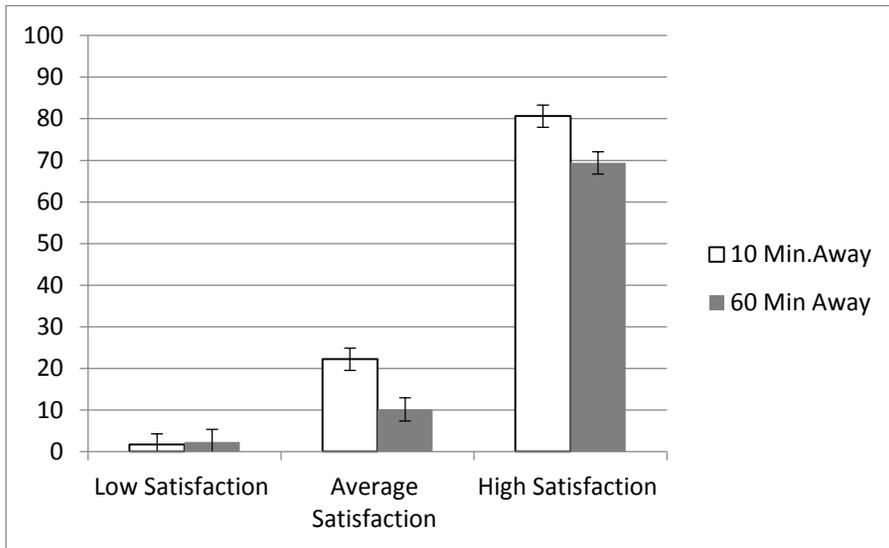
to repurchase when the initial discount is 35% ($M_{35\%} = 76.11$) or 50% ($M_{50\%} = 78.86$) rather than 85% ($M_{85\%} = 70.12$; both p 's $< .05$). There is no significant difference between the 35% and 50% discount levels ($p = .22$; see Figure 3). Interestingly, when the initial discount is lower, consumers are more likely to repurchase at full price. High discounts lower the likelihood of repurchase when there is high satisfaction.

Figure 3: *Repurchase at Full Price as a Function of Satisfaction and Discount*



In support of H3a, the interaction between distance and satisfaction was significant ($F(2, 921) = 12.98, p < .001$). When there is low satisfaction with the merchants, consumers do not repeat purchase at full price even if the distance is low (all p 's $> .05$). When there is average or high satisfaction, consumers are likely to repurchase at full price when the distance is 10 minutes ($M_{ave} = 22.24, M_{high} = 80.65$) rather than 60 minutes, ($M_{ave} = 10.19, M_{high} = 69.41$; all p 's $< .01$; see Figure 4).

Figure 4: Repurchase at Full Price as a Function of Satisfaction and Distance



Supporting H5a, the interaction between reputation and price-quality schema was significant ($F(1, 921) = 4.84, p < .05$) though following with a spotlight analysis, the interaction was not significant ($p = .52$).

The interaction of the price-quality schema with the discount level did not have a significant effect on repurchase likelihood at full price ($F < 1$); H6a was not supported.

The three-way interaction among discount, reputation, and satisfaction was significant ($F(4, 921) = 2.78, p < .05$); H2a was supported. When the merchant is unknown and when there is low or average satisfaction, consumers do not repeat purchase at full price no matter what the reputation and the discount levels are (all p 's $> .10$). However, when the merchant is known and there is average satisfaction, consumers are likely to repurchase at full price when the initial discount is 50% ($M = 19.71$) rather than 35% ($M = 11.41; p < .05$). The differences between 50% and 85% ($M = 15.97$) and 35% and 85% are not significant (both p 's $> .05$; see Figure 5). It seems that a 50% discount (but not necessarily an 85% discount) is better than a 35% discount in encouraging repurchase at full price for known merchants with average satisfaction. When the merchant is unknown and when there is high satisfaction, the highest repurchase likelihood is when the initial discount was 50% ($M = 82.09$) rather than 35% ($M = 75.15$) or 85% ($M = 66.47$; both p 's $< .05$). Moreover, repurchase likelihood is higher when the initial discount was 35% rather than 85% ($p < .05$). On the other hand, when the merchant is known and when there is high satisfaction, the discount level does not affect repurchase likelihood (all p 's $< .10$).

H2a was supported only in the high satisfaction and known merchant condition. Table 1 presents a summary of results for repurchase likelihood.

Figure 5: *Repurchase At Full Price as a Function of Satisfaction, Discount and Company Reputation*

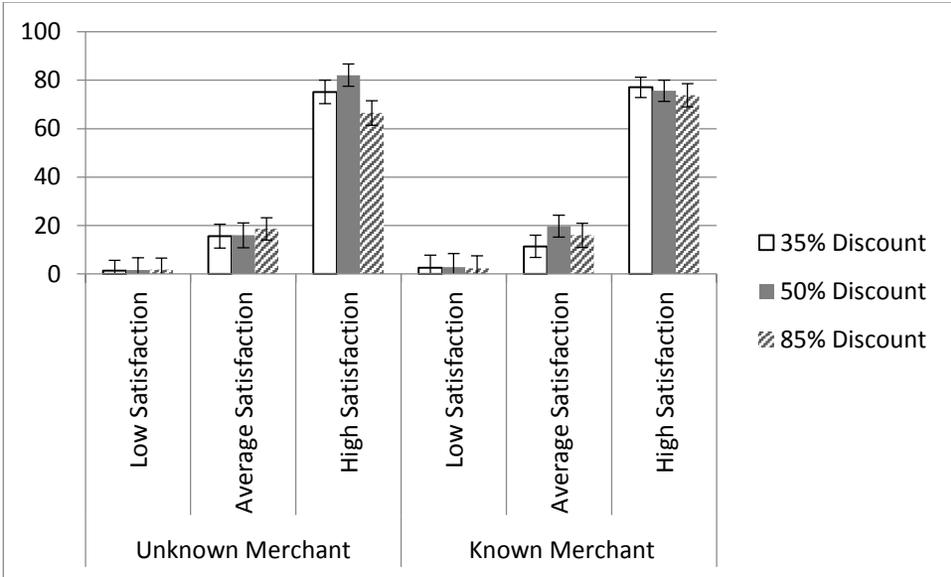


Table 1: Analysis of Covariance Results for Repurchase at Full Price

Source of Variance	Mean (SE)	SD	F	η^2
Covariates				
Coupon Proneness			2.91	.004
Price Consciousness			.69	.001
Price-Quality Schema			4.08*	.002
Involvement			1.76	.002
Reference Price			.139	.001
Main Effects				
Discount Conditions ^a			.40	.003
35% Discount	30.62 (.94)	36.93		
50% Discount	32.51 (.98)	37.97		
85% Discount	29.93 (.99)	33.86		
Reputation Conditions ^b			3.41	.002
Unknown	30.84 (.81)	30.50		
Widely known	31.14(.78)	32.16		
Distance Conditions ^c			45.77**	.05
Low	34.84 (.76)	37.00		
High	27.21 (.83)	35.66		
Satisfaction Conditions ^d			1621.9**	.78
Low	1.71 (1.01)	4.10		
Average	16.34 (.98)	17.45		
High	74.99 (.94)	24.72		
Discount x Price-Quality Schema			2.48	.004
Reputation x Price-Quality Schema			3.98*	.002
Discount*Reputation*Satisfaction			2.80*	.012
Discount*Satisfaction			3.08*	.013
Distance*Satisfaction			12.13**	.026

* $p < .05$, ** $p < .01$

Note: N= 960, $R^2=.79$

^a Discount conditions means for repurchase, there is not a significant difference between 35% and 50% ($p = .11$), but there is a significant difference between 50% and 85% ($p = .04$) conditions.

^b Reputation conditions means for repurchase, the unknown and known conditions are not significantly different ($p = .79$).

^c Distance conditions means for repurchase, the short and high distance conditions are significantly different ($p < .001$).

^d All satisfaction conditions means for repurchase, the low, average and high satisfactions are significantly different ($p < .001$).

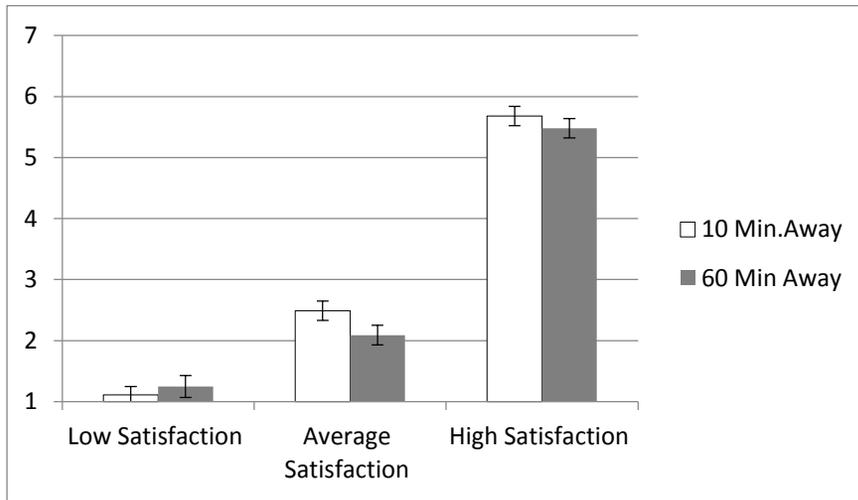
3.5. Drivers of WOM Regarding the Merchant

A 3 (discount) x 2 (distance) x 2 (reputation) x 3 (satisfaction) ANCOVA (with the price-quality schema as an independent variable and involvement, price consciousness, coupon proneness and reference price as covariates) on WOM generation was run. Only the main and the hypothesized interaction effects (the interaction between discount and satisfaction (H1b), satisfaction and distance (H3b), reputation and price-quality schema (H5), discount and price-quality schema (H6), the three-way interaction among satisfaction, reputation, and discount rate (H2b) as well as the 2-way interactions [satisfaction and reputation, reputation and discount] to test the three-way interaction were included in the model.

The main effects of satisfaction ($M_{low} = 1.17$, $M_{average} = 2.29$, $M_{high} = 5.58$; all p 's $< .001$; $F(2, 921) = 1812.96$, $p < .001$), distance ($M_{10min} = 3.09$, $M_{60min} = 2.94$; $F(1, 921) = 5.89$, $p < .05$), price-quality schema ($F(1, 921) = 10.07$, $p < .05$), coupon proneness ($F(1, 921) = 10.27$, $p < .001$), price consciousness ($F(1, 921) = 4.19$, $p < .05$) and reference price ($F(1, 952) = 4.91$, $p < .05$) were significant. The interaction between discount and satisfaction was not significant ($F(1, 921) = 1.81$, $p = .13$); H1b was not supported.

In support of H3b, the interaction between distance and satisfaction was significant ($F(2, 921) = 6.11$, $p < .001$). When there is low satisfaction with the merchant, consumers do not generate WOM even if the distance is short ($p > .05$; see Figure 6). When there is average satisfaction, consumers are likely to generate WOM only when the distance is 10 minutes ($M_{10min} = 2.49$, $M_{60min} = 2.09$; $p < .05$). However, when there is high satisfaction with the merchant, there is no difference between high and low distance conditions ($p > .05$); in both cases, consumers do generate high levels of WOM.

Figure 6: *Wom Generation as a Function of Satisfaction and Distance*



The three-way interaction among discount, reputation, and satisfaction was not significant ($F(4, 921) = 1.21, p = .30$); H2b was not supported. The price-quality schema with reputation interaction (H5b) did not have a significant effect on WOM ($p = .19$). In addition, the price-quality schema and discount interaction (H6b) did not have a significant effect on WOM ($p = .89$). Table 2 gives a summary of the results for WOM. Table 3 presents a summary of all hypothesized results.

Table 2: Analysis of Covariance Results for Word of Mouth (Wom) About the Service Merchant

Source of Variance	Mean	SD	F	η^2
Covariates				
Coupon Proneness			10.84**	.013
Price-Quality Schema			8.66*	.009
Involvement			2.53	.002
Price Consciousness			4.52*	.005
Reference Price			4.77*	.005
Main Effects				
Discount Conditions ^a			.07	.001
35% Discount	2.86	2.05		
50% Discount	3.05(.06)	2.20		
85% Discount	3.13	2.07		
Reputation Conditions ^b			1.18	.001
Unknown	2.99	30.50		
Widely known	3.03	32.16		
Distance Conditions ^c			6.80*	.007
Low	3.10	37.00		
High	2.93(.05)	35.66		
Satisfaction Conditions ^d			1790.85**	.796
Low	1.17	.48		
Average	2.29(.06)	1.14		
High	5.58	1.16		
Discount x Price-Quality Schema			.172	.001
Reputation x Price-Quality			1.61	.002
Discount*Reputation*Satisfaction			1.50	.007
Discount*Satisfaction			1.97	.009
Distance * Satisfaction			5.67*	.012

* $p < .05$, ** $p < .01$ Note: N=274, $R^2=.81$

^a Discount conditions means for repurchase, the 35%, 50% and 85% discount conditions are is significantly different ($p < .05$).

^b Reputation conditions means for repurchase, , the unknown and known conditions are not significantly different ($p = .54$).

^c Distance conditions means for repurchase, the short and high distance conditions are significantly different ($p < .05$)

^d All satisfaction conditions means for repurchase, the low, average and high satisfactions are significantly different ($p < .001$).

Table 3: Summary of Hypotheses Results

Hypothesis	(a) Repeat	(b) WOM
The higher the satisfaction level with the service, the lower the negative effect of discount rate on:	H1a ✓	H1b X
The higher the satisfaction level with the service, the stronger the attenuation effect of reputation on the negative impact of	H2a ✓	H2b X
The higher the satisfaction level with the service, the lower the negative effect of distance on:	H3a ✓	H3b ✓
The higher the price-quality schema of a consumer, the higher the likelihood of the consumer to:	H4 ✓	
Reputation enhances the price-quality schema effect on:	H5a ✓	
Discount level decreases the impact of price-quality schema on:	H6a X	

4. Discussion

This study investigated whether specific characteristics of the deal (discount level, distance), the merchant (reputation, satisfaction) and consumers (price-quality schema) influence the initial purchase of a deal from a discount site, the repurchase likelihood of the same service at the original price level, and the WOM likelihood of consumers. In terms of the initial purchase of the deal, not surprisingly, when the merchant is closer to the consumer, the consumer is more likely to purchase the deal. However, consistent with past claims that daily deal users are not particularly price

sensitive (Dholakia 2011; Amblee and Bui 2012), purchase likelihood is not affected by discount rate (whether it is 35%, 50% or 85%). However, the coupon proneness of consumers and price-quality schema significantly increase purchase likelihood of the deal. Previous researchers have debated over whether coupon proneness and price consciousness are distinct concepts (Alford and Biswas 2002; Garretson and Burton 2003). Similar to Lichtenstein's findings (1990), our results imply that coupon proneness is a distinct concept and stronger driver than price consciousness in predicting consumers' deal purchase behavior. Furthermore, a consumer level variable (price-quality schema) interacts with a merchant level variable (reputation). Price-quality schema enhances the impact of reputation on purchase likelihood. The results also show that involvement in the product category positively effects the purchase likelihood and while the perceived risk of the deal has a negative effect.

Consistent with consumer service quality theory (Taylor and Baker 1994; Cronin et al. 2000), our analysis of the drivers of repurchase indicates that satisfaction is the main driver of repurchasing. Satisfaction decreases the negative impact of discount on repurchasing as well. As expected, the repurchase likelihood at full price increases as the distance to the consumer decreases. Again, satisfaction plays a main role in terms of decreasing the negative effect of distance on repurchase likelihood. Furthermore, reputation of the merchant is another main driver of the repurchase likelihood. Satisfaction interacts with reputation and discount level; repurchase likelihood increases for known companies when satisfaction is high no matter what the initial discount level is. As for consumer characteristics, we found evidence consistent with Lee et al. (2008)'s demonstration that consumers with high price-quality schema show consistent preferences; they are more likely to repurchase at full price. The positive effect of price-quality schema increases with reputation. However, contrary to our expectations, discounting did not decrease the price-quality schema effect on repurchase likelihood.

In terms of WOM generation, satisfaction and distance are the main drivers. As for the consumer characteristics, coupon proneness, price consciousness, price-quality schema, and reference price all increase the WOM generation likelihood. Contrary to our expectations satisfaction did not interact with discount, reputation, or discount and reputation. More discounts did not lead to more WOM in case of deal sites. This may be due to the nature of deal sites' consumers who are more price seekers for quality even when a discount accompanies satisfaction. As for the reputation of the restaurant, we did not find a significant impact of it for WOM. We defined reputation as related to brand and restaurant image, however we manipulated the scenario as unknown vs. known restaurant. What we intended might not have been perceived by the participants. Hence, we could find neither a main, nor satisfaction and reputation interaction effect on WOM. As expected, we found price-quality schema increases WOM generation. As we indicated above, this may be due to the nature of the deal

sites' consumers who are motivated to purchase and repurchase with more expensive prices. Thus they would naturally create more WOM. Nevertheless, contrary to our expectations, neither discount nor reputation decreased the price-quality schema effect on WOM generation.

4.1. Managerial Implications

The three-way interaction of satisfaction, discount, and reputation effect on repurchase at full price provides nuanced and actionable managerial advice. Depending on the service, a merchant's reputation and the ability to satisfy daily deal customers, decision makers can propose the most attractive discount rate to induce repurchases. Widely-known companies that satisfy their customers at high levels should not give more than 50% discount rates. Unknown companies can give any discount rate as long as they satisfy their customers.

Since, consumers who are high on price-quality schema are more likely to repurchase at full price and give WOM about the service merchant, service merchants should consider ways to target consumers who have high price-quality schema and possibly prime this price-quality schema while experiencing the service quality. One way to do so is to remind customers of the high cost of providing the service (e.g. excellent staff and expensive ingredients for restaurant meals) – similar to the techniques that increase the price paid in Pay-What-You-Want pricing (Kim, Natter and Spann 2009).

Service merchants can benefit in several ways from our findings and recommendations. First, our findings on satisfaction and its interactions show both the importance of increasing satisfaction as a complex effect depending on reputation and discount rate. Widely-known companies that can fully satisfy their customers should not give more than 50% discount rates if they are interested in repeat purchases. Additionally, the distance and satisfaction interaction effect reveals that customers are more willing to drive further distances as long as they are satisfied. The likelihood of repurchase at close distance increased with satisfaction at average and high levels.

Involvement in the category had a positive effect on the WOM about the deal and deal site, while reference price had a negative effect. The deal sites managers can segment their consumers according to their previous purchases, demographic characteristics, and define their involved category. Offering deals in their involved category would help increasing purchase likelihood and WOM.

As for WOM creation, the consumers high on coupon proneness generate WOM about the service merchant. So, the coupon prone customers are more likely to get a deal from a deal site but are likely to recommend it to other consumers to compensate for the fact that they are not repurchasing. Service merchants can train their personnel to encourage consumers to seek and use online coupons. Also, service merchants' own websites can teach consumers that coming through deal sites and couponing is

profitable. In addition, merchants can highlight that deal site consumers are treated as a regular consumers to encourage coupon prone consumers to try their services.

We found that consumers' high in price-quality schema are willing to repurchase at full price. Identifying these people through a questionnaire (Lichtenstein et al., 1993) and following up with those consumers would increase their return. In addition, the reputation of the service merchant increases the effect of price-quality schema on repurchase likelihood at different discount conditions. Managers of deal sites and/or merchants should both emphasize the reputation of the merchants (if widely known) for repurchasing to occur. However, discount does not moderate the effect of price-quality schema on repurchase. This may be due to the fact that discount does not change those consumers with high in price-quality schema attributions for quality, which is an advantage for merchants.

5. Limitations and Future Research

The main limitations of our experiment include the fact that we collected data through an online participant pool and manipulated the variables through scenarios. We use a hypothetical scenario but we recreated a webpage very similar to the actual deal site website. Our study does not measure actual behavior but measures attitudes which are drivers of behavior. The internal validity could be increased by having respondents actually experience the service. Moreover, the external validity could be improved in field studies, using actual deals and consumers

Other promising avenues for future research include manipulating price-quality schema, a variable we measured – not manipulated. Also, future research may investigate how other deal characteristics (e.g., service category, how many people purchased the deal – popularity, time left to purchase the deal) may impact purchase, repurchase, and WOM.

References

- Alegre, J., and Cladera, M. (2009). Analysing the effect of satisfaction and previous visits on tourist intentions to return. *European Journal of Marketing*, 43 (5), 670–685.
- Alford, B.L., and Biswas, A. (2002). The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention. *Journal of Business Research*, 55 (9), 775–783.
- Ambler, N. C., and Bui, T. X. (2012, August). Value proposition and social proof in online deals: an exploratory study of Groupon. com. In *Proceedings of the 14th Annual International Conference on Electronic Commerce* (pp. 294-300). ACM.

- Anderson, E.T., and Simester D.E. (2004). Long-run effects of promotion depth on new versus established customers: Three Field Studies. *Marketing Science*, Winter 23:4-20.
- Bearden, W. O., and Shimp, T. A. (1982).The use of extrinsic cues to facilitate product adoption. *Journal of Marketing Research*, 229-239.
- Berry, L. L., and Parasuraman, A. (2004).*Marketing services: Competing through quality*. Simon and Schuster.
- Blattberg, R. C., and Neslin, S. A. (1989). Sales promotion: The long and the short of it. *Marketing Letters*,1(1), 81-97.
- Blattberg, R. C., and Neslin, S. A. (1990).*Sales promotion: Concepts, methods, and strategies* (pp. 313-43). Englewood Cliffs, NJ: Prentice Hall.
- Blattberg, R. C., Briesch, R., and Fox, E. J. (1995). How promotions work. *Marketing Science*,14(3_supplement), G122-G132.
- Byers, J. W., Mitzenmacher, M., Potamias, M., and Zervas, G. (2011). A Month in the Life of Groupon. arXiv preprint arXiv:1105.0903.
- Byers, J. W., Mitzenmacher, M., and Zervas, G. (2012, June). The Groupon effect on yelp ratings: a root cause analysis. In*Proceedings of the 13th ACM conference on electronic commerce*(pp. 248-265). ACM.
- Clifford S., and Miller C. C. (2012). Merchants and Shoppers Soul on Daily Deal Sites.<http://www.nytimes.com/2012/08/18/technology/merchants-and-shoppers-sour-on-daily-deal-sites-like-groupon.html? r=0>
- Cohen T. (2014). Why Groupon (GRPN) Stock Is Lower Today. *The Street*, available at <http://www.thestreet.com/story/12730198/1/why-groupon-grpn-stock-is-lower-today.html>
- Cronin, J. J., Brady, M. K., and Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*,76(2), 193-218.
- Del Vecchio, D., Henard, D. H., and Freling, T. H. (2006). The effect of sales promotion on post-promotion brand preference: A meta-analysis. *Journal of Retailing*,82(3), 203-213.
- Devlin, J. F. (1998). Adding value to service offerings: the case of UK retail financial services. *European Journal of Marketing*, 32(11/12), 1091-1109.
- Dholakia, U. M. (2011). What Makes Groupon Promotions Profitable for Businesses? Working Paper, Available at SSRN: <http://ssrn.com/abstract=1790414>

- Dichter, E. (1966). How Word-of-Mouth Advertising Works. *Harvard Business Review*, 44(November–December), 147–166.
- Dodds, W. B., Monroe, K. B., and Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 307-319.
- Dodson, J. A., Tybout, A. M., and Sternthal, B. (1978). Impact of deals and deal retraction on brand switching. *Journal of Marketing Research*, 72-81.
- Dowling, G. R. (1986). Perceived risk: the concept and its measurement. *Psychology & Marketing*, 3(3), 193-210.
- Dube, R. (2015). *How much money does Groupon Make and Will it Last?* Retrieved from <http://www.makeuseof.com/tag/much-money-groupon-make-will-last/>
- Edelman, B., Jaffe, S., and Kominers, S. D. (2011). To Groupon or not to Groupon: The profitability of deep discounts. *Marketing Letters*, 1-15.
- Engel, J. F., Kegerreis, R. J., and Blackwell, R. D. (1969). Word-of-mouth communication by the innovator. *The Journal of Marketing*, 15-19.
- Fitzsimons, G. J. (2008). Death to dichotomizing. *Journal of Consumer Research*, 35(1), 5-8.
- Fombrun, C., and Van Riel, C. (1997). The reputational landscape. *Corporate Reputation Review*, 1-16.
- Garretson, J. A., and Burton, S. (2003). Highly coupon and sale prone consumers: benefits beyond price savings. *Journal of Advertising Research*, 43(02), 162-172.
- Grewal, D., Janakiraman, R., Kalyanam, K., Kannan, P. K., Ratchford, B., Song, R., & Tolerico, S. (2010). Strategic online and offline retail pricing: a review and research agenda. *Journal of Interactive Marketing*, 24(2), 138-154
- Guadagni, P. M., and Little, J. D. (1983). A logit model of brand choice calibrated on scanner data. *Marketing Science*, 2(3), 203-238.
- Gupta, S., and Cooper, L. G. (1992). The discounting of discounts and promotion thresholds. *Journal of Consumer Research*, 401-411.
- Hennig-Thurau, T. and Walsh, G. (2003) Electronic Word-of-Mouth: Motives for and Consequences of Reading Customer Articulations on the Internet, *International Journal of Electronic Commerce*, 8(2), 51-74.
- Hennig-Thurau, T., Gwinner, K. P.,- Walsh, G., and Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to

- articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1) PAGES.
- Hung, K., and Petrick, J. F. (2012). Testing the effects of congruity, travel constraints, and self-efficacy on travel intentions: An alternative decision-making model. *Tourism Management*,33(4), 855-867.
- Hunt, H. K. (1977). CS/D—Overview and future research direction. In H. K. Hunt (Ed.), *Conceptualization and measurement of customer satisfaction and dissatisfaction* (pp.455–488). Cambridge, MA: Marketing Science Institute.
- Irwin, J. R.,& McClelland, G. H. (2001). Misleading heuristics and moderated multiple regression models. *Journal of Marketing Research*,38(1), 100-109.
- Kim, N., Lee, M., and Kim, H. R. (2008). The effect of service coupons on the consumer trade-offs between price and perceived quality. *Journal of Promotion Management*, 14(1-2), 59-76.
- Kim, Ju-Young, Martin Natter, and Martin Spann. (2009): Pay what you want: A new participative pricing mechanism. *Journal of Marketing*. 73.1: 44-58.
- Kumar, V., and Rajan, B. (2012). Social coupons as a marketing strategy: a multifaceted perspective. *Journal of the Academy of Marketing Science*,40(1), 120-136.
- Lee, L., Bertini, M., and Ariely, D. (2008). Money Muddles Thinking: The Effect of Price on Preference Consistency. *Columbia Business School, Working Paper*.
- Lichtenstein, D. R., Netemeyer, R. G., and Burton, S. (1990). Distinguishing coupon proneness from value consciousness: an acquisition-transaction utility theory perspective. *Journal of Marketing*, 54-67.
- Lichtenstein, D. R., Ridgway, N. M., and Netemeyer, R. G. (1993). Price perceptions and consumer shopping behavior: a field study.*Journal of Marketing Research*, 234-245.
- Linnane, C. (2015).Groupon sales head steps down: Re/code available at <http://www.marketwatch.com/story/groupon-sales-head-steps-down-recode-2015-01-08>
- Liu, Y., and Sutanto, J. (2012). Buyers' purchasing time and herd behavior on deal-of-the-day group-buying websites.*Electronic Markets*,22(2), 83-93.
- Mittal, B. (1995) A comparative analysis of four scales of consumer involvement. *Psychology & Marketing*12.7: 663-682.

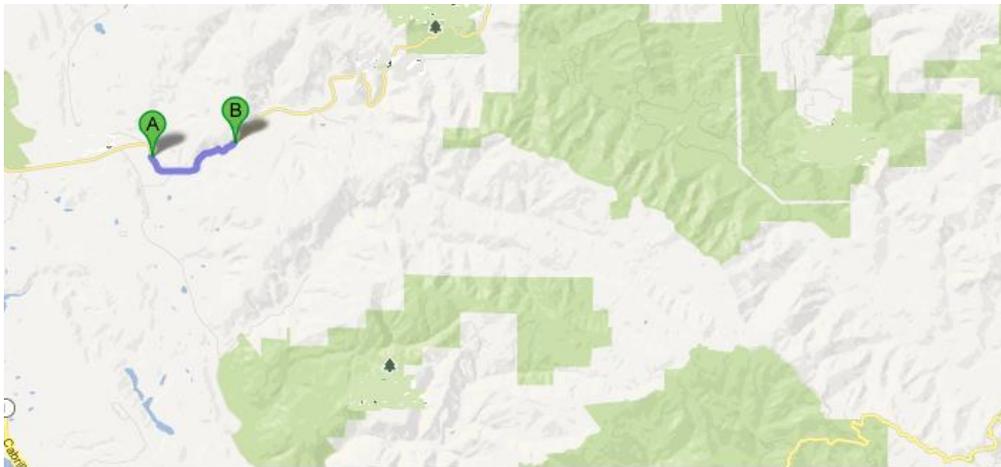
- Neslin, S. A., and Shoemaker, R. W. (1989). An alternative explanation for lower repeat rates after promotion purchases. *Journal of Marketing Research*. VOL/PAGE NUMBER
- Patterson, P. G., and Spreng, R. A. (1997). Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: an empirical examination. *International Journal of Service Industry management*, 8(5), 414-434.
- Pauwels, K., Hanssens, D. M., and Siddarth, S. (2002). The long-term effects of price promotions on category incidence, brand choice, and purchase quantity. *Journal of Marketing Research*, 39(4), 421-439.
- Raghubir, P., and Krishna, A. (1996). As the crow flies: Bias in consumers' map-based distance judgments. *Journal of Consumer Research*, VOL? 26-39.
- Rose, C., and Thomsen, S. (2004). The impact of corporate reputation on performance: Some Danish evidence. *European Management Journal*, 22(2), 201–210.
- Shao, C. Y., Baker, J. A., and Wagner, J. (2004). The effects of appropriateness of service contact personnel dress on customer expectations of service quality and purchase intention: The moderating influences of involvement and gender. *Journal of Business Research*, 57(10), 1164-1176.
- Szymanski, D. M., and Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29(1), 16-35.
- Taylor, S. A., and Baker, T. L. (1994). An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions. *Journal of Retailing*, 70(2), 163-178.
- Winer, R. S. (1986). A Reference price model of brand choice for frequently purchased products. *Journal of Consumer Research*, 13(September), 250-256.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of consumer research*, 12(3), 341-352.
- Zeithaml, V. A., Parasuraman, A., and Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon and Schuster.
- Zhang, Z., Zhang, Z., Wang, F., Law, R., and Li, D. (2013). Factors influencing the effectiveness of online group buying in the restaurant industry. *International Journal of Hospitality Management*, 35, 237-245.

APPENDIX A

Please imagine that, through the Groupon site, you found the offer below for a **WIDELY-KNOWN (RELATIVELY UNKNOWN) and HIGHLY (RECENTLY) ESTABLISHED** restaurant. This restaurant started serving customers more than 90 years ago and everybody knows it.

There is a **35% (50% vs. 85%) discount** through Groupon for this restaurant.

Once you check the map, you realize that it is **only 10 min. (more than 60 min.) away** from your home by car.



The screenshot shows the Groupon website interface. At the top, there's a navigation bar with 'Groupon' logo and various menu items like 'Featured Deal', 'All Deals', 'Getaways', 'Goods', 'A Better You', 'Gifts', 'Sign In', and 'Sign Up'. Below the navigation bar, there's a search bar with 'Refer Friends. Get \$10*' and a search input field containing 'pizza, massage, etc'. The main content area features a prominent deal for a restaurant. The deal text reads: 'Highly Reputable Restaurant, 35% Discount, less than 10 min. Away!'. There's a large blue 'Buy!' button. Below the button, it says 'Discount 35%', 'Buy it for a friend!', 'Limited time remaining!', 'Over 1,000 bought Limited quantity available', and 'The deal is on!'. To the right of the deal is a photo of a pizza. Below the photo are two buttons: 'Let's Go Brunch' and 'Date Night'. On the right side of the page, there are two smaller promotional banners. The top one is for 'Save on Self-Improvement Deals' with a 'SEE DEALS >' button. The bottom one is for 'Always Learning' Deals For You, listing three deals: '\$39 for \$399 at IT University Online Online Deal', '\$29 for \$198 at Learn IT! Anytime Online Deal', and '\$75 for \$150 at ABC Restaurant Restaurant'.