

“Deal of the Day” Platforms: What Drives Consumer Loyalty?

Maintaining a loyal customer base is challenging for “Deal of the Day” (DoD) platforms. DoD providers market and sell deals on products and services, yet it is the merchants who ultimately deliver those to consumers. Low entry and switching costs drive competition in this market. However, research on the determinants of user loyalty in the DoD context is limited. This study uses Grounded Theory and Structural Equation Modeling to explore the phenomenon of DoD platform loyalty. Particularly, monetary benefits, signal-to-noise ratio, perceived risk, and service friendliness during a merchant encounter emerge as powerful determinants of loyalty in this novel context.

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1 Introduction

In the last several years “Deal of the Day” (DoD) websites, such as Groupon, LivingSocial, and DailyDeal, have enjoyed tremendous success as the steep increase of subscribers and revenue has made evident. 36.9 million customers actively purchase deals on Groupon – the leading DoD platform (Groupon 2012). For a company that is less than five years old, these growth rates are astounding.

Often, popularity of DoD platforms among users is attributed to the substantial discounts offered by merchants on group deals. For example, Groupon claims to have saved a whopping \$980 million for consumers in North America alone (Groupon 2011b). Beyond sheer savings, DoD customers are attracted

by the opportunity to explore new services, activities, and locations. Considering these advantages it comes as no surprise that DoD providers have already reached half of all US online consumers (eMarketer 2011). Equally, businesses are quickly learning to capitalize on this new marketing channel. For many of them, DoD platforms represent a unique opportunity to promote their services without a dedicated advertising budget – an enormous benefit for small businesses struggling to survive. Largely used as a marketing tool, deals have been found to account for 6.5 % of total promotional marketing spending (Boon et al. 2012). In fact, the popularity of Groupon among businesses is so high that Groupon ‘days’ are typically booked out for months in advance (Agrawal 2011a). Considering these benefits for both consumers and merchants, the DoD concept has an unprecedented potential to create value.

Despite this popularity, DoD providers face many challenges. Even the most successful DoD provider, Groupon, reported staggering net losses shortly after its initial public offering and recognized the need to better understand consumer behavior and promote loyalty intentions (Groupon 2011a). While repatronage intentions have been extensively discussed in the marketing and e-business literature in the past (e.g. Chaudhuri and Holbrook 2001), DoD platforms represent a novel and unique environment. First, the business model of DoD platforms is closely linked to the participating merchants – the third parties whom DoD providers have little control over (Brown 2011). Second, recruitment of

merchants and promotion of daily deals implies an expansive sales and marketing outlay. Third, the DoD business model can be easily reproduced with numerous providers competing for merchants, consumer attention, and money: there were at least 30 and 221 DoD platforms in Germany and North America respectively as of June 2012 (preisgenial.de 2012; yipit.com 2012). Additionally, deal aggregators, such as dealbind.com, offer consumers a convenient interface to track deals from various providers, further reducing switching costs to a negligible factor. Finally, there are some concerns that DoD customers are possibly fatigued and overwhelmed, particularly since most deals are advertised via email newsletters (Dholakia and Kimes 2011).

Promoting user loyalty to the DoD platform and thereby supporting deal sales represents the most important strategy to ensure the long-term survival in the competitive DoD market. Consequently, in this study we aim to investigate the determinants of user loyalty to a DoD provider. In the first step, we employ an exploratory lens to study DoD platform loyalty on the basis of qualitative analysis. Next, confirmatory techniques are used to test our theoretical and qualitative findings with a larger sample of DoD users. Beyond theoretical value, our results offer practical insights into how DoD customer loyalty can be ensured.

2 Theoretical Background

The phenomenon of customer and user loyalty has received extensive coverage in the Marketing and Information Systems (IS) literature in the past (e.g., Chaudhuri and Holbrook 2001; Oliver 1999; Reichheld et al. 2000; Kim and Son 2009). As customers dictate profits, their loyalty is critical for a company's growth and its bottom line (Chow and Reed 1997). In existing studies, loyalty is typically used as an umbrella term to describe an array of desirable attitudinal and behavioural characteristics (Dick and Basu 1994). From the attitude perspective, loyalty is reflected in the positive predisposition to a provider, in the intention to use the service again and the willingness to recommend it to others. On the behavioural side, loyalty mainly translates into the repeated use of the system and actual recommending behavior (Hair et al.

2003). For online services, loyalty is especially important since word-of-mouth spreads fast online and recommendations of loyal customers can generate new followers (Reichheld and Scheffer 2000).

State-of-the-art research suggests that the perception of benefits an individual obtains from using the online service is one of the key determinants of user loyalty online (Kim and Son 2009). In this context, marketing literature suggests a variety of benefits customers can gain from participating in sales promotions, similar to those offered in a DoD environment. For example, Chandon et al. (2000) differentiate between hedonic benefits, such as opportunities for value expression, entertainment, and exploration on the one side, and utilitarian benefits, including savings, opportunity to gain a better quality and enhancement in shopping convenience on the other. For the DoD setting, the preliminary findings on the role of particular benefits in user repatronage behavior, however, remain controversial. On the one hand, Dholakia and Kimes (2011) show that DoD consumers in US are less responsive to the size of the discount, suggesting that other mechanisms may determine deal purchasing behavior, such as desire to explore and share one's experiences with others. Capitalizing on these hedonic motives, the DoD major provider, Groupon, views itself as providing cool and unique experiences, instead of simple discounts (Sennett 2012). The findings of Erdoğmus and Çiçek (2011), however, draw a different picture. In their qualitative study, DoD consumers are mainly motivated by savings, with search for novelty and variety playing an important but secondary role. Similar findings are reported by Tuten and Ashley (2011), who demonstrate a significant effect of both monetary and exploration motives, with monetary motives exerting a visibly higher effect on enjoyment value of a DoD transaction. All in all, research evidence on the motivational patterns of DoD users is mixed, which calls for further exploration of this phenomenon.

Beyond perceptions of benefits, the Information Systems (IS) continuance model posits that user satisfaction a latent construct incorporating affective perceptions regarding service – is another critical factor in user loyalty (Bhattacharjee 2001). The development of this factor depends on both perceptions of benefits and confirmation of expectations – a construct reflecting the extent to which

prior expectations of users regarding an IS have been met (Bhattacharjee 2001; Kim and Son 2009). Even though these factors are likely to equally define loyalty intentions towards a DoD provider, the insights on the satisfaction levels of DoD users as well as on how DoD platforms and participating merchants perform in meeting customer expectations are scarce and inconclusive. For example, examining customer deal experience, Kimes and Dholakia (2011) find DoD consumers to be largely satisfied with their restaurant deals. In contrast, respondents in the Erdoğmus and Çiçek (2011)'s study report the feelings of resentment, discrimination, and cases of poor treatment when redeeming DoD vouchers. These negative reports are complemented by research focusing on the merchant side of DoD promotions, as it reveals the intricacies of the “merchant–consumer” interaction in the DoD context. For example, Dholakia (2010, p. 11) argues that DoD promotions “give too much value to consumers and not enough value to the small businesses than run them”. As a result of these asymmetries, every fifth DoD buyer reports being treated differently than a regular customer despite the ex-ante marketing premise of DoD campaigns (GoDealla 2011). These negative experiences are then reflected in plummeting online ratings, as dissatisfied users report their negative experiences on review platforms like Yelp (Byers et al. 2012).

Overall, insights provided by the literature on traditional couponing suggest that ensuring loyalty in the DoD context should be particularly hard given the characteristics of customers these platforms are likely to attract. Since deal proneness is stable across different types of products and services (Bawa and Shoemaker 1987), it is expected that similar types of consumers are attracted to DoDs. Specifically, field studies conducted in offline contexts find that coupon users are price-conscious consumers with a more price-elastic demand function, a lower reservation price and lower opportunity costs for time (Narasimhan 1984; Pindyck and Rubinfeld 1995). Since price considerations are critical for these consumers, they have a higher propensity to switch to another provider if a better offer is available (Krishnamurthi and Raj 1991). While this conclusion finds strong support in the couponing literature, a study conducted by Kimes and Dholakia (2011,

p. 27) rejects the notorious reputation of DoD users as being “fickle” by demonstrating that DoD users are not less loyal than non-users. However, the existence of fundamental discrepancies among research conclusions uncovers a significant need for systematic research specifically targeting DoD domain.

In conclusion, while some recent studies have examined deal experience of DoD users (Erdoğan and Çiçek 2011), their motives (Erdoğan and Çiçek 2011; Tuten and Ashley 2011) and demographic characteristics (Kimes and Dhoklakia 2011; Tuten and Ashley 2011), the evidence on motivations for DoD use, satisfaction, and loyalty remains mixed. Moreover, to the best of our knowledge none of the studies have systematically studied the determinants of loyalty toward a DoD provider. Considering the importance of understanding customer loyalty in the DoD context, this study adopts a two-stage approach presented below.

3 Exploratory Stage: Understanding the Phenomenon of User Loyalty to a DoD Provider

3.1 Study Design and Methodology

Despite existence of a significant body of research investigating determinants of customer loyalty in both offline and online contexts (e.g., Dick and Basu 1994; Chaudhuri and Holbrook 2001; Reichheld and Schefter 2000), in the first stage of this study an explorative approach relying on Grounded Theory (GT) was adopted for the following reasons. First, DoD business model is a new phenomenon, with Groupon being on the market for only few years. This implies possible existence of novel and not yet explored factors, which, however, may have significant implications for both theory and practice. For example, Groupon and other DoD platforms rely heavily on email marketing: Groupon emails are sent to an astounding 150 million subscribers (Peak 2012). This approach to promoting DoD offers creates both opportunities and challenges for ensuing customer loyalty. Moreover, in most studies exploring customer loyalty online, the online platform provider is typically responsible for delivering the service and is therefore able to adjust customer experience in the favourable direction (e.g., Srinivasan et al. 2002).

This, however, is not the case with DoD platforms, in which a platform provider and a service provider (a merchant) are two separate entities, maximizing their own distinct utility functions. A possible misalignment of the incentives introduces a new level of complexity to modeling the determinants of loyalty, not addressed by previous research. Application of GT techniques to explore field data may reveal these and other new areas of interest.

Initially, two focus groups (FGs) with DoD users in Germany (eleven students and one working professional) were conducted. Additionally, seven young professionals and one student were interviewed for 15 to 25 minutes to address limitations of the predominantly student composition of FGs. To provide for a meaningful discussion, a prior purchase and redemption of at least one deal was a prerequisite for the FG/interview participation. Both FGs and interviews involved a comparable set of questions focusing on participants’ attitudes towards the use of DoD platforms, their experience with the purchased deals and their loyalty intentions. All FG subjects and interviewees were living in Germany at the time of their participation, even though the background of FG participants was predominantly international. 8 respondents were female and 12 male with mean age of 26.3 (median 25.5). To include opinions of non- and former users, 4 students (2 females and 2 males) who reported not to use DoD (at all or not any more), all living in the US, were asked to provide a written statement outlining the reasons for their non-use. In total, opinions of 24 respondents were included in our qualitative analysis, resulting in a data corpus of 20988 words.

The “Straussian” line of GT was chosen as an approach to data analysis since it does not contradict existence of prior knowledge and a research question (Matavire and Brown 2008; Strauss and Corbin 1990, 1998). Following Strauss and Corbin (1990, 1998), our analysis involved three stages. In the open coding stage, the materials were analyzed to derive initial ‘labels’ and understand emerging data patterns. While in the initial stage of the analysis three independent coders were involved, whose task was to identify and agree on the preliminary code structure on the basis of FG materials, finalization of the coding on the basis of the overall dataset was performed by the first author using the process of iterative comparison. Emerging

codes were combined into higher level categories. For example codes such as “fair price”, “rip-off”, “not making a great deal”, were subsumed under the category “Value for Money”, which in turn is a descriptive property of “Merchant Encounter” – a uniting category involving factors contingent on the performance of a third-party (service) provider, but nonetheless having a direct effect on user attitudinal and behavioral loyalty to a DoD provider – our phenomenon. In the axial coding stage, relationships between emerging categories and subcategories at their respective dimensional levels were derived and analyzed (e.g., Krasnova et al. 2010). In this process, relevant text excerpts were assigned to the main categories within the coding paradigm (e.g., Strauss and Corbin 1990, 1998; Winkler et al. 2011, p. 5). Emerging relationships are explicated below via quotations (Q), by pointing out categories and their salient dimensions in square brackets. Finally, in the process of selective coding, several categories were brought together to bring the model to an appropriate level of abstraction. Throughout the analysis, past research was consulted and previous findings were allowed to flow into the coding process, when our data provided basis for it. This helped to embed our findings within existing theoretical terminology and discourse (Matavire and Brown 2008; Winkler et al. 2011). **Figure 1** presents a conceptual model derived as a result of this analysis.

3.2 Exploration of the Phenomenon, Actions, and Strategies

In line with previous literature, two sides of consumer loyalty – attitudinal (att.) and behavioural (beh.) – emerged from our data (e.g., Chaudhuri and Holbrook 2001; Dick and Basu 1994). Considering the causal nature of these sub-dimensions, the attitude-related codes were assigned to the ‘phenomenon’ part and action-oriented codes were captured in the ‘actions and strategies’ part of our paradigm-driven framework (Strauss and Corbin 1990, 1998). We find that when a favourable attitude is present, respondents are often willing to repurchase, follow, and involve others in the group-buying promotions: “I used it a lot since I came to Germany (*beh. loyalty*);

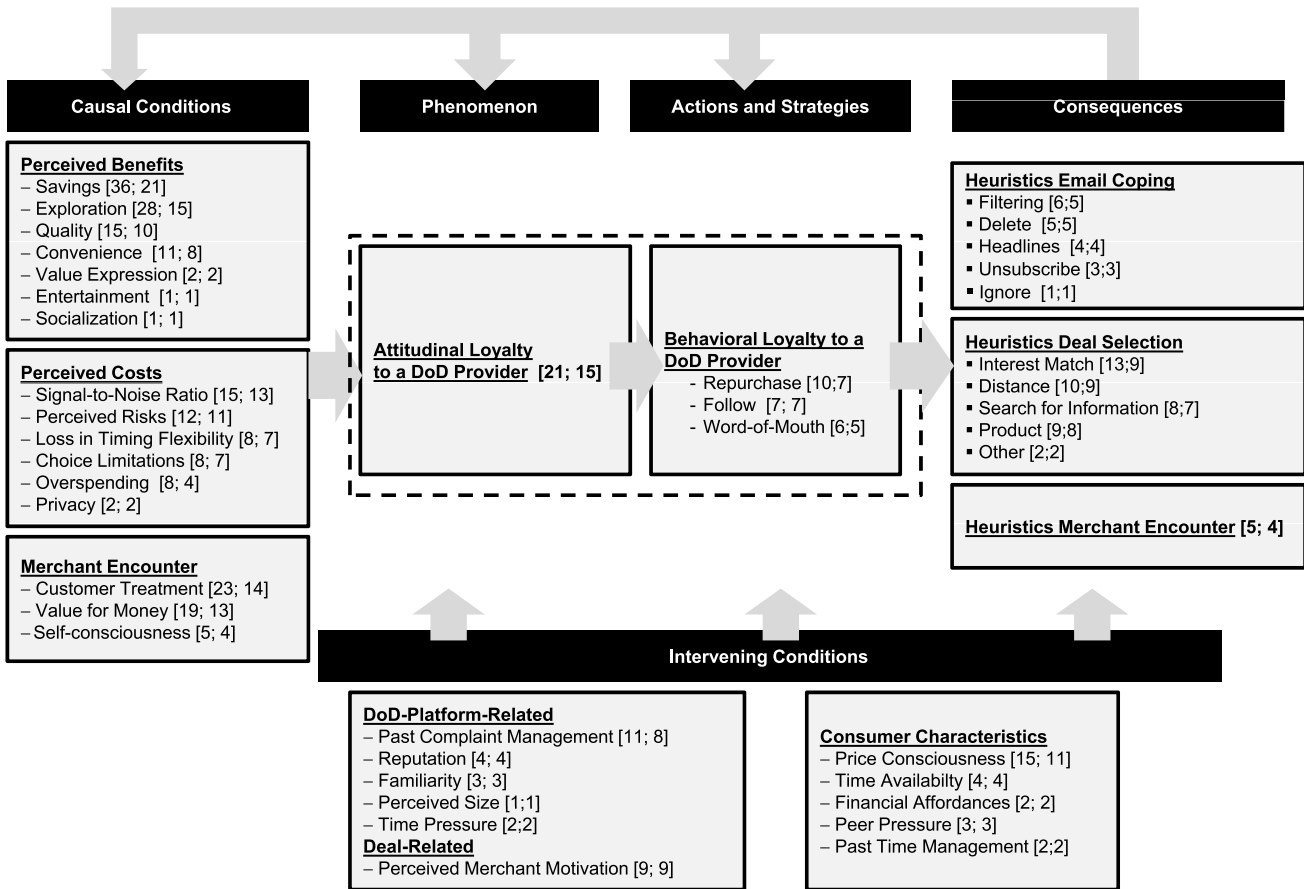


Fig. 1 Conceptual model of loyalty formation on “Deal of the Day” platforms. The first number in square brackets reflects a number of times this category was mentioned across our data. The second number reflects the number of respondents mentioning this category (max. 24)

Repurchase: high),¹ [...], I actually have a positive impression of Groupon (*att. loyalty*: positive) because [...] it's cheap (savings: high)²” (Q). At the same time, a negative attitude led users to abandon the platform and/or unsubscribe from emails. In some cases attitudinal loyalty was present, but no behavioral loyalty was reported due to causal or intervening conditions: “I do have a Google Offers subscription [...], however I have never made a purchase (*beh. loyalty*: Repurchase: low). I have yet to see a deal that really grabs my attention (*signal-to-noise*: low). [...] I think they offer great deals... (*att. loyalty*: positive)” (Q). Only few respondents reported an overtly negative attitude towards DoD platforms, partly due to the notorious reputation of DoD providers for exploiting participating merchants and partly due to respondents' negative experiences when redeeming their deals. These findings

are consistent with Dholakia and Kimes (2011), who reject the presence of fatigue for DoD customers, providing evidence for a high level of repurchase intentions, particularly for heavy DoD users.

3.3 Causal and Intervening Conditions

A number of categories emerged from our data, with their properties influencing the development of loyalty attitudes, moderating the relationship between attitudes and behavior, and leading to the emergence, and enhancement of certain heuristics.

Perceived Benefits of DoD Promotions: Seven categories of perceived benefits emerged as motivators to participate in DoD promotions. While these benefits emerged directly from our data, most of them, except for ‘socialization’, correspond to consumer benefits of sales

promotions identified by Chandon et al. (2000). Therefore we adopted their naming approach. We find that utilitarian incentives, such as savings and ability to obtain products and services of better quality without having to spend more, together form an important group of benefits motivating users to come back. Indeed, as DoD platforms typically offer reductions of 50 % or more, getting a discount is the major driver to return and buy DoD deals (Kimes and Dholakia 2011; Rueter 2011). These monetary incentives often went hand in hand with exploration benefits, as respondents acknowledged being motivated by the search for variety, novelty, need for exploration and curiosity (Chandon et al. 2000; Hui et al. 2006): “I am using it more to seek things (*beh. loyalty*: Follow: high) that I'm interested in; but for which I don't want to pay in the next months. I just pay for some classes of something,

¹The following scheme is used to present the logic of axial coding: [Category: Sub-category: dimension].

²Some quotations were edited for style to improve readability.

just to try it (*exploration*: high)” (Q). Together, these motives were not always beneficial for merchants: Attracted by the opportunity to save and explore, respondents were often buying deals in places they cannot typically afford or which were too far away. As a result, “adverse selection” of customers took place, which undermined the purpose of DoD promotions for merchants: In fact, out of 19 deals that twelve respondents in our FGs described in detail, only 5 resulted in customer retention. Convenience benefits emerged as another category motivating users to engage with DoD platforms, with respondents sometimes using these sites as heuristics to find ways to spend leisure time, select places to eat out, choose presents, thereby reducing their search and time costs (Chandon et al. 2000). Potential of DoD promotions to provide users with benefits of entertainment, value expression or socialization were only rarely and marginally mentioned. For example, two respondents reported feelings of pride of being a smart shopper – an important component of value expression category: “... people around me were paying 120 € and I just paid 30 (*savings*: high), [...] I was the wise one! (*value expression*: high)” (Q).

Perceived Costs of DoD Promotions: Six factors emerged as impediments of user loyalty. Among them, low signal-to-noise ratio – the proportion of potentially relevant deals to the overall number of deals promoted by a DoD provider – surfaced as the major hurdle to continuous use. Since the quest for exploration is an expected benefit of DoD promotions (Erdogmus and Çiçek 2011), respondents reported being frustrated by the “repeating” offers and dominance of only a few specific deal categories. This coincides with a sentiment often expressed in the media, that DoD deals tend to concentrate on restaurants and “spa and beauty” offers (Rueter 2011) – instead of more pertinent needs of consumers (Perez 2012a). Overall, low signal-to-noise ratio goes hand in hand with respondents being overwhelmed by the sheer amount of promotional offers they receive per email: “I don’t like getting so many emails (*signal-to-noise ratio*: low) [...] Now, I just delete all the emails (*heuristics email coping*: Delete), I just go there when I need something (*beh. loyalty*: Follow: low)” (Q). Paradoxically, it

is the volume of email traffic with ill-fitting offers – a core promotional technique most DoD platforms rely on (Byers et al. 2011) – that stands in the way of consumer acceptance.

Furthermore, perceived risk surrounding deal purchases was frequently mentioned as a factor inhibiting DoD use. This was particularly true for the “experience” category of services, such as restaurants, for which a final outcome was hard to anticipate: “I would never buy a product or a service (*beh. loyalty*: Repurchase: low), for which I don’t know what the quality is (*perceived risk*: high)” (Q). As a result, many respondents claimed to avoid certain types of deals or to spend more time on collecting information before the purchase: “I would not buy this again. And even if, I would check the price (*heuristics deal selection*: Search for Information)” (Q). Of less importance were user concerns regarding loss in timing flexibility, due to the notorious difficulty of making an appointment with an overwhelmed merchant, choice limitations (e.g., fixed content of a menu in restaurant deals), overspending, and privacy.

Encounter with the Merchant: Respondents often projected their experiences from a merchant encounter to their DoD attitudes: “My impression [of Groupon] is also a little bit negative (*att. loyalty*: slightly negative). ... I had two really bad experiences recently and that is why my opinion has changed about it. ... (*merchant encounter*: negative)” (Q). Two properties emerged as particularly salient in creating these spill-over effects. First, perceived value for money – an ex post evaluation of a deal as a bargain – was often mentioned, with respondents resenting unexpected costs imposed on them when redeeming the deal: “... in the end a lot of stuff was just extra. [...] So it was not such a cheap deal... (*value for money*: moderate)” (Q). This finding is consistent with extant research, which shows a direct link between perceived value of the deal and customer satisfaction (Cronin et al. 2000). Second, dissatisfaction with customer treatment by the merchant emerged as an important impediment of DoD loyalty in this category. This is paradoxical, since DoD promotions are mainly used as tools to increase brand awareness and gain new customers (Dholakia 2010). In this context,

respondents elaborated on their experiences of being treated like second-rate customers: “You don’t get a 200 gram portion, you get only 150 (*customer treatment*: poor)” (Q). Providing rationale for this counter-intuitive outcome, Dholakia (2011) finds that merchants and their employees are often frustrated with the quality of attracted customers, viewing them as “deal hunters”. Allegedly, low levels of tipping and upselling, but also the sheer number of to-be-served clientele are at the roots of this phenomenon (Agrawal 2011b). Additionally, respondents were often aware of the strain DoD promotions impose on merchants (e.g., Agrawal 2011b). As a result, they anticipated to be treated badly to begin with, even when there was no apparent reason for it. This anticipation intensified respondents’ self-consciousness – another perceived cost of DoD participation – referring to a mixture of negative emotional outcomes such as feelings of shame, embarrassment, and negative self-image (Honea and Dahl 2005): “... you take your voucher and you show it, ok we are Groupon customers; we are not normal customers [...]. And maybe they are not acting different, but you feel different (*self-consciousness*: high)” (Q). Overall, state of elevated self-consciousness was not an exception, leading users to avoid sharing their DoD experiences: “My friend thought that I’m kind of a cheap buyer (*self-consciousness*: high), so after that I decided not to share [the deal purchase] with anybody (*beh. loyalty*: Word-of-Mouth: low)” (Q). From the theoretical perspective, this self-report suggests that attitudinal loyalty is an important but not a sufficient precondition of behavioural loyalty, with some users finding themselves in a state of “latent loyalty” (Dick and Basu 1994, p. 101).³

Intervening Conditions: In addition, an array of platform-, deal-, and consumer-related properties defined the context of our phenomenon, intervening with the motivational structure behind user loyalty and its consequences. Particularly, customers’ price consciousness, reflected in “a concern for purchase outlays” (Lichtenstein et al. 1988, p. 245), emerged as a consumer characteristic of high importance. For example, admitted price consciousness made some respondents less sensitive to customer treatment

³We would like to thank an anonymous reviewer for this valuable suggestion.

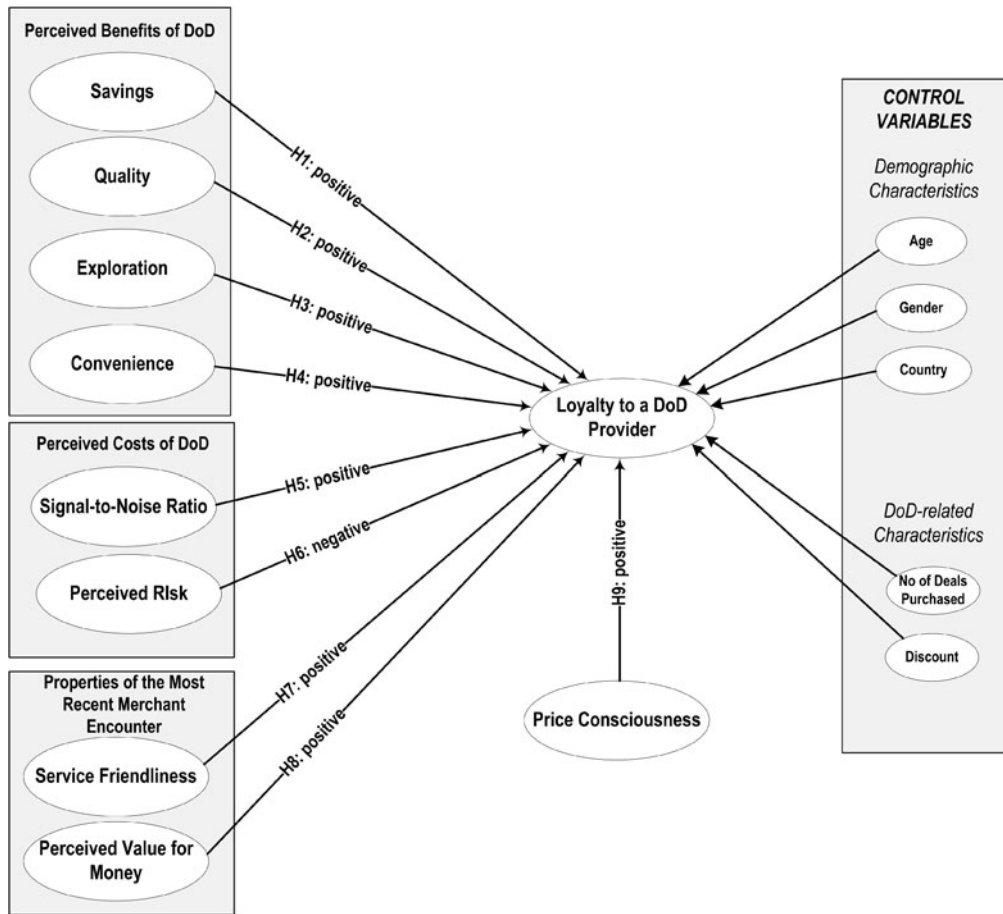


Fig. 2 Research model of loyalty formation on "Deal of the Day" platforms

aspects and more tolerant towards low signal-to-noise ratio. This is in line with existing literature which shows that price conscious consumers are willing to spend extra efforts or deal with inconveniences to find and redeem the cheapest offer (Rao et al. 2000; Urbany et al. 1996).

3.4 Consequences

Since most respondents saw significant value in using DoD platforms, they developed a set of strategies to mitigate the negative effects associated with their usage. For example, to manage the flood of emails, respondents adopted a variety of coping heuristics, including setting up filters, dedicating separate email accounts or deleting emails. Expecting only a small proportion of the deals to fit their interests, respondents in most cases only scanned email headlines, rarely opening DoD emails to study the offers. As respondents collected some negative experiences with a merchant, their heuristics for deal selection improved as well. They spent more time reading terms and conditions, avoided deals with particularly

high discounts and got more involved when choosing the deal. Some claimed to avoid deals with significant human contact: "Gyms are the same, paintball is the same everywhere. But I would be afraid of using it for restaurants..." (Q) to avoid the state of elevated self-consciousness or bad treatment by the staff. Some have also improved their merchant encounter heuristics, only approaching a merchant in a big group of friends; promising a merchant to come back, or giving a higher tip.

Together, our data-driven conceptual model provides a detailed overview of the determinants of user loyalty in the DoD context.

4 Confirmatory Stage: Examining Determinants of User Loyalty

4.1 Design and Scope of the Study

Even though analysis of the qualitative data is a typical domain of GT applications, Glaser (1992) argues that quantitative evidence can also be integrated into

the analysis to further validate research propositions. A growing number of IS studies have successfully adopted this approach by combining insights gained via GT-based models with findings obtained via confirmatory methods with larger samples (e.g., Krasnova et al. 2010). Following these arguments, in the second study we verify a set of identified relationships using quantitative data obtained from a survey of DoD customers. While application of GT has led us to derive 42 categories related to each other, in the quantitative study we primarily concentrate on testing the relationship between user loyalty to a DoD provider and nine constructs, which emerged as most salient properties of the main categories of our data-driven framework. Specifically, the following hypotheses formed the basis of our research model (Fig. 2):

Hypotheses (H1–H4): Users' perceptions regarding savings (H1) | quality (H2) | exploration (H3) | convenience (H4) benefits of DoD promotions have a positive impact on loyalty to a DoD provider.

Table 1 Demographic characteristics

Measure	Measure	Pre-test ($n = 179$)	Main study ($n = 202$)
Demographics			
Current location	US	27.9 %	10.9 %
	Germany	72.1 %	89.1 %
Gender	Male	41.9 %	36.5 %
	Female	58.1 %	63.5 %
Age	Mean	26.0	24.9
	Median	25	24
Occupation	Students	83.2 %	92.5 %
	Employed	14.0 %	6.8 %
Income (per month) ^a	Less than \$/€500	24 %	27.9 %
	\$/€500–1000	37.4 %	51.9 %
	\$/€1000–3000	24 %	17.5 %
	More than \$/€3000	8.4 %	2.7 %
Specifics of the latest deal			
Platform of the latest purchase	Groupon	76.5 %	81.2 %
	DailyDeal	8.9 %	11.9 %
	LivingSocial	5.6 %	2.5 %
Category of the latest deal	Restaurant	36.9 %	25.9 %
	Beauty, Wellness, and Healthcare	24.0 %	20.4 %
	Products	10.6 %	24.4 %
	Hotels and Trips	6.2 %	3.0 %
	Discount of the latest deal (mean)	US Sub-sample	39.6 %
	German Sub-sample	52.7 %	46.5 %
Redemption period of the latest deal (mean)	US Sub-sample (in months)	4.0	3.7
	German Sub-sample (in months)	6.9	6.6

^a\$ and € were pooled together due to space limitations

Hypothesis 5 (H5): Users' perceptions regarding favourable signal-to-noise ratio of DoD offerings have a positive impact on loyalty to a DoD provider.

Hypothesis 6 (H6): Users' perceived risk associated with deal purchases has a negative impact on loyalty to a DoD provider.

Hypothesis 7 (H7): Users' perceptions regarding service friendliness when redeeming the most recent deal have a positive impact on loyalty to a DoD provider.

Hypothesis 8 (H8): Users' perceptions regarding value for money of the most recent redeemed deal have a positive impact on loyalty to a DoD provider.

Hypothesis 9 (H9): Users' price consciousness has a positive impact on loyalty to a DoD provider.

Following past studies, respondents' demographic characteristics, such as age,

gender and country of residence were additionally integrated as control variables into our research model (Kimes and Dholakia 2011; Tuten and Ashley 2011). Further, two DoD-related variables were included as controls. First, the number of DoD deals purchased from the focal DoD provider was added to account for the possible effect of habituation documented for online platforms as well as respondents' experience with deals from a particular DoD provider (Khalifa and Liu 2007). Second, the size of the discount of the most recent deal was incorporated. Inclusion of these control variables has allowed us to account for possible sources of heterogeneity in our model.

4.2 Survey Design and Measurement Scales

Initially developed in English, the survey items were carefully translated into Ger-

man. Psychometric properties of most scales⁴ were pre-tested in a survey with 179 subjects (demographic characteristics of the pre-test sample are summarized in **Table 1**). As a result, a few items were dropped and some items were reformulated to better address the essence of the construct and the results of the qualitative study. Every construct was measured on a 7-point Likert scale (except perceived value for money, which was operationalized with a 7-point semantic differential) and modeled reflectively. For most questions respondents could choose a "not applicable" (n.a.) option to ensure consistency of answers across different deal contexts. We relied on Chandon et al. (2000) to operationalize savings, quality, exploration and convenience benefits of DoD promotions. Price and Arnould (1999) and Lin (2008) measures of loyalty were drawn upon to operationalize loyalty to a DoD

⁴All construct scales except *perceived risk* and scales used in the robustness checks (reported in **Sect. 6**) were part of the pre-test.

provider. Items for price consciousness were borrowed from Bloch et al. (1989) and Lichtenstein et al. (1988). The measure for signal-to-noise ratio was initially borrowed from Schöndienst et al. (2011) and significantly modified to fit the DoD context. Perceived risk was operationalized following Cox and Cox (2001). Perceived value for money measure was initially borrowed from Dodds et al. (1991). Items to operationalize service friendliness were adapted from Responsiveness, Assurance, and Empathy dimensions of SERVQUAL (Parasuraman et al. 1988) – an accepted measure of service quality – since each of these sub-dimensions emerged during the FG discussions. All scale items, except for price consciousness, focused on the DoD provider/the merchant encounter of the deal most recently redeemed, which helped to ensure the highest level of recall among respondents. Full list of scales is available in **Table A-1 of Appendix A** of the online version of this paper. Next, a link to online survey was distributed using a mailing list of one large university in Germany. A raffle of 30 Amazon.de gift cards was offered as an incentive to participate in the study. To reduce cultural bias, the English-version of the survey was also distributed among students in a US university in exchange for extra credit.

4.3 Sample Description

332 Respondents accessed the first page of the survey. Among them, however, 39.2 % omitted a significant share of questions or selected a “not applicable” (n.a.) option multiple times. Since these observations threatened to undermine the validity of our analysis, we removed them from the final evaluation. A resulting net sample of 202 usable responses contained only a marginal number of missing/n.a. values, with the median number of n/a reaching 3 for all items in our research model. The only exception was the service friendliness construct, for which the mean number of n/a answers was 23.5 (11.6 %) per item. A large share of these responses related to product deals, many of which were redeemed online and did not involve a merchant encounter. Taking this into consideration, special care was taken when assessing the impact of this construct on our dependent variable as explained in **Sect. 5. Table 1** summarizes demographic characteristics of our sample and characteristics of the last deal that respondents redeemed.

Overall, available data allows us to make only limited conclusions about the presence of non-response bias in our dataset. Specifically, the “early” vs. “late wave” method cannot be reliably used in our case since the German/US data was collected in a very short 2-/3-day time frame respectively, after which the survey was closed. This measure was taken to motivate respondents to take part in the survey, as a raffle was used to reward their participation. Nonetheless, the application of the Mann-Whitney test to compare respondents from day 1 vs. day 2 (+ day 3 for US subjects) across an array of variables such as gender, age, income, number of deals purchased, number of deals redeemed as well as length of DoD participation did not render any significant differences between these sub-samples (Armstrong and Overton 1977). Further, demographic characteristics of our sample were compared to those of [Groupon.com](#), [Groupon.de](#) and [DailyDeal.de](#) audience. With some divergence, young, educated, and female customer segments are overrepresented on these platforms (Alexa 2013), suggesting that our dataset can be considered comparable. Hence, with some caution, we can assume that non-response is not a concern of our study.

4.4 Empirical Results

In the next step, our research model was evaluated using the Partial Least Squares (PLS) methodology with the help of SmartPLS 2.0.M3 software (Ringle et al. 2005). This approach was preferred due to the non-normal distribution of our data: the Kolmogorov-Smirnov test conducted for each item rendered a p-value of less than a required threshold of 0.05 (measures of skewness/kurtosis are provided in **Table A-1 of Appendix A**). Moreover, the limited sample size and an exploratory character of our study also spoke for the use of the variance-based approach, such as PLS (Fornell and Bookstein 1982). Mean replacement was used as a missing value algorithm throughout the study.

In the forefront, the absence of a common method bias in our data was assured following a three-step procedure. First, Harmon’s one-factor test was executed using principal components analysis on all ten constructs included in our main model (Podsakoff and Organ 1986). An unrotated solution with a number of extracted factors fixed to 1

rendered a component explaining only 28.2 % of the overall variance. Additionally, extraction of factors with Eigenvalues greater than 1 rendered 10 factors, with a mean share of variance across factors comprising only 7.7 % (median 4.7, SD = 7.7). Second, the ‘marker variable’ test was used (Lindell and Whitney 2001). To implement this test, we additionally included another theoretically unrelated construct in our survey – self-disclosure (see **Table A-2 of Appendix A** for operationalization). Adding this factor to our model as another antecedent of loyalty to a DoD provider did neither impact any of the path coefficients in any meaningful way, nor did it affect R^2 . Furthermore, as can be derived from **Table B-2 of Appendix B**, all correlations between marker construct and other variables used in the study were low: $r_{\text{mean of absolute values}} = 0.065$ (SD = 0.044). Moreover, a detailed analysis of correlations between items used in the marker variable and those of other constructs suggested the absence of a common method bias, with a mean of absolute correlation coefficients reaching 0.057 (SD = 0.0465) and mean of p -value = 0.516 (SD = 0.3056). Third, a correlation matrix presented in **Table B-2 of Appendix B** does not include factor-pairs with particularly high correlations ($r_{\text{max}} = 0.59$) (Bagozzi et al. 1991). Together, these results provide evidence that our data are not subject to a common method bias (Podsakoff and Organ 1986; Pavlou et al. 2007).

Next, the Measurement Model (MM) was assessed. To ensure Convergent Validity, measures for Indicator Reliability (IR), Composite Reliability (CR) and Average Variance Extracted (AVE) were evaluated as summarized in **Table B-1 of Appendix B**. Only five items in our model – PC1 (0.691), SNR1 (0.470), PR4 (0.630), PR5 (0.668) and Deal_Conv1 (0.657) – had loadings lower than 0.7, with all other values exceeding this threshold (Hulland 1999). Hence, IR could be assumed. For all constructs the CR and AVE values exceeded the required levels of 0.7 (Hulland 1999) and 0.5 (Fornell and Lackner 1981) respectively. Additionally, Cronbach’s Alpha (CA), reflecting Internal Consistency of the used scales, was higher than a required threshold of 0.7 for all constructs (Hulland 1999). All in all, Convergent Validity was confirmed. Further, Discriminant Validity was assessed by comparing the square root of AVE for each construct with the

Table 2 Standardized path coefficients and significance levels for pre-test and main study

Hypothesis	Construct → Loyalty to a DoD provider	Path coefficient ^{Significance}		Hypothesis outcome
		Pre-test	Main study	
H1	Savings benefits	0.234**	0.242**	Supported
H2	Quality benefits	0.237**	0.183**	Supported
H3	Exploration benefits	−0.023	0.025	Rejected
H4	Convenience benefits	0.050	0.045	Rejected
H5	Signal-to-noise ratio	0.217**	0.237**	Supported
H6	Perceived risk	n.a.	−0.134**	Supported
H7	Service friendliness	0.134*	0.128*	Supported
H8	Perceived value for money	0.073	0.083	Rejected
H9	Price consciousness	0.167**	0.143*	Supported
Control variables	Age	−0.123**	−0.158**	n.a.
	Gender	0.036	0.029	n.a.
	Country	−0.060	0.091	n.a.
	Number of deals purchased	0.122*	0.182**	n.a.
	Discount (most recent deal)	0.183**	−0.052	n.a.

Significance: * at 5 %; ** at 1 % or lower

correlation between this construct and any other construct in the model. Since in each case a square root of AVE was higher than a corresponding correlation (see **Table B-2** of **Appendix B**), all constructs exhibited acceptable level of Discriminant Validity (Hulland 1999). Taken together we can conclude that our MM is well-specified.

In the second step, the Structural Model (SM) was evaluated. We find that together variables in our model explain 62.5 % of variance in Loyalty to a DoD Provider, which approaches a substantial level of explanatory power according to Chin (1998). Furthermore, predictive relevance of our model Q^2 reached 0.518, suggesting that independent constructs in our model have strong predictive relevance for the exogenous construct (Hair et al. 2011). Next, path coefficients were evaluated and their significance was determined via a bootstrapping procedure, by setting the number of cases equal to sample size ($n = 202$) as recommended by Tenenhaus et al. (2005) and the number of bootstrap repetitions (samples) to 200 as suggested by Efron and Tibshirani (1998). A no-sign-changes option available in SmartPLS (Ringle et al. 2005) was used for evaluation.

As summarized in **Table 2**, we find that ability to save money and purchase services/products of better quality emerged as key motives defining user loyalty to a DoD provider (H1 and H2 supported). Furthermore, positive signal-to-noise ratio and price consciousness were shown

to magnify, while perceived risk of deal transactions was shown to dampen consumers' desire to follow deals on a DoD platform (H5, H9, H6 supported). Finally, while service friendliness during the most recent interaction with the merchant further motivated consumers to look for more deals (H7 supported), perceptions of value received for the price paid did not serve as significant determinant (H8 rejected). Despite their salience in the qualitative study, exploration, and convenience benefits did not exert a significant impact on our dependent variable (H3 and H4 rejected).

Of the control variables, gender, country of residence of a respondent and a discount obtained in the most recent deal did not exert any significant influence on the dependent variable. At the same time, age was negatively related to loyalty, suggesting that younger consumers are more likely to stay on the DoD platform they once used. Finally, number of deals purchased in the past was indicative of future behavior, suggesting that DoD platforms possess a certain level of stickiness. Importantly, results obtained in a pre-test were consistent with those of the main study, suggesting a high level of consistency of our findings. The only exception was the size of the discount, which strengthened respondents' loyalty intentions in our pre-test, but was not significant in the main study.

5 Ad Hoc Analysis

Two ad hoc analyses were performed to gain a deeper understanding of the complexity of our phenomenon. First, considering the large number of missing/n.a. values in responses to service friendliness items, we additionally tested a model with a smaller sample of 177, in which observations with missing/n.a. values for this construct were removed. No notable differences to the previous results were found, with strength and significance of path coefficients across all constructs in the model staying comparable. R^2 dropped only slightly, reaching 61.4 %.

Second, while only direct relationships were tested in the main model, our qualitative analysis suggests that the strength of the impact of loyalty determinants can be influenced by a number of intervening conditions, with price consciousness emerging as one of the most important factors. This is in line with past marketing research which shows that price conscious consumers are more tolerant towards inconveniences in their search for the cheapest offer (Rao et al. 2000; Urbany et al. 1996). Applied to the DoD context, these findings suggest that price consciousness can act as a moderator of the relationship between (1) signal-to-noise ratio, (2) perceived riskiness, (3) service friendliness and loyalty to a DoD provider. To test for these effects, interaction terms

Table 3 Standardized path coefficients and significance levels for robustness checks

Construct → Loyalty to a DoD provider	Path coefficient	R_{new}^2	Effect size (f^2)	Change in significance of other coefficients
Value expression	0.205**	64.6 %	0.059	No (quality benefits $t = 1.845$) ^a
Entertainment	0.266**	65.2 %	0.078	No
Overspending	0.034	62.6 %	0.003	No
Loss in timing flexibility	0.024	62.5 %	0.000	No
Choice limitations	0.049	62.7 %	0.005	No
Self-consciousness	0.005	62.5 %	0.000	No

^aThe significance of the coefficient for *Quality* benefit has dropped from 5 % level to 10 % level
Significance: * at 5 %; ** at 1 % or lower

were generated one by one in Smart-PLS (Ringle et al. 2005), with indicator values being mean-centered before multiplication. However, no support for these assumptions was found: $b_{SNR*PC} = 0.083$ (t -statistic = 1.015), $b_{PR*PC} = 0.027$ (t -statistic = 0.352), and $b_{FRIEND*PC} = 0.011$ (t -statistic = 0.199).

6 Robustness Checks

While factors tested in the main study did emerge as most salient predictors influencing the development of our phenomenon in the qualitative stage, our inferences about importance of some and unimportance of other, less mentioned factors, could still be biased. To account for these limitations, the impact of six other factors, which emerged as determinants of moderate importance in our qualitative study (Fig. 1), was also tested as part of model robustness checks.

Specifically, the following six factors – *perceived benefits*: (1) entertainment, (2) value expression; *perceived costs*: (1) loss in timing flexibility, (2) choice limitations, (3) overspending; and *merchant encounter*: (1) self-consciousness – were additionally included one by one into our model as direct antecedents of loyalty to a DoD provider. The full list of scales is available in Table A-2 of Appendix A. We find that despite only cursory mentioning in the FG/interviews, perceptions regarding value expression and entertainment benefits do exert a significant impact on users' loyalty intentions, even though the effect size for these two factors is small (Cohen 1988) (see Table 3). On the other hand, perceived costs such as overspending, loss in timing flexibility and choice limitations as well as expectations of elevated self-consciousness do not actually

stand in the way of users' loyalty, despite being lamented.

7 Theoretical and Managerial Implications

Contributing to existing research, our study reveals that while users appreciate benefits of convenience and exploration when discussing DoD platforms, it is the monetary incentives – savings and quality benefits – which make them engage in repeated purchasing and positive word-of-mouth. Indeed, our study shows that DoD platforms serve as a magnet for price conscious customers, who exhibit high loyalty intentions to DoD providers they once tried. Together, these findings suggest that delivering greater savings should remain the highest priority for DoD providers. This importance of offering monetary incentives, however, reveals the complexity of the DoD business environment, since this strategy alone makes it difficult for a provider to differentiate itself from a multitude of other players all touting savings. Hence, additional efforts are required to promote user loyalty. As our study shows, enhancing user perceptions of making “smart” purchases in an entertaining environment can further enhance platform stickiness – insights DoD providers could make use of in their search for differentiation.

Our study reveals that low signal-to-noise ratio represents a major hurdle for consumer loyalty. This is in line with past research on couponing: Dickinger and Kleijnen (2008) argue that customers should not be overwhelmed with coupon offers; instead companies should concentrate on consumer education of coupon usage and their usability. In a similar vein, our findings from the DoD context

call for the optimization of the emailing strategy: almost a third of respondents in our sample (26.9 %) felt to some extent spammed by emails from the DoD provider – a perception providers should address. Moreover, our analysis of the moderating influence of price consciousness on the link between signal-to-noise ratio and loyalty to a DoD provider did not reveal any significant relationship suggesting that all consumers are equally affected when flooded with ill-fitting deal offers. To enhance the value of the offers passed on to consumers, preference- and demographics-based targeting can be used, as currently pioneered by a handful of DoD providers (Perez 2012b). In the long-term, improvements in this area are likely to secure a competitive advantage for providers working in this direction. Beyond challenges caused by information overload, perceived risk emerged as another impediment dampening users' intentions to shop for daily deals. To address this challenge, providers should seek ways to decrease information asymmetry, by providing consumers with easy access to customer reviews as well as integrating ratings of DoD customers, who previously participated in deals of the featured merchant. Together, these measures will contribute to enhancing platform sustainability.

Further, our findings provide evidence for the presence of significant spill-over effects, with merchant performance exerting a direct impact on loyalty to a provider who mediated a deal. This outcome suggests that DoD providers should select merchants and set up their deals very carefully, since one poor experience with a merchant could have a damaging effect on subsequent purchase intentions. In particular, DoD providers should ensure service friendliness of the merchant, since unfriendly treatment results in the loss of loyalty for a DoD provider. This is

important with regard to all categories of consumers, regardless of their price sensitivity, as suggested by our ad hoc analysis, which makes this strategy particularly vital to implement. In this context, alignment of interests of a merchant, its employees and a DoD provider emerges as critical. For example, while business owners and senior managers typically make a decision to take part in a DoD promotion, the customer-facing employees – waiters, cooks, hair-dressers – are the ones who have to deal with an incoming wave of DoD customers. Facing high workload, these employees inevitably experience high level of exhaustion and frustration, which may lead to poor customer treatment (Agrawal 2011b; Dholakia 2010, 2011). Considering these effects, setting realistic limitations on the number of vouchers available for sale should be a priority not only for a merchant but also for a DoD provider. Nonetheless, only 11 % of businesses in the study by Dholakia (2010) placed a limitation on the number of vouchers offered for sale.

In conclusion, our findings provide a roadmap for DoD providers on their way to build and, more importantly, support a loyal customer base.

8 Conclusions and Limitations

As DoD promotions start to occupy a prominent place in marketers' toolbox, there is a growing interest to understand customer behavior on these platforms. To address this need, this study examined the context and determinants of user loyalty to a DoD provider. We find that customer loyalty is largely driven by monetary incentives – the opportunity to gain better quality and save money – but can also be promoted if value expression and entertainment benefits are provided. At the same time, properties of merchant encounter can dampen users' intentions to repurchase if merchants fall short of users expectations concerning customer treatment standards. In addition, enhancing signal-to-noise ratio and decreasing information asymmetries emerge as significant challenges DoD providers should address on their way to building a loyal customer base.

Our study is subject to several limitations. First, our respondents were from two different countries – USA and Germany – and reported on their experiences with deals from various categories.

Hence, potential for data heterogeneity and possible differences in users' behavioral patterns cannot be excluded. Future research should concentrate on identifying these potentially different customer segments to better understand diverging patterns of loyalty on DoD platforms. Further, our sample mainly involves students. Kruglanski (1975) argues that student samples are acceptable when the research question revolves around general psychological constructs. In addition, students are typically price conscious, which makes them an important target group for DoD providers (Narasimhan 1984). Nonetheless, other demographic segments should be further explored to gain a full picture of behavioral intricacies in this novel setting. On the whole, while our study represents the first attempt to systematically study the context of user loyalty on DoD platforms, gaining a deeper understanding of customer behavior on DoD platforms remains a promising venue for future research endeavors.

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Abstract

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“Deal of the Day” Platforms: What Drives Consumer Loyalty?

“Deal of the Day” (DoD) platforms have quickly become popular by offering savings on local services, products and vacations. For merchants, these platforms represent a new marketing channel to advertise their products and services and attract new customers. DoD platform providers, however, struggle to maintaining a stable market share and profitability, because entry and switching costs are low. To sustain a competitive market position, DoD providers are looking for ways to build a loyal customer base. However, research examining the determinants of user loyalty in this novel context is scarce. To fill this gap, this study employs Grounded Theory methodology to develop a conceptual model of customer loyalty to a DoD provider. In the next step, qualitative insights are enriched and validated using quantitative data from a survey of 202 DoD users. The authors find that customer loyalty is in large part driven by monetary incentives, but can be eroded if impressions from merchant encounters are below expectations. In addition, enhancing the share of deals relevant for consumers, i.e. signal-to-noise ratio, and mitigating perceived risks of a transaction emerge as challenges. Beyond theoretical value, the results offer practical insights into how customer loyalty to a DoD provider can be promoted.

Keywords: Deal of the Day, Loyalty, Grounded theory, Structural equation modeling

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