

How Businesses Fare With Daily Deals As They Gain Experience:
A Multi-Time Period Study of Daily Deal Performance

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Abstract

We examine performance of daily deals using survey data from 641 small- and medium-sized businesses obtained during three time periods: April-May 2011, October 2011, and May 2012. In contrast to our June 2011 report, our present findings indicate a number of positive signs for the daily deal industry, notably: (1) the incidence of profitable promotions has remained stable over the study's duration (between 55% and 61%); (2) the likelihood of enjoying profitable promotions is associated positively with the operator's experience with them. Less than half of the businesses running their first daily deal report profitable promotions, whereas more than three quarters of those running seven or more deals do so; (3) daily deals are just as likely to be successful for businesses that don't do any other marketing at all as those that spend heavily on marketing activities; (4) performance metrics of completed daily deals have remained largely stable since May 2011, and have even improved on some measures like spending by deal users beyond the voucher's value and spending by repeat customers in the most recent May 2012 sample; (5) businesses continue to attract close to 80% new customers even when running their seventh (or more) daily deal, and see equally stable conversion rates for repeat purchasing and spending beyond deal value; (6) the daily deal site's share of revenue increased marginally from 42.5% in October 2011 to 45% in May 2012; (7) the calculation of dropout rates (i.e., businesses not intending to run daily deals again in the future) indicates that daily deals appear to be sustainable programs for approximately 30% of businesses; and (8) newer and relatively smaller businesses have even higher sustainability rates of close to 40%. We also find that restaurants and retailers (store-fronts and offline) are having a more difficult time making daily deals work compared to other industries, whereas salons and spas, and health and fitness services are doing relatively well with daily deals. Taken together, ***our results find little or no evidence of deterioration in the performance of daily deal promotions over the past year (April-May 2011 to May 2012) for small and medium-sized businesses or with experience as the business operator runs multiple daily deals. Rather, there is improvement in some metrics.***

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Summary of Main Findings and Conclusions

- This study is based on a total of 641 surveys and interviews with owners/ operators of small- and medium-sized US-based businesses: 321 businesses from Spring 2011, 154 businesses from October 2011 and 166 businesses from May 2012.
- Daily deal site loyalty levels are low for businesses running multiple daily deals. For their second deal, 54% of businesses go with the same daily deal site they used the first time. By the time they have run seven or more deals, only 8.6% of businesses have used the same site for all their daily deals, whereas 27.5% have used four or more daily deal sites.
- The percentage of businesses making money remained fairly stable in the Spring 2011 (55.5%) and October 2011 (54.9%) samples, but jumped by about 6 percentage points in the May 2012 sample to 61.5%. Correspondingly, the percentage of businesses that lost money trended downward. These differences were not statistically significant.
- The incidence of profitable daily deals increases with prior level of experience. Less than half of the businesses that have run their first daily deal report profitable promotions in any of the time period, more than three quarters of them do by the time they have run seven or more deals.
- The smallest businesses (those earning less than \$100,000 annually, 60.1% profitable) and the largest ones (those earning more than \$5 million, 76.7 % profitable) do relatively better whereas those in the middle that earn between \$500,000 and \$5 million in revenues each year do relatively poorly.
- Businesses that spend very little or nothing on marketing activities are just as likely to enjoy profitable promotions as businesses that spend a lot on marketing. Success with daily deals, defined with respect to having a profitable promotion, appears to be independent of the marketing emphasis or marketing sophistication of the business.
- Photographers (with a 75% rate of profitable daily deals), health and fitness services (69.3%), tourism-related services (68.0%), and doctors and dentists (66.7%) have significantly higher rates of success than average. In contrast, cleaning services (27.3%), restaurants and bars (44.2%), and retailers (50%) fare relatively poorly.
- There is remarkable consistency in most performance metrics measures across the one-year time span of the study. The percentage of new customers that the daily deal attracts remains virtually unchanged, at close to 80% in all three samples. The same is the case for percentage of deal users who spent beyond the deal's value, the percentage of deal users that became repeat customers, and the percentage of unredeemed deals then the promotion ended. In a few cases, there is notable improvement in the metrics in the most recent May 2012 sample. Both average amount spent beyond the deal's value, as well as the amount spent by repeat customers on their next visit were higher in May 2012, when compared to the other two time groups combined. ***There is little or no evidence to indicate that daily deals are working less effectively for businesses than they did last year.***

- The daily deal sites' share of revenue increased from 42.5% last October to 45% this May indicating stable or increasing pricing power.
- The rate of new customer acquisition for the most recent completed daily deal hovers close to 80% even when the business has run seven or more deals before, and they continue to be able to convert around a third of these customers to repeat purchasers. ***Daily deals continue to remain equally effective with repeated use.***
- On the negative side, businesses running multiple daily deals do not see increased spending by deal users either when they use the voucher or on subsequent occasions when compared to first-time businesses. This suggests that businesses may not be learning or improving based on their experiences from earlier daily deals. Similarly, there is also no marked decrease in the percentage of the revenue shared with the daily deal site as operators run more deals (good news for daily deal sites).
- 42% of businesses dropped out after running one deal in October 2011, and by the time they had run 7+ deals, 30% remained to run more deals in the future. In May 2012, 35% dropped out after the first deal, and 33% remained after 7+ deals.
- Restaurants and retailers indicated higher dropout rates, and salons and spas indicated lower dropout rates. Daily deals appear to function as sustainable marketing programs for only about a fifth of restaurants/ bars and retailers that try them, but for about two-fifths of salons and spas.
- Based on dropout and retention rates, daily deals appear to be more sustainable marketing programs for a greater proportion of newly-formed businesses (those founded within the past six years) than well-established ones, and for smaller businesses (as measured by annual revenue of less than \$500,000) compared to larger ones.

Taken together, these findings are in contrast to our June 2011 report, and indicate a number of positive signs for the daily deal industry. The results find little or no evidence of deterioration in the performance of daily deal promotions over the past year (April-May 2011 to May 2012) for small and medium-sized businesses or with experience as the business operator runs multiple daily deals. Rather, there is improvement in some metrics.

Introduction

We are now in the fourth year of the daily deal industry's evolution, and we have already been through numerous ups and downs. Hundreds of daily deal sites have been launched, some by large corporations and others by individuals on their kitchen tables. A significant number of them have shut down, merged with other sites, or changed their business models drastically¹. Through these upheavals, however, the industry's market leaders have remained unchanged and continued to grow impressively. For instance, Groupon, the industry's originator and now a publicly traded company, reported an increase of 75% in its North American revenue during the first quarter of 2012 compared to a year ago², and enjoys some 61 percent of the market share in North America. Meanwhile, LivingSocial reported 2011 revenue of \$245 million, a first-quarter 2012 revenue growth rate of 170% over the first quarter of 2011³, and remains second with some 26 percent market share⁴.

Despite these positive signs, there are doubts raised from various quarters regarding sustainability of the daily deal industry as a whole, and of individual daily deal sites.⁵ Whereas

¹ See for example, Taulli, Tom (2012), "798 daily-deal sites die – in 6 months," InvestorPlace, Available online at: <http://www.investorplace.com/ipo-playbook/798-daily-deal-sites-die-in-6-months/>; Heussner, Ki Mae (2012), "Closure of CityPockets provides window onto shakeout in daily deal business," GIGAOM, May 10, Available online at: <http://gigaom.com/2012/05/10/closure-of-citypockets-provides-window-onto-shakeout-in-daily-deal-business/>; Reisinger, Don (2011), "Struggling BuyWithMe may live on as unit of Gilt, report says," CNET, October 28. Available online at: http://news.cnet.com/8301-13506_3-20127170-17/struggling-buywithme-may-live-on-as-unit-of-gilt-report-says/; Geron, Tomio (2011), "First Facebook, now Yelp scaling back daily deals: Report," Forbes, August 30. Available online at: <http://www.forbes.com/sites/tomiogeron/2011/08/30/first-facebook-now-yelp-scaling-back-daily-deals-report>.

² Guy, Sandra (2012), "Groupon reports smaller 1Q loss, 89% boost in revenue," Chicago Sun-Times, May 14. Available online at: <http://www.suntimes.com/business/12531031-420/groupon-reports-smaller-1q-loss-higher-revenue.html>.

³ Kabani, Unaiz (2012), "LivingSocial Top-line accelerates, up 15% in Q1," Available online at: <http://blog.yipit.com/2012/04/30/livingsocial-topline-accelerates-up-15-in-q1/>.

⁴ Flook, Bill (2012), "LivingSocial's new products gain ground on daily deals," Washington Business Journal, June 20. Available online at: <http://www.bizjournals.com/washington/news/2012/06/20/livingsocials-new-products-gain.html?page=all>.

⁵ See for example, Bazilian, Emma (2011), "Has the daily deals market reached its breaking point?" AdWeek, September 19, Available online at: <http://www.adweek.com/news/technology/has-daily-deals-market-reached-its-breaking-point-134958>; Guy, Sandra (2012), "Groupon founders tally billions in paper losses," Chicago Sun-Times, June 5. Available online at: <http://www.suntimes.com/business/12998739-420/groupon-founders-tally-billions-in-paper-losses.html>; Kamenec, Kara (2012), "Travelzoo CEO Chris Loughlin, bases daily deal industry dynamics," Daily Deal Media, April 20. Available online at: <http://www.dailydealmedia.com/724travelzoo-ceo-chris-loughlin-bashes-daily-deal-industry-dynamics/>; Li, Shan(2012), "Groupon faces growing doubts about its credibility and

many of these concerns are regarding financial and accounting aspects of these companies⁶, issues regarding the adoption, experiences, and repeated use of daily deals by small and medium-sized businesses are of equal significance⁷ and form the focus of the present study.

By this time, a significant number of local businesses have tried running daily deal promotions, and many of them have run multiple ones, either with the same site or more commonly, with multiple daily deal sites. There is recent emerging evidence that businesses running multiple daily deals are having some success with them. For example, Yipit, the daily deal aggregator, recently reported that 41% of merchants running Groupon promotions were repeat merchants in the first quarter of 2012, up from 31% in the third quarter of 2011, and they accounted for 56% of Groupon's North American gross billings in the first quarter of 2012, from just 33% six months earlier.⁸

However, to our knowledge, no study to date has systematically examined the experiences of novice and experienced business operators with daily deals, or studied how the performance of daily deal promotions has changed over the past one year using a comprehensive set of performance metrics. For instance, does the third or fourth daily deal promotion run by a business still bring in the same proportion of new customers as the first promotion did? And how do factors like spending by deal users or the rates at which they come back to repurchase at full price change as the business runs more promotions? Nor do we know the rates at which

viability," Los Angeles Times, April 6. Available online at: <http://articles.latimes.com/2012/apr/06/business/la-fi-groupon-growing-pains-20120407>.

⁶ See for instance, Yglesias, Matthew (2012), "No deal: Why you shouldn't believe the theory behind Groupon's business model," State, April 2. Available online at: http://www.slate.com/articles/business/moneybox/2012/04/groupon_earnings_report_the_shaky_theory_behind_the_company_s_business_model_.html; Aubin, Dena (2012), "Analysis: Groupon accounting problems put spotlight on board," Reuters, April 12. Available online at: <http://www.reuters.com/article/2012/04/12/net-us-groupon-board-idUSBRE83B0F920120412>; Geron, Tomio (2012), "LivingSocial had \$558 million loss in 2011, says Amazon filing," Forbes, February 1. Available online at: <http://www.forbes.com/sites/tomiogeron/2012/02/01/livingsocial-had-558m-loss-in-2011-says-amazon-filing/>.

⁷ See for example, Abdallah, Mazen (2012), "Groupon's biggest obstacle is merchant retention," Seeking Alpha, Available online at: <http://seekingalpha.com/article/317246-groupon-s-biggest-obstacle-is-merchant-retention>; Sowa, Tom (2012), "Groupon invigorates park use," The Spokane-Review, June 16. Available online at: <http://www.spokesman.com/stories/2012/jun/16/groupon-invigorates-park-use/>.

⁸ Spielberg, Sean (2012), "Here's a sign merchants are starting to really like Groupon," Available online at: <http://blog.yipit.com/2012/06/18/heres-a-sign-merchants-are-starting-to-really-like-groupon/>.

businesses are dropping out from running daily deals as they gain experience with them.

Study objectives

Our goals in the study are to try and answer some of these questions. We seek insights into how the experiences of businesses with daily deal promotions have changed over the past one year (from April 2011 to May 2012) and to what extent daily deal performance changes as businesses gain more experience with running such deals. Through this report, our primary objective is to provide specific useful guidance to small- and medium-sized businesses that are considering a daily deal promotion for the first time, as well as those businesses that have run daily deals before. We also hope to provide some useful information to operators of daily deal sites and to industry observers regarding sustainability of the daily deal industry. We try to answer the following specific questions in this study:

- Has the percentage of businesses that make money vs. lose money from a daily deal promotion changed over time?
- How is the likelihood of having a profitable daily deal affected by the level of prior experience with running daily deals?
- Which businesses are more likely to have profitable daily deals and which ones are less likely?
- How do performance metrics such as: (1) percentage of new customers that the deal brings in, (2) proportion and level of spending by deal users beyond the voucher's value, (3) rates at which deal users become repeat purchasers and their spending, (4) non-redemption rates of deal vouchers, and (5) revenue shared with the daily deal site, all change over time and with level of prior daily deal experience?
- At what rates do businesses drop out from running daily deals, and how do these rates vary across industries?

Taken together, we expect the answers to these questions to shed light on how daily deal promotions have performed over the past year for businesses, and how sustainable the daily deal promotion is.

Study method

This study contains survey data gathered from owners/ operators of small- and medium-sized US businesses during three time periods: April-May 2011 (hereafter referred to as the “Spring 2011” sample⁹), October 2011, and May 2012. In each case, we employed a similar procedure. First, we identified US-based businesses that had completed daily deals in the past using one of the major daily deal sites such as Groupon, LivingSocial, Google Offers, Amazon Local, OpenTable, Travelzoo Local Deals, etc. A total of 45 different cities nationwide were covered across the three time periods, and we included different samples of businesses each time, to avoid overlap in respondents. For the Spring 2011 sample, approximately 1,200 businesses were contacted for participation in our study, and the corresponding number for the October 2011 and May 2012 samples was roughly 1,000 businesses each time.

Businesses were identified using a combination of web-page searches of the daily deal sites, searches using Google, Bing, and Yahoo, and through deal aggregator sites to discover other past deals that were not otherwise accessible. For each business, we identified its owner or manager through the company’s website and contacted him or her by email personally with an invitation to participate in the study. Respondents were offered between \$10 and \$50 for completing our survey (depending on the length and difficulty of the interview), and in most cases, we sent one reminder approximately two weeks after the initial invitation to encourage participation.

The surveys consisted of a large number of questions (with some differences in what was asked across the three samples) not all of which are analyzed or reported here. Germane to the present report, all respondents were asked how many daily deals they had completed in the past, details regarding their most recent one (i.e., which daily deal site they used and what the deal was for), followed by a number of specific questions regarding this particular promotion focusing on key performance metrics (described in depth below) and their perceptions. We also asked about the respondent’s future intentions to run another daily deal promotion. In the

⁹ Note that an in-depth analysis of this dataset is reported in Dholakia, Utpal M. (2011), “How Businesses Fare with Daily Deals: A Multi-Site Analysis of Groupon, LivingSocial, Opentable, Travelzoo, and BuyWithMe Promotions,” Available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1863466.

October 2011 and May 2012 samples, we asked respondents what percentage of their revenue from the promotion they shared with the daily deal site. Finally, we asked questions about their business such as its year of founding, annual revenue, percentage of revenue spent on marketing activities annually, and industry sector. The following industry sectors are covered in the study: (1) Restaurants or bars, (2) Salons and spas, (3) Retailers (including store-fronts and online), (4) Automotive services (repair and maintenance), (5) Cleaning services, (6) Doctors and dentists, (6) Health and fitness services (e.g., yoga classes, gyms, fitness camps, outdoor activities, etc.), (7) Education services (e.g., language classes, software training, etc.), (8) Tourism-related services (tours, sight-seeing, etc.), (9) Special events (concerts, shows, movie screenings, etc.), and (10) photographers (including portrait, wedding and boudoir photography services).

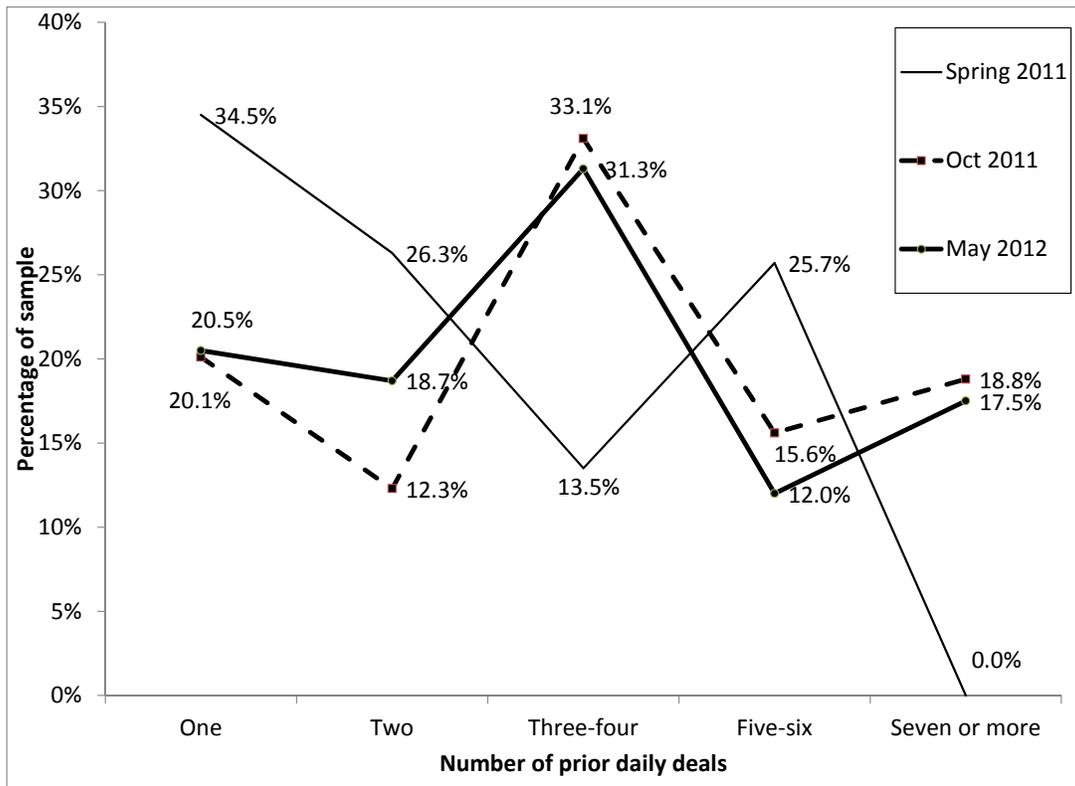
The analysis described in this report is based on a total of 641 responses: we have 321 businesses from Spring 2011¹⁰, 154 businesses from October 2011 and 166 businesses from May 2012. Thus the response rates are 26.8%, 15.4% and 16.6% for the three samples¹¹. Note that our focus here is on understanding trends in daily deal performance over time (across the three samples) and with amount of experience (based on number of prior daily deals conducted by the business). As such, we do not report performance metrics for specific daily deal sites or how they have changed over time in this report. Our conclusions concern the daily deal industry as a whole, not specific daily deal sites.

Distribution of level of experience with daily deals. In our samples, there were a number of businesses which had completed just one daily deal promotion. Many others had varying degrees of experience with daily deals. Given the main goals of this study, it is important to first understand the distribution of experience levels of businesses with daily deals in the three time periods. This information is summarized in Figure 1.

¹⁰ In fact, there were a total of 324 businesses in the Spring 2011 sample. However, three businesses did not report how many deals they had done in the past, and since this is a key variable in the present analysis, we excluded these three businesses from the analysis.

¹¹ We note that these are conservative estimates of response rates. During each time period, some indeterminate number of emails that were sent to businesses were either undelivered (e.g., because the person's mail-box was full) or were unopened (we have no way to know how many). Since contact was not established in these cases, the actual response rate (if calculated as the fraction of contacted individuals that completed the survey) was much higher.

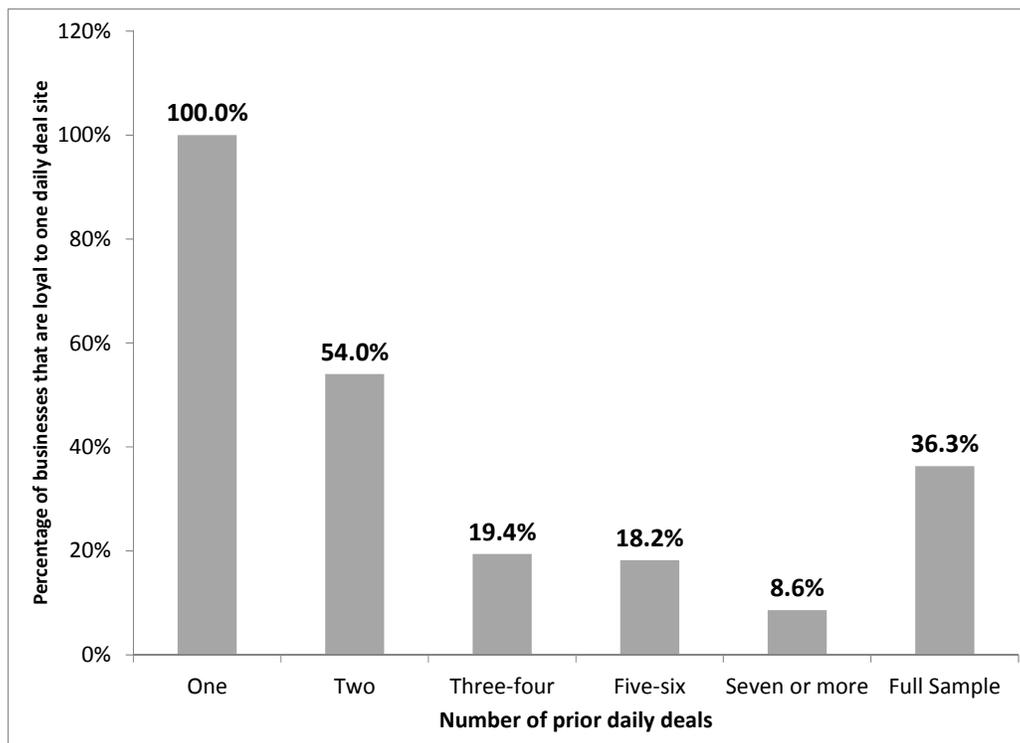
Figure 1: Distribution of prior experience with daily deals by time period



As can be seen, the distribution for the Spring 2011 sample is starkly different from the latter two time periods. In Spring 2011, there were no businesses that had run seven or more deals, but this sample had a disproportionately high number of first-time triers (more than a third of the sample, or 34.5% had run a single deal). Interestingly, the distributions of experience levels in the October 2011 and May 2012 samples are remarkably similar. In both samples, only about a fifth of respondents had run only one deal, and almost as many had run seven or more deals, indicating that many businesses have gained considerable experience running daily deals since last spring.

Loyalty to daily deal sites. So how loyal are businesses to daily deal sites? To find out, the next graph shows percentage of businesses that used the same daily deal site to run all their daily deals for different levels of experience with daily deals.

Figure 2: Loyalty to daily deal sites by level of experience



As can be seen from the figure, daily deal site loyalty levels are low for businesses running multiple daily deals. For their second deal, just over half (or 54%) of the businesses go with the same daily deal site they used the first time, and by the time they have run seven or more deals, more than 90% of them have used multiple daily deal sites. Only 8.6% have used the same site for all their daily deals in this experienced group of businesses¹².

Incidence of profitable vs. unprofitable daily deal promotions

Perhaps the single-most important metric used by small and medium-sized businesses to gauge the daily deal's success is whether the deal itself was profitable¹³. Many such businesses do little marketing all year, and the daily deal promotion represents the most significant, and in some cases, the only marketing activity conducted by the business. More than any other variable,

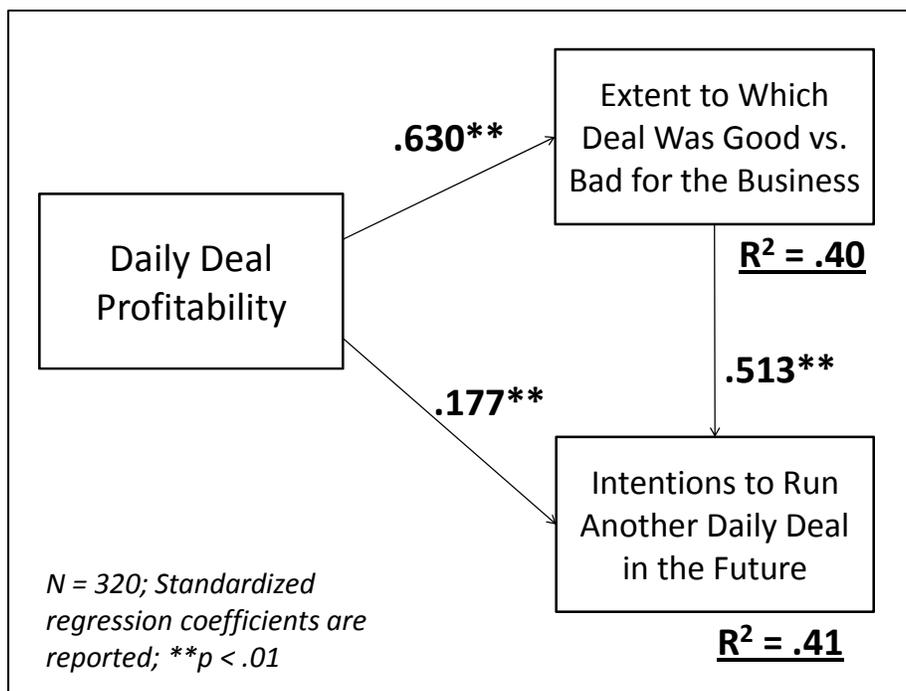
¹² In our sample, of all the business operators running 7+ deals, 8.6% were loyal to a single site, 27.6% rotated between two sites, 32.8% rotated between three sites, and 27.5% used four or more daily deal sites.

¹³ See Dholakia (2011), "How Businesses Fare with Daily Deals: A Multi-Site Analysis of Groupon, LivingSocial, Opentable, Travelzoo, and BuyWithMe Promotions," Available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1863466 for more details

therefore, the deal’s profitability is predictive of the business operator’s perception of daily deals, and the likelihood that s/he will run another deal in the future.

In our surveys, we asked respondents questions about all three issues: (1) the daily deal’s profitability (i.e., whether they made money or lost money), (2) the extent to which the daily deal was good or bad for the business, and (3) the intentions to run a daily deal promotion in the future¹⁴. The results of regressions, summarized in Figure 3, reveal the strong impact of the daily deal’s profitability on perceptions regarding the extent to which the deal was good vs. bad for the business, and repeat intentions.

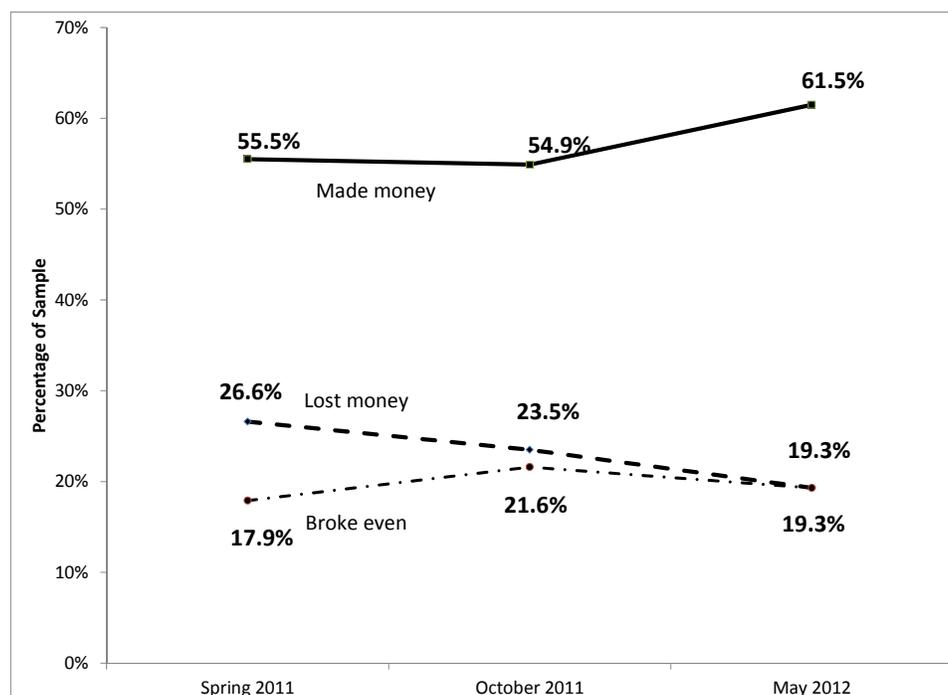
Figure 3: How daily deal profitability impacts deal value perceptions and repeat intentions



¹⁴In our surveys, the daily deal’s profitability was measured with the question “How would you characterize the profitability of your most recent daily deal promotion?” The responses available to participants were “We lost a lot of money on the promotion”, “We lost a little money on the promotion”, “We broke even; we neither made nor lost money”, “We earned a little money on the promotion”, and “We earned a handsome profit from the promotion”. To measure whether the deal was good or bad for the business, we asked, “Considering all the factors (costs involved, number of new customers, use by existing customers, revenues, profitability etc.), was running a daily deal promotion a good thing for your business?” Responses were elicited with “It was one of the worst possible things for my business,” “It was bad for my business,” “The effects washed out; it was neither good or bad for my business,” “It was good for my business,” and “It was one of the best things possible for my business.” We measured repeat intentions with the question “How likely are you to run a daily deal promotion again for your business in the future?” and responses were elicited using a 7-point “Very unlikely – Very likely” scale.

The results show that the more profitable the deal is, the more the business operator believes it was good for his or her business, and both deal profitability and these value perceptions significantly impact the operator's intentions to run another daily deal in the future. Based on this importance of the deal's profitability, we classified respondents' responses regarding the deal's profitability into three categories: whether the respondent lost money, broke even, or made money on the promotion. Figure 4 summarizes the percentage of businesses in the sample that made money, broke even, and lost money on their most recent daily deal across the three time periods.

Figure 4: Percentage of businesses making money, breaking even and losing money by time period

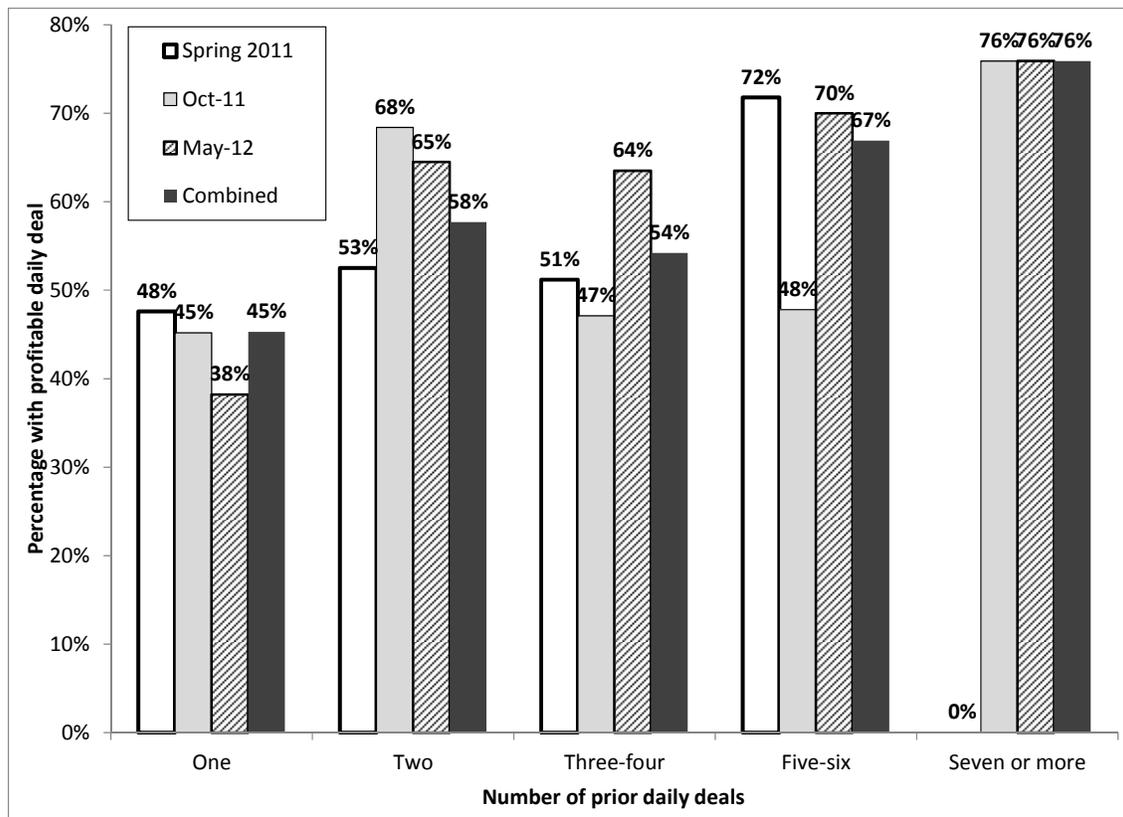


As can be seen, the percentage of businesses making money remained fairly stable in the Spring 2011 (55.5%) and October 2011 (54.9%) samples, but jumped by about 6 percentage points in the May 2012 sample to 61.5%. Relatedly, the percentage of businesses that lost money on their most recent daily deal promotion trended downward. Note however that these differences between the time periods are not statistically significant¹⁵.

¹⁵ The results of an ANOVA with time as the independent factor and percentage making money as the dependent variable revealed that the main effect was not significant, $F(1,309) = .045$, $p > .83$.

Profitability incidence and experience with daily deals. Next, we examined how incidence of profitable daily deals changes with the number of deals that the business has run before. The next figure provides the percentage of respondents in the sample reporting that their most recent daily deal was profitable (i.e., they made money) based on time period and number of daily deals they had run before.

Figure 5: Percentage of businesses with profitable daily deals by time period and experience



As can be seen from Figure 5, the main finding here is that there is a clear impact of experience. Whereas less than half of the businesses (45%) that have run their first daily deal report profitable promotions, more than three quarters of them (76%) do by the time they have run seven or more deals. The greater is the number of prior daily deals that the business has run, the higher is the likelihood that it will have a profitable daily deal¹⁶. We note that although the

¹⁶ The results of an ANOVA revealed that the effect of time was not significant ($F(2,609) = .47, p > .62$), but that of number of daily deals was significant ($F(4,609) = 5.17, p < .001$). Further, results of pairwise Bonferroni tests indicated that businesses running one deal had significantly lower likelihood of profitable daily deals than those running 5-6 deals (Mean difference = $-.22, p < .01$) and those running 7+ deals (Mean difference = $-.31, p < .001$).

figure indicates some variations between the time periods, statistically, there are no significant differences over time. On the whole, this result indicates that *incidence of profitable daily deal promotions increases with experience*.

However, it is important to point out that since businesses which have unprofitable deals on their initial or earlier forays are likely to drop out even before they gain experience with running daily deals, there is likely a significant self-selection aspect to these results. Thus, to shine light on the question of the daily deal industry's sustainability, it is important to understand the phenomenon and process of dropping out from running more daily deals in more depth. We address this issue later on in this report. However, first we examine differences in incidence of profitable daily deals among different types of businesses to learn which businesses are more likely to enjoy profitable daily deals and which ones are less so.

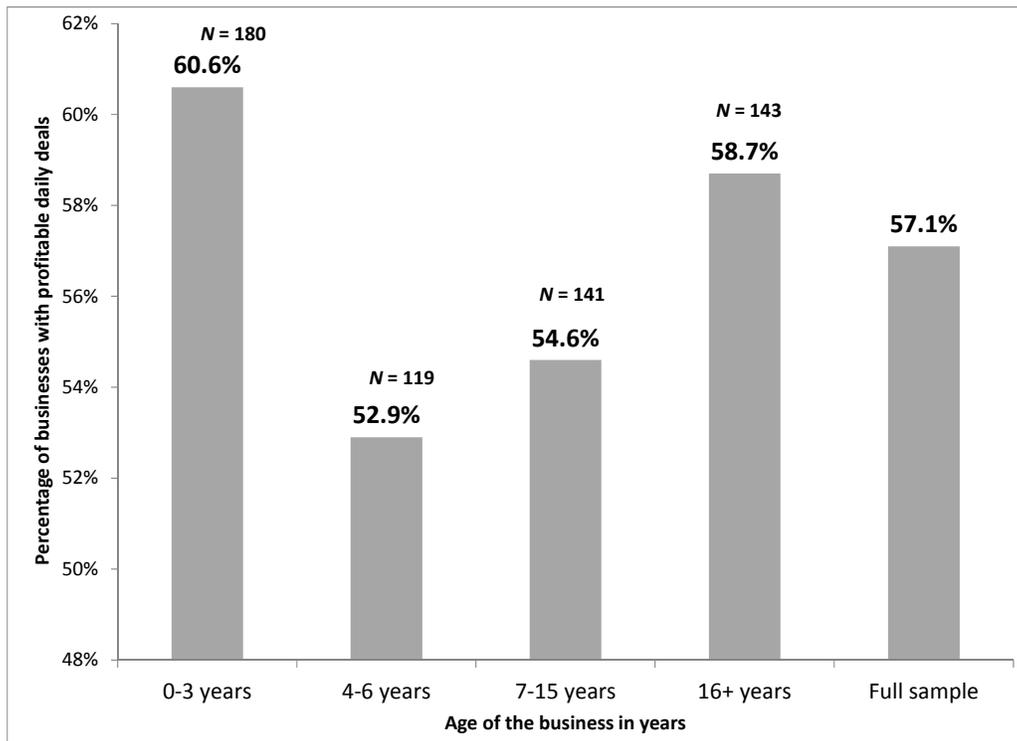
Profitability incidence and business age. To examine how incidence of profitable daily deals varied by age of the business, we classified all businesses in our dataset into four categories: those with average ages of 3 years or less (N = 180), those between 4 and 6 years old (N = 119), those between 7 and 15 years old (N = 141) and those which were at least 16 years old (N = 143). The key question here is whether new or well-established businesses benefit more from running daily deals.

Figure 6 summarizes the incidence of profitability for these four categories of businesses. As can be seen, the highest incidence of profitable daily deals, or 60.6%, occurs for the youngest businesses, those that have been established within the last three years. For the other three categories, the lowest levels are obtained by businesses operating for 4-6 years with just over a 50% likelihood of a profitable daily deal, followed by a progressive increase. It is important to observe here that the numerical differences between the groups observed in Figure 6 are not statistically significant¹⁷.

Similarly, those running 3-4 deals had much lower incidence of profitable deals than those running 7+ deals (Mean difference = -.22, $p < .05$).

¹⁷ The results of an ANOVA did not reveal a significant main effect of business age : $F(3, 579) = .74, p > .52$.

FIGURE 6. Percentage of businesses with profitable daily deals by business age

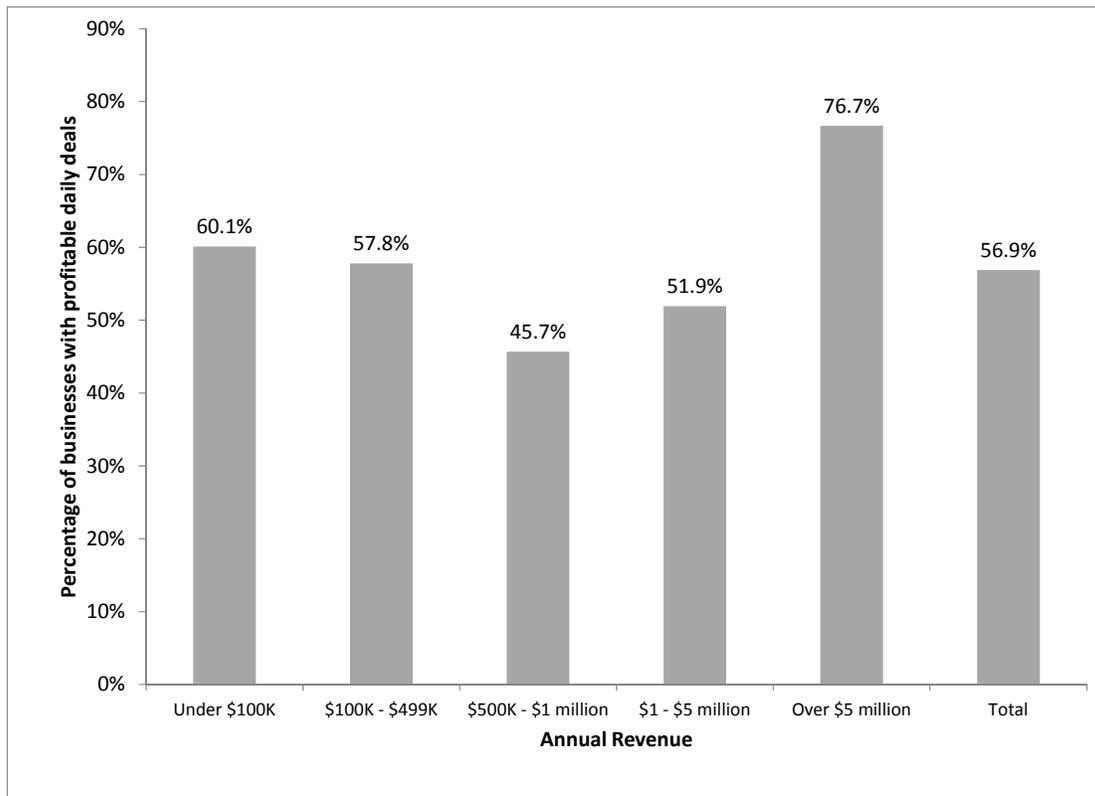


Profitability incidence and business size. Next, we examined incidence of profitability for businesses of different sizes as measured by their annual revenue. This helps answer the question of whether small or large businesses benefit more from running daily deals. The next figure displays the results.

As can be seen, in this case there are interesting differences between the groups. The smallest businesses (those earning less than \$100,000 annually) and the largest ones (those earning more than \$5 million) do relatively better whereas those in the middle that earn between \$500,000 and \$5 million in revenues each year do relatively poorly¹⁸. It is possible that the reasons that the smaller businesses are more successful are quite different from the reasons that the larger ones are, however we are not able to shine more light on this issue in this report.

¹⁸ The results of an ANOVA revealed a significant main effect of revenue size : $F(4, 577) = 2.76, p < .05$. Pair-wise comparisons of the groups further revealed that the \$500k-\$1 million group was significantly lower than the \$5 million+ group.

FIGURE 7. *Percentage of businesses with profitable daily deals by annual revenue*



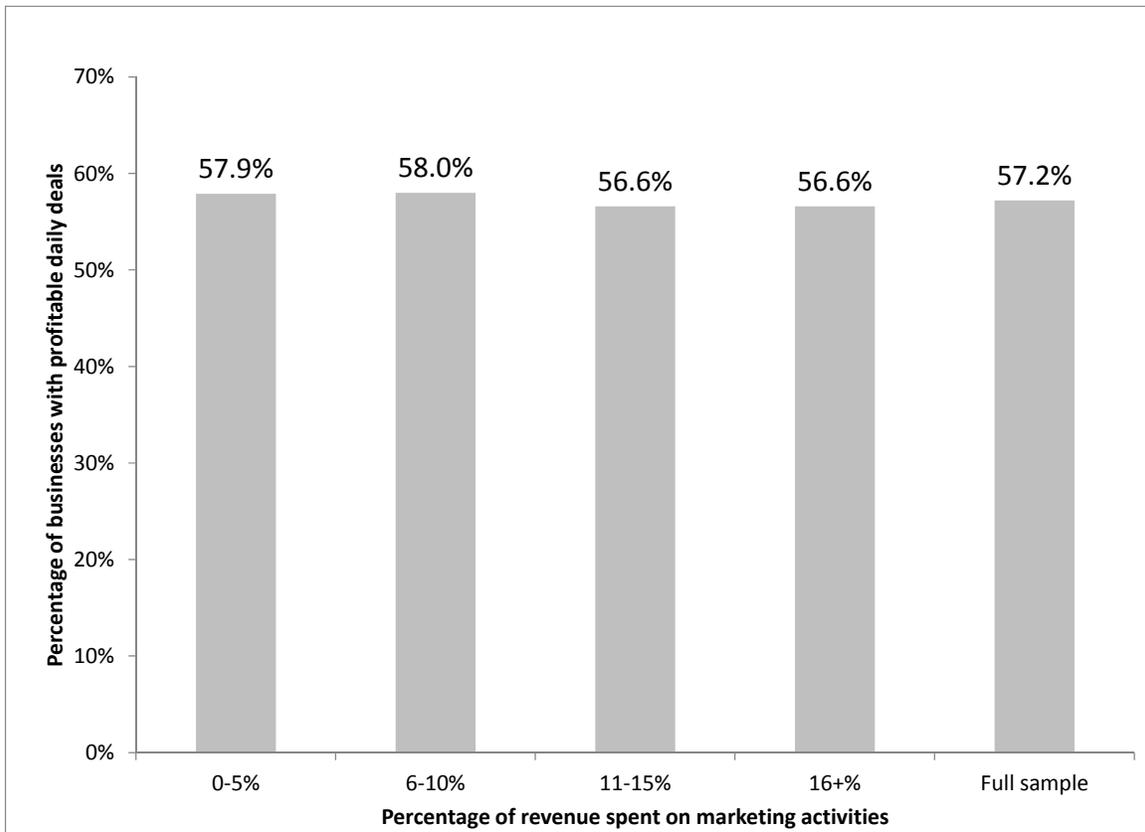
Profitability incidence and marketing spending. One of the questions we asked business operators in our survey was what percentage of their revenue they spent each year on marketing activities. Responses ranged from 0% to 65%. We categorized the businesses into four levels based on their marketing spending: 0-5% of revenues spent on marketing (N = 171), 6-10% of revenues (N = 131), 11-15% of revenues (N = 36), and 16% or more of revenues (N = 99). The next figure depicts the incidence of profitable deals by level of marketing spending.

These results are quite surprising. As can be seen, there are virtually no differences between the groups¹⁹, indicating that businesses spending very little on marketing activities (and for which daily deals are likely the only marketing activity) are just as likely to enjoy profitable promotions as businesses that spend a lot on marketing, or anywhere in between. From this surprising result, we can conclude that success with daily deals, at least as defined by having a

¹⁹ The results of an ANOVA with marketing spending as the independent factor yielded insignificant results $F(3, 433) = .12, p > .94$.

profitable promotion, is independent of the marketing emphasis or marketing sophistication of the business.

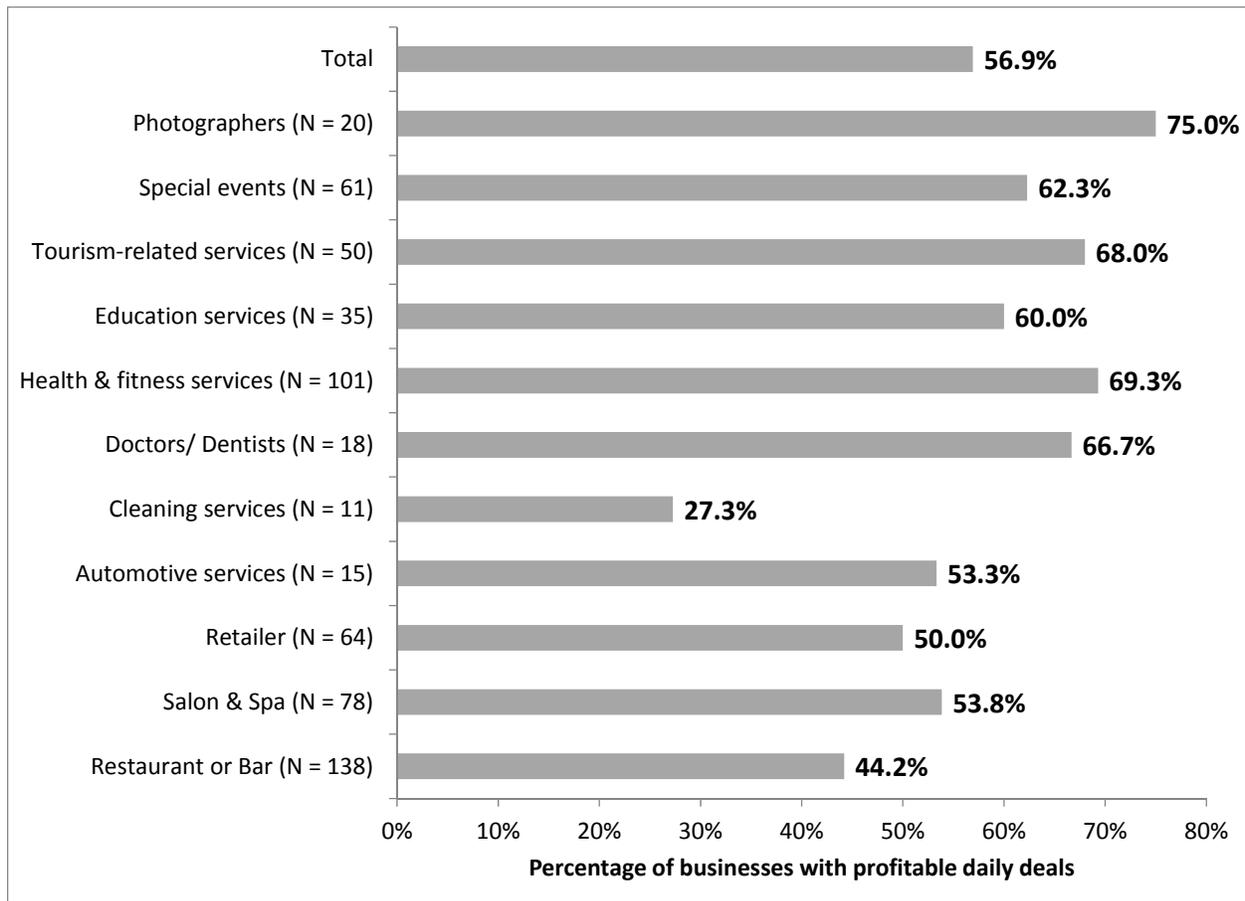
FIGURE 8. *Percentage of businesses with profitable daily deals by level of marketing spending*



Profitability incidence and industry. Finally, we examined incidence of profitable daily deals by industry, shown in the next figure.

As can be seen from Figure 9, there are considerable differences in incidence of profitable daily deals for different industries. On the positive end, photographers (with a 75% rate of profitable daily deals), health and fitness services (69.3%), tourism-related services (68.0%), and doctors and dentists (66.7%) have significantly higher rates of success than average. In contrast, cleaning services (27.3%), restaurants and bars (44.2%), and retailers (50%) fare relatively poorly.

FIGURE 9. *Percentage of businesses with profitable daily deals by industry*



Which factors predict profitability incidence? To formalize the discussion so far on profitability incidence, we conducted a logistic regression including the age of the business (in years), its size (as defined by annual revenue), the number of prior daily deals it had run, the four largest industry categories in our dataset, i.e., whether the business was a (1) restaurant or bar, (2) salon and spa, (3) health/ fitness service, (4) a retailer, and time frame of the sample (with May 2012 serving as the baseline) to predict the incidence of a profitable daily deal promotion. Note that the difference between this analysis and examining each driver separately is that in this model, *the effect of each variable on profitability incidence is assessed after controlling for effects of the other variables.* Table 1 summarizes the results.

TABLE 1: Logistic regression results for incidence of profitable daily deal promotion

Variable	Regression Coefficient	Standard Error	Wald Statistic	p-value
Business age	.011*	.006	2.83	.093
Business revenue	-.234	.213	1.21	.272
Number of prior daily deals	.313**	.071	19.52	.000
Whether business is a restaurant/bar	-.656 **	.241	7.41	.006
Whether business is a salon and spa	-.328	.285	1.33	.250
Whether business is a health/fitness service	.550*	.283	3.77	.052
Whether business is a retailer	-.617**	.303	4.13	.042
Whether Spring 2011 ^a	-.099	.224	.20	.657
Whether October 2011 ^a	-.457*	.246	3.44	.064

^aThe May 2012 sample is the baseline; **indicates statistically significant coefficient at the p=.05 level of significance; *indicates statistically significant coefficient at the p = .10 level of significance

In Table 1, the significant predictors are highlighted in gray. The results reveal that business age is a marginally positive predictor of having a profitable daily deal such that controlling for other drivers, the older and more established (presumably) the business, the more likely it is to enjoy a profitable daily deal. Although business revenue does not have an impact, in line with our earlier discussion, the number of prior daily deals is a strong predictor of profitability. Both restaurants and retailers have significantly lower likelihoods of having profitable daily deals, whereas health and fitness services have a significantly higher likelihood when compared to the remaining industries. Finally, businesses in the October 2011 sample have a lower likelihood of having a profitable promotion when compared to the May 2012 sample. Taken together, the results in this section provided some useful insights into mostly exogenous drivers of profitable daily deals, in particular, business characteristics.

Next, we examine the metrics that drive daily deal profitability more closely and also study how they vary across time and with level of prior daily deal experience.

Understanding the performance metrics that drive daily deal profitability

Our prior reports on the daily deal industry have argued and provided some evidence that businesses run daily deal promotions for a number of short- and long-term objectives, which in turn, determine the deal's profitability²⁰. Over the short term, the most important objective for many businesses is to bring in new customers through the doors (or website in the case of online businesses) via the deal. Furthermore, when the deal users, whether they are new or existing customers, spend more than the voucher's face value, in most cases, the business earns a higher margin on this incremental spending, and stands to benefit more.

Over the longer term, the daily deal's success hinges on its ability to convert a significant proportion of the new customers that the deal brought in into repeat buyers who then return to repurchase from the business again and again at full price²¹. Such regular sales to repeat customers usually enjoy higher margins (because repeat customers are not as price-sensitive) and contribute to both the profitability and growth of the business. Consistent with the previous studies, in each of the three time periods, we asked questions in the survey regarding both, percentage of customers (e.g., what percentage of customers using the daily deal were new customers?) and the average amount spent by them (e.g., what was the average amount spent by new customers on the occasion when they used the voucher?).

In addition to these performance metrics, another determinant of the daily deal's profitability is the percentage of vouchers that remain unredeemed when the deal expires. This is because the revenue from unredeemed deals flows directly to the company's bottom-line²². In fact, it is

²⁰ See Dholakia, Utpal M. (2010), "What makes Groupon promotions profitable for businesses?" Available online at: [Hhttp://papers.ssrn.com/sol3/papers.cfm?abstract_id=1790414](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1790414)H as well as Dholakia (2011), "How Businesses Fare with Daily Deals: A Multi-Site Analysis of Groupon, LivingSocial, Opentable, Travelzoo, and BuyWithMe Promotions," Available online at: [Hhttp://papers.ssrn.com/sol3/papers.cfm?abstract_id=1863466](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1863466)H for details. See also Gupta Sunil, Timothy Keiningham, Ray Weaver, and Luke Williams (2012), "Are daily deals good for merchants?" Harvard Business School Working Paper, March 8.

²¹ For a detailed discussion of this issue, see Dholakia, Utpal M. (2006), "How Customer Self-Determination Influences Relational Marketing Outcomes: Evidence from Longitudinal Field Studies," *Journal of Marketing Research*, 43(1), 109-120.

²² In an in-depth analysis of a single Groupon promotion conducted by Dholakia and Tsabar (2011), we found that unredeemed deals significantly bolstered the promotion's profitability, adding approximately 30% to the profits otherwise earned by the business from running the promotion.

worth mentioning that it is this feature of daily deals that distinguishes them from other more conventional types of price promotions like coupons, and makes them closer to promotional gift cards because consumers pay the deal voucher's price up front, and have discretion in redeeming it until it expires.

The final metric we examine and report on in this study is not a variable measuring consumer behavior but is potentially a crucial driver of the deal's financial success: *the percentage of the revenue that the business agrees to share with the daily deal site*. We asked this question in October 2011 and May 2012, but this information is not available for the Spring 2011 sample. The default value of the revenue sharing agreement that has emerged in the daily deal industry is 50% -- that is, of the total revenue earned from selling vouchers, the daily deal site retains half of it, and the merchant gets the remaining half. In reality, there is considerable variation in the percentage of revenue shared across different daily deal sites, and across businesses, and is based on both, the business's operator's willingness and ability to negotiate its share of revenue, and also the daily deal site's power and reputation to remain intransigent in the face of this pressure.

The next table, Table 2, summarizes the mean values of each of these metrics for the three time periods in our sample. The key insight that emerges from this table is *the remarkable consistency in most measures across the one-year time span* in which these samples were collected. For example, the percentage of new customers that the daily deal attracts remains virtually unchanged, at close to 80% in all three samples. The same is the case for percentage of deal users who spent beyond the deal's value, the percentage of deal users that became repeat customers, and the percentage of unredeemed deals when the promotion ended. In a few cases, there is notable improvement in the metrics in the most recent May 2012 sample. Both average amount spent beyond the deal's value, as well as the amount spent by repeat customers on their next visit were higher in May 2012, when compared to the other two groups combined²³. On the

²³ The results of ANOVAs in which May 2012 was compared against the combined 2011 samples revealed significant differences for amount spent beyond deal value ($F(1,581) = 4.97, p < .05$), and for amount spent by repeat customers on their next visit ($F(1,510) = 4.24, p < .05$).

flip side, the amount retained by the daily deal sites increased from 42.5% last October to 45% this May²⁴.

TABLE 2. Average levels of profitability metrics by time period

Customer Behavior Metrics	Full Sample	Spring 2011 (N = 321)	October 2011 (N = 154)	May 2012 (N = 166)
% of customers that were new	79.6%	79.2%	78.0%	80.7%
Avg. amount spent by new customers	\$70.7	\$64.3	\$56.6	\$92.4
% of deal users who spent beyond deal value	33.9%	35.9%	32.3%	32.2%
Avg. amount spent beyond deal value	\$90.1	\$60.2	\$80.8	\$150.2
% of deal users that became repeat buyers	20.1%	19.9%	19.2%	20.4%
Avg. amount spent by repeat customers on next visit	\$83.7	\$70.8	\$63.6	\$118.0
% of unredeemed deals when promotion ended	21.7%	21.7%	20.1%	23.4%
% revenue shared with daily deal site	43.8%	-	42.5%	45.0%

On the whole, these results are encouraging for the daily deal industry. They provide no evidence to support the conventional wisdom that daily deals are working less effectively for businesses than they did in the early stages of this industry's evolution. Nor do we find the daily deal industry to be becoming weaker in its pricing power (admittedly, only over the last six-month period). If anything, our results on revenue sharing indicate maintained or increased pricing power of daily deal sites²⁵. To investigate this issue further, the next table shows how the average levels of the profitability metrics vary with the prior experience of the businesses with daily deals.

²⁴ The result of an ANOVA indicated that this difference was marginally significant ($F(1,310) = 2.97, p = .086$).

²⁵ We note that one explanation for the difference observed in revenue shared by the business with the daily deal site in the October 2011 and May 2012 samples is that the different daily deal sites differ from one another in their pricing power (i.e., Groupon and LivingSocial wield greater power than the other sites). Consistent with this possibility, 69% of the deals in our October 2011 sample were with either Groupon or LivingSocial. In contrast, just over 88% of the deals in the May 2012 sample were with one of these two daily deal sites.

TABLE 3. Average levels of profitability metrics by prior daily deal experience

Customer Behavior Metrics	Full Sample	One prior deal (N = 170)	Two prior deals (N = 130)	3-4 prior deals (N = 144)	5-6 prior deals (N = 122)	7+ prior deals (N = 58)
% of customers that were new	79.6%	76.3%	83.0%	81.2%	79.4%	77.5%
Avg. amount spent by new customers	\$70.7	\$50.4	\$98.4	\$81.7	\$70.3	\$43.1
% of deal users who spent beyond deal value	33.9%	33.8%	34.6%	33.1%	35.3%	33.9%
Avg. amount spent beyond deal value	\$90.1	\$51.6	\$90.7	\$127.5	\$82.4	\$124.9
% of deal users that became repeat buyers	20.1%	15.9%	20.5%	21.8%	22.5%	21.3%
Avg. amount spent by repeat customers on next visit	\$83.7	\$64.0	\$79.5	\$122.8	\$71.4	\$74.3
% of unredeemed deals when promotion ended	21.7%	21.1%	19.7%	25.2%	22.7%	17.2%
% of revenue shared with daily deal site	43.8%	43.8%	45.9%	44.0%	43.4%	41.9%

Surprisingly, the findings in the table indicate no statistical differences between groups for the variables, and provide mixed news for daily deal sites and for the business operators. On the positive side, with greater experience, there is no deterioration in the key metrics of attracting new customers and converting them. The rate of new customer acquisition for the most recent completed daily deal hovers close to 80% even when the business has run seven or more deals before, and they continue to be able to convert around a third of these customers to repeat purchasers²⁶. This suggests that daily deals continue to remain effective with repeated use, and marks the first such evidence to our knowledge that daily deals can be sustainable marketing programs at least for some businesses that use them. The questions of “How many businesses is

²⁶ One factor in explaining this surprising result is that these business operators are running daily deals through a variety of daily deal sites. Such a strategy could involve either using a large variety of daily deal sites with little or no repetition, or rotating deals through a handful of selected sites. In our sample, of all the business operators running 7+ deals, 8.6% were loyal to a single site, 27.6% rotated between two sites, 32.8% rotated between three sites, and 27.5% used four or more daily deal sites.

this true for?” and “Which ones are they?” are addressed later on in the next section when we examine the process of dropping out.

On the negative side, it is somewhat discouraging that businesses do not seem to be doing better on some of the spending metrics as they gain experience with running daily deals. Specifically, the results indicate that the businesses that have run multiple daily deals do not appear to have figured out (or may not even have been concerned with) how to get deal users to spend more money at the business on that first occasion as well as in the future during repeat visits. It is quite likely that they could be running similar, or even the same deal, again and again, resulting in comparable results each time. It is also noteworthy that there is no marked decrease in the percentage of the revenue shared with the daily deal site (although there is a numerical decrease) as operators run more deals. To summarize, the overall theme in these results is one of consistency in results even as businesses run more daily deals.

At what rates do businesses drop out from running daily deals?

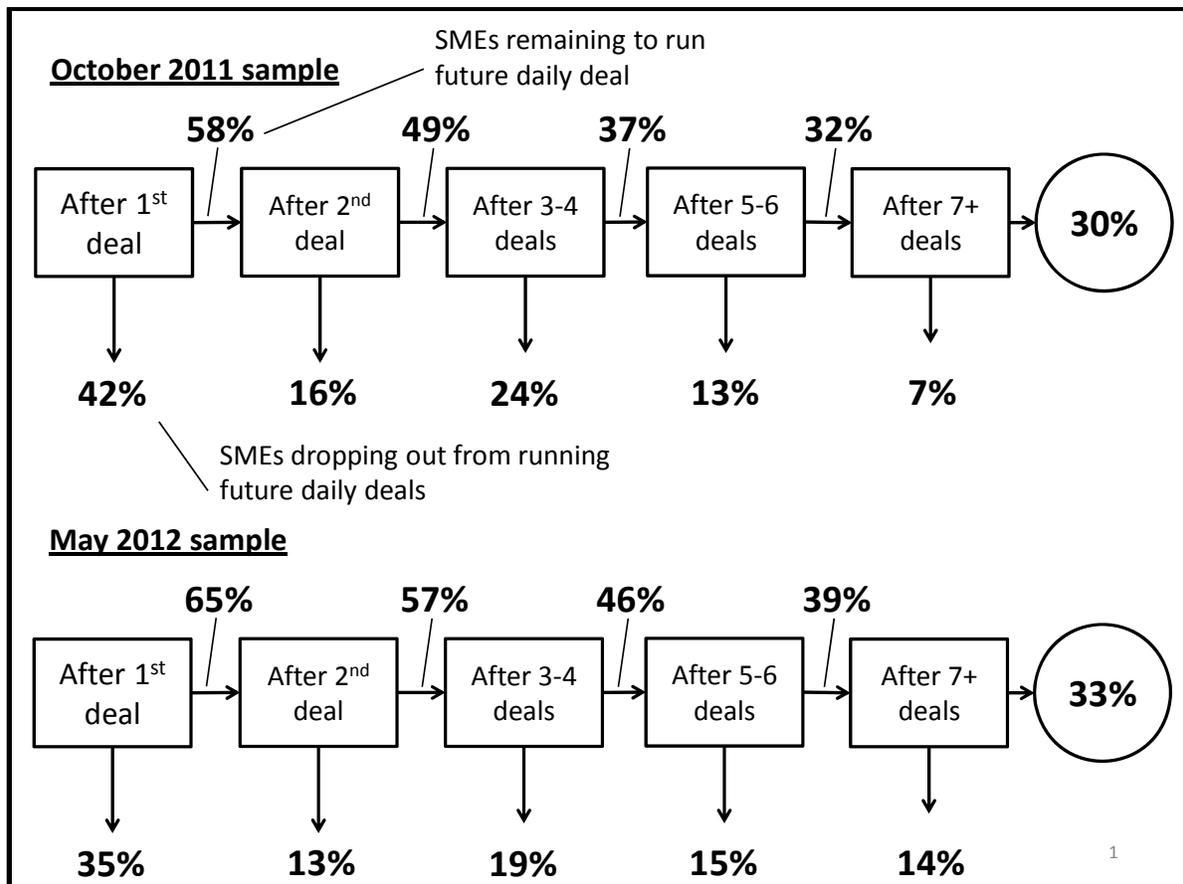
To probe the question of the sustainability of daily deal promotions as marketing programs further, in this section, we estimate the extent to which businesses continue using them and at what rates they drop out from running future daily deals. Higher rates of drop out are problematic for the daily deal industry because they indicate that greater effort will be required to acquire new businesses that are willing to run daily deals. In contrast, lower rates provide positive news indicating that daily deals are sustainable marketing programs for more businesses.

In this report, we define a business as “dropping out” from running daily deals if they report a strong intention that they will not run another daily deal in the future (1 or 2 on the 7-point “very unlikely” – “very likely” scale)²⁷. We calculated rates of dropping out by number of deals run in the past separately for the October 2011 and May 2012 datasets, and these results are

²⁷ The specific question asked in the surveys was: “How likely are you to run a daily deal promotion again for your business in the future?” and the response was elicited on a 7-point scale that was labeled with 1 = Very unlikely, 2 = Unlikely, 3 = Somewhat unlikely, 4 = Undecided, 5 = Somewhat likely, 6 = Likely, 7 = Very likely. Note that we didn’t ask the question this way in the Spring 2011 survey, so data is only available for the October 2011 and May 2012 periods.

summarized in Figure 10.

Figure 10: Dropout rates by number of deals for October 2011 and May 2012 samples



The figure should be interpreted as follows. Considering the results for the October 2011 sample in the top panel of Figure 10, 42% of businesses that had run just one daily deal indicated that they would not run another daily deal in the future, i.e., they dropped out after the first deal. Further, of those who had run two deals, 16% reported dropping out, and so on. As businesses drop out, the proportion of businesses that remain shrinks. In the October 2011 sample, only 58% of the original pool remained to run a second deal, 49% remained to run a third deal, and so on. Thus, by the time businesses had run 7+ deals, only 30% remained to run more deals. The equivalent number for the May 2012 sample was 33%.

The results in Figure 10 provide a number of additional useful insights regarding

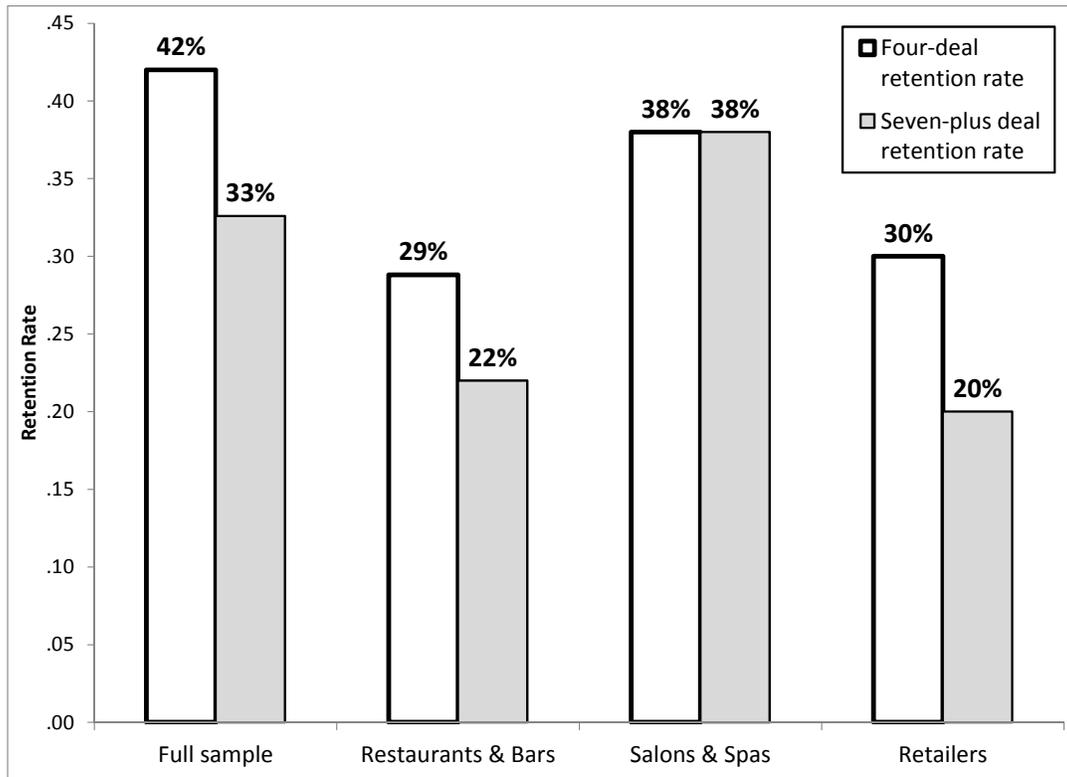
sustainability of daily deals. First, despite numerical differences visible in the figure, there are no statistical differences in dropping out between the two time periods²⁸. Thus, dropout rates remained stable from October 2011 to May 2012. Second, and perhaps not surprisingly, the dropout rate after the first deal is significantly higher than subsequent dropout rates in both time periods²⁹. However, as can be seen, attrition does continue steadily (but at much reduced rates) and by the time businesses have run four daily deals, less than half of them (37% in October 2011, 46% in May 2012, and 42% in the combined sample) remain to run future daily deals. By the time, they have run seven or more daily deals, just under a third (30% in October 2011, 33% in May 2012, and 32.6% in the full sample) remain. Building on the findings from the previous sections, this analysis answers the “How many?” question, by indicating that daily deals appear to be sustainable marketing programs for about a third of the small- and medium-sized businesses that try them.

In the discussion that follows, we refer to the percentage of businesses that remain after running four deals and after running seven or more deals as the *four-deal retention rate* and the *seven plus-deal retention rate* respectively. We calculated the four-deal and seven plus deal retention rates for three of the most prominent industries represented in our samples: (1) restaurants and bars, (2) salons and spas, and (3) retailers. Figure 11 summarizes the four-deal retention rate and the seven plus-deal retention rate for the entire sample and these three industries.

²⁸ We conducted an ANOVA with time and number of prior daily deals as the independent factors and whether business indicated dropping out from subsequent deals as the dependent variable. In this case, the main effect of time was insignificant: $F(1,309) = .045, p > .83$.

²⁹ The main effect of number of prior daily deals was significant: $F(4, 309) = 4.87, p < .005$). Results of pair-wise Bonferroni tests revealed that the one daily deal group was significantly higher than the two deal group (Mean difference = .24, $p < .02$), the five-six deal group (Mean difference = .25, $p < .02$), and the seven+ deal group (Mean difference = .28, $p < .01$). However, it was marginally higher from the three-four deal group (Mean difference = .17, $p \approx .07$).

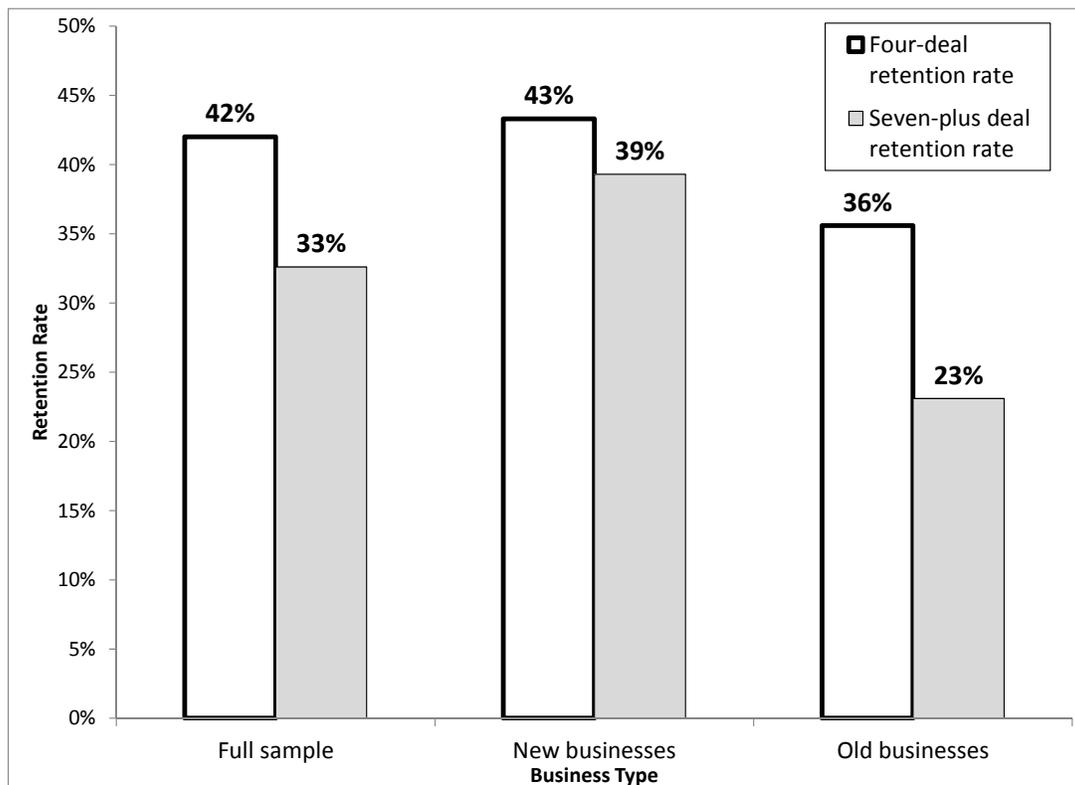
Figure 11: Four-deal and seven-plus deal retention rates for full sample and selected industries



Consistent with the results on deal profitability, we find that restaurants/ bars and retailers have significantly lower four- and seven-plus deal retention rates when compared to the full sample, and the values for salons and spas are much higher than the other two industries. We can conclude that sustainability is starkly different for these industries. Daily deals appear to function as sustainable marketing programs for only about a fifth of restaurants/ bars and retailers that try them, but for about two-fifths of salons and spas.

Retention rates for old and new businesses. We investigate rates of dropout for old and new businesses. To do this, based on their year of founding, we created a median-split variable classifying businesses into either new (those that were founded within the last six years) or old (those that were older than six years). Figure 12 provides the four-deal and seven-plus deal retention rates for old and new businesses. For comparison purposes, the values for the entire sample are also provided in the Figure.

Figure 12: Four-deal and seven-plus deal retention rates for old and new businesses



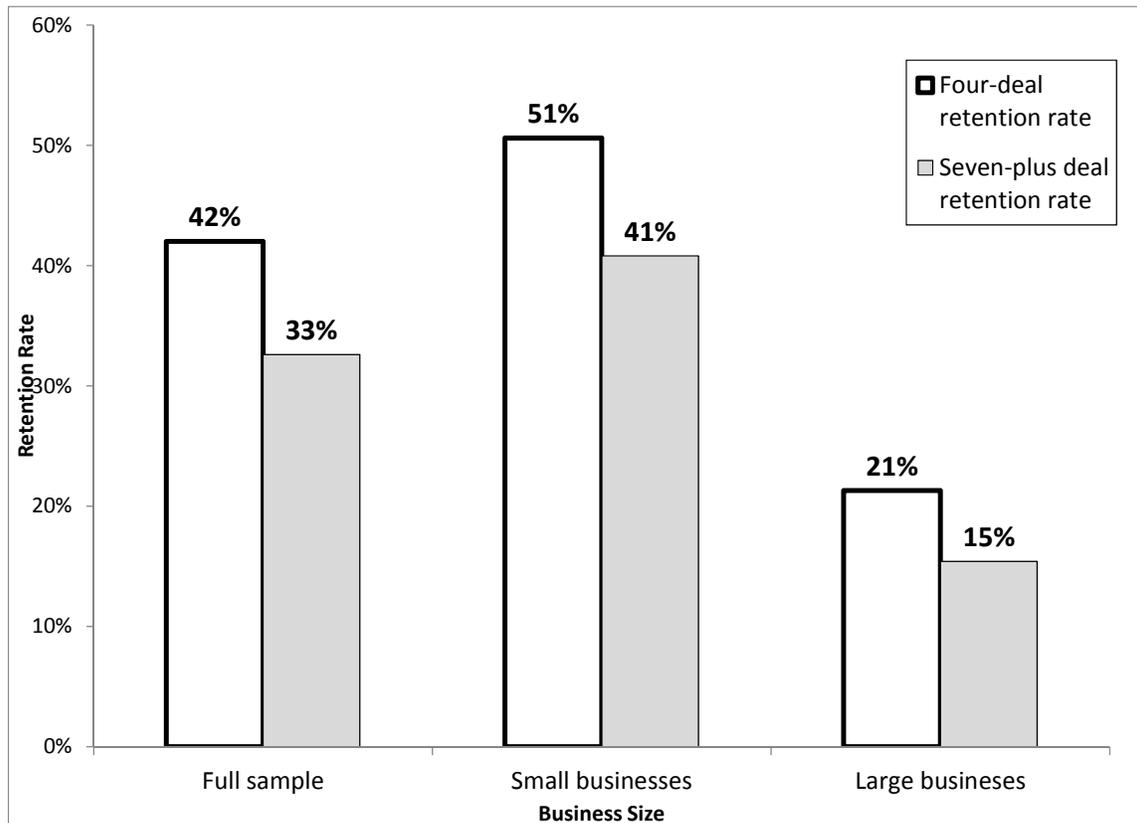
As can be seen, there is a stark difference between the two groups. The seven-plus deal retention rate is 39% for new businesses, but fully 40% lower or 23% for old businesses. It is interesting to note that although business age was associated with a marginally greater likelihood of having a profitable daily deal, less than a quarter of the old businesses stay on to run more than seven deals. Clearly, based on this analysis, daily deals appear to be sustainable marketing programs for a greater percentage of newly-formed businesses than well-established ones.

Next, we classified businesses by size into small (those with annual revenue of less than \$500,000, N = 367) and large (annual revenue > \$500,000, N = 215) to compare the four-deal and seven-plus deal retention rates. Figure 13 summarizes the results for the two groups as well as the full sample.

As can be seen from the Figure, in this case, the results are even starker. Whereas 51% of small businesses run more than four deals, only 21% of large businesses do so. The seven-plus

deal retention rates are 41% and 15% respectively for small and large businesses. Using the retention rate metric, daily deals unambiguously appear to be more sustainable for smaller businesses.

Figure 13: Four-deal and seven-plus deal retention rates for small and large businesses



Study limitations

The present study shares the limitations of its predecessors. First and foremost, all three samples in the study are convenience samples of respondents. Without access to a master-list of all businesses that have run daily deals (if indeed such a list exists), it is infeasible to use any sampling approach or to attempt to obtain a strictly representative set of respondents. Despite this limitation, what we did try to do was to cast our net wide in soliciting respondents, and include a diverse set of businesses within our respondent pool, as characterized by their geography, age, size, industry, spending on marketing activities, and experience level.

Nevertheless, we make no claims that our results generalize to the population of American small- and medium-sized businesses running daily deals as a whole.

Second, because this is a survey-based study, our results are susceptible to a *non-response bias*, which is the possibility that non-respondents to our survey were systematically different from those that chose to respond to it. Note however that the response rate we obtained on all three occasions was quite healthy and in line with other such studies. Third, the survey-based methodology we employed also means that all performance metrics are assessed based on self-reports provided by owners or operators of participating businesses. Such information is based on subjective assessments of respondents and may vary with respect to accuracy in reflecting actual customer behaviors or the actual results that the business experienced from running daily deal promotions. Nevertheless, since these are the individuals that make future decisions regarding daily deals for their respective businesses, we believe that it is their assessments, even though subjective, are what matters. For instance, if they believe the daily deal worked for their business, they are likely to run another one, and vice versa.

Conclusion

We examine performance of daily deals using survey data from 641 small- and medium-sized businesses obtained during three time periods: April-May 2011, October 2011, and May 2012. In contrast to our June 2011 report, our present findings indicate a number of positive signs for the daily deal industry, notably: (1) the incidence of profitable promotions has remained stable over the study's duration (between 55% and 61%); (2) the likelihood of enjoying profitable promotions is associated positively with the operator's experience with them. Less than half of the businesses running their first daily deal report profitable promotions, whereas more than three quarters of those running seven or more deals do so; (3) daily deals are just as likely to be successful for businesses that don't do any other marketing at all as those that spend heavily on marketing activities; (4) performance metrics of completed daily deals have remained largely stable since May 2011, and have even improved on some measures like spending by deal

users beyond the voucher's value and spending by repeat customers in the most recent May 2012 sample; (5) businesses continue to attract close to 80% new customers even when running their seventh (or more) daily deal, and see equally stable conversion rates for repeat purchasing and spending beyond deal value; (6) the daily deal site's share of revenue increased marginally from 42.5% in October 2011 to 45% in May 2012; (7) the calculation of dropout rates (i.e., businesses not intending to run daily deals again in the future) indicates that daily deals appear to be sustainable programs for approximately 30% of businesses; and (8) newer and relatively smaller businesses have even higher sustainability rates of close to 40%. We also find that restaurants and retailers (store-fronts and offline) are having a more difficult time making daily deals work compared to other industries, whereas salons and spas, and health and fitness services are doing relatively well with daily deals. ***Taken together, our results find little or no evidence of deterioration in the performance of daily deal promotions over the past year (April-May 2011 to May 2012) for small and medium-sized businesses or with experience as the business operator runs multiple daily deals. Rather, there is improvement in some metrics.***