## Yu-Lun Hsu ${ }^{1}$, Kuan-Yu Chen ${ }^{2}$, Yu-San Ting ${ }^{3}$ <br> THE EFFICACY OF ONLINE GROUP BUYING WEBSITES IN TRAVEL INDUSTRY MARKETING: THE CASE OF GROUPON.COM

This paper explores the efficacy of Groupon as a marketing venue for the travel industry. Groupon accommodates marketing by travel firms through its section on 'Getaway'. As a new online marketing venue, this could be a means for travel firms to raise sales, increase market share, and boost competitiveness. It is important to determine how well this group-buying website works for travel firms by considering its mechanisms as well as prospective cost, losses and profit.

Keywords: group buying; price discrimination; discount deals; travel industry; travel coupons.

## Ю-Лун Хсу, Куан-Ю Чен, Ю-Сан Тінг <br> ЕФЕКТИВНІСТЬ ВЕБСАЙТІВ ГРУПОВОЇ ЗАКУПІВЛІ У ТУРИСТИЧНОМУ МАРКЕТИНГУ: НА ПРИКЛАДI GROUPON.COM

У статті досліджено ефективність "Groироп" як маркетингового майданчика для індустрії туризму. Туристичні фірми продають свої послуги на "Grouроп" у секції "Getaway". У якості нового маркетингового онлайн-майданчика це може бути можливістю для турфірм підняти рівень продажів, збільшити свою частку на ринку та підвищити конкурентоспроможність. Важллво визначити, наскільки корисний цей сайт групової закупівлі для турфірм, через оцінювання його принципів дії та прогнозованих вартості, збитків та прибутків.

Ключові слова: групова закупівля; иінова дискримінація; пропозиції зі знижкками; індустрія туризму; туристичні сертифікати.
Табл. 6. Літ. 11.

## Ю-Лун Хсу, Куан-Ю Чен, Ю-Сан Тинг <br> ЭФФЕКТИВНОСТЬ ВЕБСАЙТИВ ГРУППОВОЙ ЗАКУПКИ В ТУРИСТИЧЕСКОМ МАРКЕТИНГЕ: НА ПРИМЕРЕ GROUPON.COM

В статье исследована эффективность "Groupon" как маркетинговой площадки для индустрии туризма. Туристические фирлы продают свои услуги на "Groupon" в секции "Getaway". В качестве новой маркетинговой онлайновой площадки это может быть возможсностью для турфирм поднять уровень продаж, увеличить свою долю на рынке и повысить конкурентоспособность. Важсно определить, насколько полезен этот сайт групповой закупки для турфирм, через оценивание его принципов действия и прогнозируемых стоимости, убытков и прибылей.
Ключевые слова: групповая закупка; ценовая дискриминация; предложения со скидками; индустрия туризма; туристические сертификаты.

1. Introduction. Group-buying websites draw sellers to make travel offers at a discounted price and fulfill the deal if a given number of consumers express their willingness to buy. There is no outright cost in participating. A minimum number of will-

[^0]ing buyers offsets potential revenue lost from discounting to ensure profit. Groupon is a group-buying website launched in November 2008. The name is a combination of "group" and "coupon" to express the website concept of coupon offers on products/services from sellers to groups of consumers. The website offers a wide range of deals, including tour packages and hotel and restaurant deals available to consumers in 565 cities around the world (Hoovers, 2011). The website is moving towards localization by establishing websites in different countries using the local website address and language. It is important for travel firms to understand the effectiveness of the website mechanism to the travel industry in terms of expected cost, sales and profit.

## 2. Literature Review

2.1. Group Buying Mechanism. The group buying mechanism has 3 elements, which are the number of goods, price and time limitation (Anand \& Aron, 2003) [See Table 1]. The number of goods is the number of units that a seller is willing to provide for a given price and number of expected buyers. The offer can be outright 50 units at $\$ 75$ per unit with 50 expected buyers or a scale of decreasing price as the number of goods increases. The price is flexible with the ceiling value representing the market price and decrease in value representing the price discount. More goods with willing buyers can lower the price. This acts as an incentive for people interested in an offer to a group together to obtain a product at the lowest possible price. Time limitation expresses the urgency for consumers to make a decision on a offer. Very attractive offers have lesser time limit to create the urgency for group purchase.

Table 1. Components of the Group Buying Mechanism

| Offer | No. of Units | Price per Unit | Time Limit |
| :--- | :---: | :---: | :---: |
| Example 1 | $1-25$ | $\$ 100$ | No Time Limit |
|  | $26-50$ | $\$ 90$ | No Time Limit |
|  | $51-75$ | $\$ 80$ | 1 Week |
|  | $76-100$ | $\$ 70$ | 1 Week |
| Example 2 | 100 | $\$ 70$ | $1-3$ Days |
| Example 3 | 100 | $\$ 50$ | 1 Day |

Group buying operates through a number of mechanisms. One is discount expectation (Bakar \& Hashim, 2008; Kauffman, Lai \& Ho, 2010). The initial price posted by group buying websites is slightly higher than at other websites. While the price is higher, the expectation of a discount works as an incentive for consumers to make an order. Another mechanism is the propensity of consumers towards group buying as explained by network externality (Li, Chawla, Rajan \& Sycara, 2004). In online consumption, the benefit of this venue for buying increases with the expansion in the user's network. Online consumers participate in group-buying behavior through their networks. More widely networked consumers are more likely to be group buyers. Internet users employ their online networks to increase takers by posting tweets, links and status messages on their social networking accounts, emailing their family members, friends and coworkers, writing blogs, and creating or posting on forum threads. A third explanation is the price threshold (Weiss \& Mehrotra, 2001; Dasu \& Tong, 2010; Kauffman et al., 2010). Offers of group buying websites indicate the original value, the discount, and the savings together with the time remaining on
the offer, number of people who bought, and the number of purchases needed to obtain the discount. Purchases increase as the number of purchases needed to obtain the discount decreases, especially given a time constraint. The last one is mediation of different party interests to ensure competitive pricing (Kannan \& Kopalle, 2001; Li et al., 2004). Group buying websites operate online to minimize costs. The site accommodates discounted offers by building its online consumer network while at the same time drawing attractive offers from sellers. In playing their intermediary role, group-buying sites earn a percentage from actual sales.
2.2. Benefits and Downsides of Group Buying. Group buying websites do not absolutely deliver benefits to interested parties. Effectively matching seller's offers with buyer's needs is necessary. Attractiveness of an offer covers the nature of a product/service and price discounts relative to a market price.

There are benefits and downsides to buyers, sellers and group buying websites [See Table 2]. Group buying provides consumers with a wide range of discount offers at no additional cost. Making orders is also risk-free because a consumer always gets a product at a discounted price, given a minimum number of takers. The downsides to consumers are the failure to satisfy a demand and waste of time and effort in searching for discounts when there is only a small number of takers. Online sellers do not need to pay upfront but receive upfront payment from purchases made on their offer at the site. Sellers can also create a customer base, build loyal customers, and improve brands awareness. At the same time, sellers have free advertising on the network of the website and its members. However, sellers need to make discounted offers, which could be up to $50 \%$ off a price. If poorly managed, discounting can lead to losses for a seller. Unanticipated orders can also lead to failure in accommodating orders. Group buying websites operate at low cost as online firms and generate sales from hosting offers. The website can establish a wide network of sellers and consumers while at the same time accessing market information to grow revenue. However, group-buying websites can incur losses or fail to realize earnings when unable to bring together sellers and buyers effectively. (Chen, Kauffman, Liu \& Song, 2010).

Table 2. Benefits and Downsides of Using Group-Buying Websites

| Interested Parties | Benefits | Downsides |
| :--- | :--- | :--- |
| Online Consumers | Options, Cost savings, Low risk | Failure to obtain product at <br> desired price, waste of time <br> and effort |
| Online Sellers | No up-front cost, up-front payment, <br> customer base, brand awareness, <br> customer loyalty, free advertising <br> through online network | Offer discount, risk of losing <br> money, inability to manage <br> inflow of orders |
| Group Buying Website | Low operational costs, sales from <br> hosting, online network, market <br> information | Risk of losing earnings, <br> consumers and sellers |

Source: (Chen et al., 2010).
3. Methodology. Archival or secondary research and observation are the useful techniques in exploring group-buying website for travel firms based on the case of Groupon.com in the United States. The largest number of website users is in the U.S.
and most widespread travel offers exist for different states. The duration of data collection on travel offers is July 2011 to track the posted travel offers and outcomes of these offers. The investigation provides an analysis of the use of the website by travel firms and potential financial outcomes.

## 4. Results

4.1. Groupon.com for the Travel Industry. The "Getaways" page of Groupon.com caters to travel firms and consumers. Clicking "Getaways" directs consumers to travel on deals in their cities or all deals in case a customer wants to travel to different states or countries.

As for July 2011, Groupon.com featured 88 travel offers, with some of the details and deal status shown in Table 3. The offers cover travel locations in the United States, Canada, Caribbean, and Latin and South America available to users in the United States. The deals run for a week. The number of travel deals per week is 21 to 23 offers. The lowest discount rate is $40 \%$ and the highest discount rate is $67 \%$. Most $(75 \%)$ of the deals offer a $50 \%$ discount. Although the initial price of travel packages is slightly higher ( $5-10 \%$ ) than the price in other travel sites, a $50 \%$ discount remains a substantial decrease in cost when compared to purchasing the same travel package at a regular price. A $50 \%$ discount represents an actual decrease in price of $40-45 \%$ depending on the initial markup (5-10\%) on regular prices. Purchases at the end of a week indicate variance in the number of people that bought a travel deal. The lowest number of buyers is 24 while the largest number of buyers is 1,652 people. Although there is a variance in the number of people buying, the deal is on upon reaching the minimum number of people required. At the end of the week, most of the travel deals reached the minimum number of buyers and even achieved significant number of purchases. Only 1 to 2 deals are off at the end of the week. Groupon is able to support most of the deals offered by travel firms with website users meeting the minimum number of purchases and even reaching high numbers, such as more than 1,000 for some of the deals. While there is a small number of travel deals that do not achieve the minimum number at the end of the week, probable explanations are the mismatch between the package and customer interest and/or greater attractiveness of other deals. Travel firms also compete in making attractive offers.

Table 3. Groupon Getaways Deal for July 2011

| Period(July 2011) | \# of Travel Deals | Discount Rate (\%) |  | \# of People Buying at End of Period |  | End of Period Status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Deal is On | $\begin{aligned} & \text { Deal not } \\ & \text { On } \end{aligned}$ |
|  |  | Lowest | Highest |  |  | Lowest | Highest |
| Week 1 | 21 | 50 | 65 | 74 | 1479 | 21 | 0 |
| Week 2 | 22 | 45 | 60 | 51 | 1182 | 20 | 2 |
| Week 3 | 23 | 50 | 60 | 120 | 1235 | 22 | 1 |
| Week 4 | 22 | 40 | 67 | 24 | 1652 | 21 | 1 |

Consideration of the travel deals for the last week of July [See Table 4] provides a more detailed picture of how Groupon accommodates travel deals. In the fourth week of July there were 22 deals. The discount rate varied, with the lowest discount rate at $40 \%$ and the highest discount at $67 \%$. Of the 22 deals, 30.82 percent offered
$50 \%$ discount and the same percentage offered $51-55 \%$ discount. Travel firms set different numbers of minimum purchases to tip a deal. The lowest number is 2 for a more pricey travel deal in Antigua and Barbuda and the highest number is 100 for a less pricey deal with Avis car rental. The common minimum number is 10 to 20 people buying a deal. Of 22 travel deals, all the deals were on at the end of the week with the minimum number to tip a deal reached in the first 2-3 days after a deal posting. At the end of the week, the number of purchases substantially increased. Except for the one deal that did not push through, all the deals were on with significant number of purchases. The travel firms posting the deals should expect customers to redeem their coupons in the next 6 months to 1 year, depending on the terms posted.

Table 4. Groupon Getaways Deal for Week 4 of July 2011

| Travel Deals (July Week 4) | Value of Travel Deal |  |  |  |  | Travel Deal Status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Discount, \% | Original Price | Discounted Price | Cost Savings | $\begin{aligned} & \text { \# to } \\ & \text { Tip } \\ & \text { Deal } \end{aligned}$ | End-ofDeal Status | \# Bought at End of Deal |
| Chic, Vibrant <br> Suites, <br> Vancouver | 52.57 | 350 | 184 | 166 | 5 | Deal is On | $\begin{aligned} & 555 \text { bought/ } 45 \\ & \text { remaining } \end{aligned}$ |
| Omni Bedford Springs Resort | 53.13 | 638 | 339 | 299 | 10 | Deal is On | 1135 bought /limited quantity available |
| Cotton Tree <br> Lodge, San <br> Filipe, Brazil | 50 | 1479 | 739 | 740 | 5 | Deal is On | 88 bought /limited quantity available |
| Crystal Palms Beach Resort, Florida | 50 | 298 | 149 | 149 | 20 | Deal is On | 944 bought/217 remaining |
| Boutique Hotel, New Brunswick, Canada | 50 | 260 | 129 | 131 | 10 | Deal is On | 24 bought/limited quantity available |
| Saint James Club Resort and Villas, Antigua and Barbuda | 53 | 2560 | 1199 | 1361 | 2 | Deal is On | 32 bought/limited quantity available |
| The <br> Fitzpatrick <br> Hotel, <br> Washington, <br> Georgia | 54 | 120 | 55 | 65 | 15 | Deal is On | 243 <br> bought/limited quantity available |
| Green Valley Ranch, Henderson, Nevada | 64 | 278 | 100 | 178 | 10 | Deal is On | 197 bought/limited quantity available |
| Hollywood Casino Bay, St Louis, Mississippi | 60 | 139 | 120 | 119 | 5 | Deal is On | 70 bought/limited quantity available |

The End of Table 4

| Travel Deals (July Week 4) | Value of Travel Deal |  |  |  |  | Travel Deal Status |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Discount, } \\ \% \end{gathered}$ | Original Price | Discounted Price | Cost Savings | $\begin{aligned} & \text { \# to } \\ & \text { Tip } \\ & \text { Deal } \end{aligned}$ | End-ofDeal Status | \# Bought at End of Deal |
| The Lodge of Four Seasons, Ozark, Missouri | 51 | 614 | 299 | 315 | 15 | Deal is On | 182 bought/limited quantity available |
| Mountain Top Inn \& Resort, Chittenden, Vermont | 50 | 550 | 275 | 275 | 5 | Deal is On | 62 bought/limited quantity available |
| The Peabody Littlerock, Littlerock, Arkansas | 50 | 350 | 174 | 176 | 20 | Deal is On | 128 <br> bought/limited <br> quantity available |
| Reunion Resort, Reunion, Florida | 50 | 1440 | 720 | 720 | 20 | Deal is Off | 2 bought/ 18 more to tip the deal |
| Stagecoach Trails Guest Ranch, Yucca, Arizona | 45 | 280 | 154 | 126 | 5 | Deal is On | 260 <br> bought/limited quantity available |
| Avis Car Rental | 50 | 40 | 20 | 20 | 100 | Deal is On | 1625 bought/limited quantity available |
| The Dupont Circle Hotel, Washington D.C. | 45 | 545 | 299 | 246 | 5 | Deal is On | 131 bought/limited quantity available |
| Brasskey Guesthouse, Provinceton, | 51 | 460 | 225 | 235 | 25 | Deal is On | 457bought/ 43 remaining |
| Chetola Resort, Blowing Rock, North Carolina | 40 | 194 | 116 | 78 | 5 | Deal is On | 549 bought/ 116 remaining |
| Il Lugano Suite Hotel, Ft. <br> Lauderdale, Florida | 49 | 548 | 279 | 269 | 10 | Deal is On | 124 bought/limited quantity available |
| Sandaway, Oxford, Maryland | 55 | 325 | 147 | 178 | 10 | Deal is On | 383 bought/limited quantity available |
| Hard Rock Hotel Chicago | 67 | 372 | 124 | 248 | 20 | Deal is On | 1652bought (sold out on 29 July) |
| Executive, Whistler, British Columbia, Canada | 45 | 350 | 194 | 156 | 20 | Deal is On | 300 bought (sold out on 29 July) |

4.2. Cost, Sales and Profit in Using Groupon. Effectiveness of Groupon can be justified by comparing cost, revenue and profit based on assumed redemption rate of $40 \%$, assumed $50 \%$ new customers, assumed $50 \%$ additional purchases, and additional purchase amount comprising the difference between the regular and discounted price [See Tables 5 and 6]. The computations employed two Groupon calculators (Crudele, 2010; Eklund, 2011), one of which computed the cost of using Groupon and the other computed the profit and return on investment in using the website.

The cost of the hotel in Chicago in using Groupon to offer its travel deal can be obtained from the value on 'Total Net Revenue Lost by Offering the Deal', which is $\$ 102,424$ [See Table 5]. The value represents the total cost of offering the deal at Groupon is less than the total revenue in using Groupon. The value is negative, which means that total revenue is higher than the total cost. The cost incurred by the hotel in posting the deal on Groupon was justifiable.

Table 5. Cost of Using Groupon

| Voucher value | \$372 |
| :---: | :---: |
| Voucher price | \$124 |
| Voucher sales expected | 1,652 |
| \% Redeemed before voucher expiration date is reached | $40^{\prime}$ |
| \% Sales with additional purchases | 50 |
| Average additional purchase amount (beyond voucher value) | \$248 |
| \% Redeemers that become regular customers | $50^{\prime \prime}$ |
| Average number of visits by a typical regular customer per month | 1 |
| Average amount of money your regular customers spend | \$496 |
| Your revenue per voucher sale | \$62.00 |
| Groupon's share per voucher sale | \$62.00 |
| Groupon's total earnings | \$102,424 |
| Total product/service sales price | \$204,848 |
| Total number redeemed | 1,652 |
| Total number of additional purchases | 826 |
| Total number of new regular customers gained | 826 |
| Total revenue earned from additional purchases | \$204,848 |
| Total revenue earned from voucher sales | \$102,424 |
| Total revenue gained from regular customers next month (post deal offering) | \$409,696 |
| Total revenue you earn from offer plus next month's purchases from new customers | \$716,968 |
| Total product/service sales value | \$614,544 |
| Total Net Revenue Lost By Offering Deal (total expenses minus total revenue) | -\$102,424.00 |
|  |  |
| Total number of visits needed by newly acquired customers in order to break even | 0.75 |
|  |  |
| Expense/voucher sold | \$62.00 |
| Expense/voucher redeemed | \$62.00 |
| Regular customer acquisition cost | \$124.00 |
|  |  |
| Percentage of voucher's value lost with each voucher purchase | -16.67\% |
|  |  |
| *Important* - This tool doesn't not take into account any additional workers that merchants must hire to handle appointment scheduling and the hundreds/thousands of new customers coming in to redeem their vouchers. |  |

Source: Derived from the Groupon calculator (Eklund, 2011).
Assuming a $150 \%$ markup or margin and a $40 \%$ redemption rate, the profit from coupon purchases is $\$ 4,096.96$ with a long-term profit of $\$ 249,914.56$, a return on investment in the long-term is $95.31 \%$ [See Table 6]. Short-term profit is small while long-term profit and return on investment are significant, when considering the zero outright cost of using Groupon. Using Groupon to post travel deals can increase the number of customers, including new consumers, as well as lead to financial benefit for a firm.

Table 6. Profit and ROI in using Groupon

| Description |  | Factor |
| :--- | :--- | ---: |
| What is the face value of the certificate? | Offer Amount (O) | $\$ 372.00$ |
| How much will someone spend to buy the <br> certificate? | Sell Amount (S) | $\$ 124.00$ |
| What \% of paid money will Groupon get? | Groupon's Cut (G) | $50.00 \%$ |
| What is your normal price margin? | Margin (M) | $150.00 \%$ |
| What is the average amount a customer spends <br> on a purchase using the certificate? | Certificate Average Ticket <br> (A) | $\$ 372.00$ |
| What \% of the certificates do you expect to be <br> redeemed? | Redeemed Ticket \% (R) | $40.00 \%$ |
| How many certificates do you expect to sell? | Total Sold (T) | 1,652 |
| How many new, recurring customers do you <br> expect to attract from the campaign, expressed <br> as a \% of total certificates sold? |  | New Patron \% (N) |

Source: Derived from the Groupon calculator (Crudele, 2010).
5. Conclusion. Groupon provides special accommodation to travel firms and travelers by allotting a page on "Getaways". The page brings together travel firms and travel deal buyers through discount offers, where the parties can negotiate on price. Not all the offers push through. A key to a successful offer is for travel firms to make attractive offers relative to the market and the other offers made on the website. Attractiveness refers to discount rate, aesthetics and information on the deal. At the same time, an offer should also meet market demand and the demand of Groupon subscribers. In addition, offering discounts on Groupon.com means losses of a travel firm from the slash in price and the share of Groupon. Travel firms need to ensure that the discount price should attract enough buyers to offset losses, raise revenue, and gain profit. Groupon is expanding to other countries to make discount offers on local and international travel deals available to a wider range of markets. Effectiveness of Groupon for travel firms in different countries is an important area in continuing this research.

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[^0]:    ${ }^{1}$ DBA, Corresponding Author, Assistant Professor, Department of Tourism, Nan Jeon Institute of Technology, Tainan, Taiwan.
    ${ }^{2} \mathrm{PhD}$, Associate Professor, Department of Recreation Sport and Health Promotion, National Pingtung University of Science and Technology, Pingtung, Taiwan.
    3 DBA, Assistant Professor, Department of Tourism, I-Shou University, Kaohsiung, Taiwan.

