

Customized Online Promotions: Moderating Effect of Promotion Type on Deal Value, Perceived Fairness, and Purchase Intent

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Abstract

We investigate if consumers differ in their perceptions of deal value, fairness and purchase intentions when presented with individually targeted (or customized) promotions versus universal promotions offered to all consumers at online retail websites. We found that customized offers lead to significantly higher purchase intent compared to universal offers. Perceived fairness differed significantly across promotion types (free shipping, \$ off and temporary reduced price) based on whether they were customized to the consumer or offered universally. Implications for designing customized online promotions are offered.

Key words: customized promotions; deal value; perceived fairness; price discrimination.

Introduction

The exponential growth and technological development of the Web and the Internet, has fueled the enthusiasm towards developing customer-responsive promotions. In 2009 alone, online promotions are projected to account for \$1.6 billion out of \$25.7 billion in total US online ad spending (Hallerman 2008). The initial enthusiasm for online promotions was the lure of addressability and mass customization. The ability to track click behavior over time and infer what drives the “desirable” consumer (or a cookie ID) to purchase, coupled with the potential of developing promotions of the right kind, offered at the right instant, to the right customer can be the key to retailing success. Effective customization of promotions requires consumers to register online and implicitly allow the online retailer to monitor their online activity in order to avail promotions. Little is known how privacy concerns impact consumer perceptions of customized price promotions and different types of promotions.

Prior research in marketing has firmly established that consumers differ in their perceptions of promotion offers based on the framing of the promotion (Suri, Swaminathan, and Monroe 2004). Frames investigated were restrictions on promotion availability and promotion type (Inman, Peter, and Raghubir 1997). In stores, marketers use physical possession of coupons to restrict who gets the price savings, a strategy of price discrimination, because only price-sensitive buyers are willing to expend efforts to collect and redeem coupons (Narasimhan 1984). Coupon promotions were found to have significantly higher perceptions of deal value compared to universal reduced price promotions. Universal promotions or promotions offered to all consumers erode brand equity, increase price sensitivity and have lower effectiveness compared to coupons (Suri, Swaminathan, and Monroe 2004).

In the online marketplace, physical possession of coupons cannot be used to implement targeting restrictions. Online promotions are typically implemented through the use of promotion or offer codes or links to specific pages at the website with the promotional offer. The proliferation and easy access to coupon repository websites that provide searchable access to promotion codes and promotion page URLs has made over-redemption of restricted promotions a cause of concern and defeats the purpose of price discrimination. Restricting access to promotions online requires targeting, identifying and tracking consumer click behavior (or their online identities) at the individual level. Anecdotal evidence suggests that some retailers have realized gains from such customized promotions to a limited extent, but for many consumer acceptance and redemption of customized online promotions

is fraught with privacy concerns, mistrust and technical challenges. Many consumers are concerned that web monitoring involved in online targeting and customization invades their privacy (Fox et al. 2000). So it is important to examine how consumer privacy concerns impact or interact with perceived transaction benefits from using an online promotion.

In this research, we investigate if consumers differ in their perception and use of sales promotions if they are offered universally or customized (i.e., available only when consumers register or log in). There is considerable research indicating that different implementations or framing of the same retail price reduction (dollar off, or temporary price reductions) can change consumers' perception of the promotion offer and purchase decisions. Further, free shipping has emerged as a popular online promotion but has not been examined extensively in the pricing literature, since it is not relevant in store-based shopping. Hence we examine if consumer perceptions of deal value, fairness and purchase intent differs for different promotion types based on whether promotions are customized or universally offered.

Conceptual Framework and Hypotheses

The customization of a promotion offer can be viewed as a restriction increasing the perception of exclusivity and deal value for the promotion recipient. Research by Feinberg, Krishna, and Zhang (2002) provides evidence of a betrayal effect, whereby loyal consumers of a brand provide less favorable preferences for that brand when they were excluded from a targeted deal offered only to competitors' customers. Equity frameworks (Bolton and Ockenfels 2000) presume that individuals will engage in inter-personal comparisons that factor not only the outcomes one receives (non-social utility) but also how such outcomes compare to those accrued by others (social utility). When consumers react to marketing offers with the goal of maximizing personal welfare (i.e., they are self-regarding), the receipt of an exclusive deal leads to advantageous inequity that enhances evaluations of the targeted discount among deal recipients (cf. Loewenstein, Thompson, and Bazerman 1989). Further active participation of customers in specifying their preferences is expected to make the fit between the offer and customers' preferences more transparent and lead to higher offer attractiveness. Hence,

H1. Perceived deal value of customized promotions will be higher than that of universal promotions.

Simonson (2005) suggests the "customized" label can positively affect perceived fit, assuming that the customer trusts the marketer. Inferred motive for the promotion is one of the key antecedents of trust (Moorman, Zaltman and Deshpande 1992). Inferred motives for a customized promotion restricted to an individual may imply retailer's willingness to forgo profits (a positive motive) and values the business relationship with the consumer leading to perceptions of fairness. Customized offers may lead to perceptions of "being singled out" and attempts to manipulate and persuade (Friestad and Wright 1994) increasing perceived unfairness. Our experimental design was not designed for prior or repeated consumer-retailer experiences hence we do not expect subjects to develop experience-based trust. In contrast, retailers using universal promotions treat all buyers equally and thus the issue of lateral unfairness does not arise. Hence we hypothesize,

H2: Perceived fairness will be lower for customized promotions than for universal promotions.

Since customization requires efforts in specifying consumer preferences and provide identifying information, consumers may perceive an advantageous price equity and just financial exchange for providing personal information. They may perceive a prerogative of paying a "special" lower price and the process of participating in the customization may lead them to feel smart and competent as shoppers (Schindler, Morrin and Bechawati 2005) than when promotions are offered to all customers. Further, since customized promotions are not displayed on comparison shopping agents, promotions offered after login at a retailer site can lead to a "pleasant surprise" effect (Heilman, Nakamoto and Rao 2002), the unexpected gain can elevate consumers' moods thus increasing purchase intentions.

H3: Purchase intentions will be higher for customized promotions than for universal promotions.

Moderating Effect of Promotion Type: Prior research on promotions suggests that coupons have higher deal value and purchase intent relative to reduced price promotions (Suri, Swaminathan, and Monroe 2004). Shipping charges are considered a disutility in online shopping and consumers attribute profit motives (not just covering cost) to the retailer. Free shipping promotions can reduce perceptions of unfairness but not increase deal value since base price of product remains the same. If customized promotions are perceived to be more attractive, exclusive (H1 is supported) or better matched to their preferences compared to universal promotions it should amplify the perceived value for promotion types that reduce the base price but not that of free shipping. Hence we hypothesize,

H4a: Perceived deal value of \$off and temporary low price will be higher when promotions are customized than when universally offered but not significantly differ for free shipping or no promotion.

In the absence of experience-based trust (due to our experimental context), cue-based trust or surface credibility may play an important role. Cue-based trust is defined as trust generated based on an individual's initial encounter with the stimulus (retailer website). It involves consumers' beliefs that his or her vulnerabilities will not be exploited (Dholakia and Sternthal 1977). Cue-based trust is based on informational cues provided the seller and are important in building consumer trust in an online shopping environment especially for sellers that lack traditional cues like national reputation and impressive size. The literature on signaling and asymmetric information suggests that actions such as money-back guarantees, price protection serve as risk relievers (Akaah and Korgaonkar 1988). Further, Simonson (2005) proposes that consumers are likely to rely on cues for assessing the fit of a customized offer with their preferences in the presence of consumer trust. Hence free shipping may engender higher levels of trust compared to \$off or temporary price reductions. Further, this effect will be higher when promotions are customized compared to universally offered. Hence we hypothesize:

H4b: Perceived fairness will be higher for free shipping compared to \$off or temporary price reduction and this difference will be higher when promotions are customized compared to when promotions are universally offered. Since perceived deal value of promotion and fairness influences purchase intention and hypotheses H4a and H4b suggest contrasting impacts for the three promotion types, we cannot predict which of these effects would dominate, hence we do not specify any hypotheses for purchase intention.

Experimental Method and Measures

Design: We used a 2x4 between-subject design to examine the effect of promotion customization (2 conditions – universal offer, customized offer) and promotion type (4 conditions -free shipping, \$ off, discounted price and no promotion) at an experimental website. To maintain task interest and involvement, students considered the purchase of a particular product (digital camera), at a fictitious retailer to control for the possible confounding effects due to brand or retailer reputation. Eight versions of the experimental website were created and hosted locally. Respondents in the customized condition were advised to login and the promotion offer was displayed right after consumer logged in and on product description cart pages. The customized no-promotion version did not have any promotion offer and simply advised respondents to log in. Pre- and post experiment questionnaires were integrated so responses could be electronically recorded. Table 1 shows the stimuli conditions:

Table 1. Experimental conditions and stimuli

	\$ off	Reduced base price	Free shipping	No promotion
Customized	(name), this \$ off offer is for you:	(name), this reduced price offer is for you:	(name), this free shipping offer is for you:	(name), this price is for you:
Universal	Price: \$100 Promotion: \$10 S/H: \$20	Price: \$90 S/H: \$20	Price: \$110 Promotion: free shipping	Price: \$100 S/H: \$20

Sample. 352 undergraduate marketing students at a northeastern university, with about equal number of males and females were randomly assigned to the treatment conditions. Participation was requested for 45 minutes

for course credit. Responses for 28 students who agreed to participate but did not come for the main study were discarded.

Procedure. Subjects reported at a computer lab and were allocated to specific terminals. All subjects read the same cover story – the researcher was studying usability issues at websites. Respondents in the universal promotion condition were instructed to answer a questionnaire on familiarity and expertise with using the Internet, online purchasing history and demographic questions. On submitting their questionnaire they went to the experimental website with appropriate promotion offers to begin the main experiment. Respondents in the customized site condition were instructed to register for access to the retailer’s website using their email username and password. Subjects then answered the Internet familiarity and purchase history questionnaire similar to the universal condition and asked to log out. These subjects then started the main experiment and were asked to login before browsing through the site. The appropriate promotion offer was displayed on pages after login.

Respondents were allowed to browse through product descriptions, take as much or little time as needed and add products to their shopping cart and checkout. After submitting the checkout page respondents were taken to a webpage to collect dependent measures and responses to manipulation check questions. Subjects could click on exit hyperlink provided on each page, fill out the questionnaire for dependent measures and leave. All respondents were thanked for their participation and debriefed.

Dependent Variables: Behavioral dependent measures –checkout or abandon cart were collected from clickstream data. Perceptual measures were collected through surveys at the end of experiment. Perceived fairness was rated on a bipolar adjective scale (1-very fair and 7-very unfair) (Campbell 1999). Perceived promotion value was measured using a three-item, seven-point semantic differential scale bad deal- good deal, worthless-valuable, and unattractive to me- attractive to me ($r=0.89$, $p<0.001$) (Grewal et al. 1998). Purchase intention was measured using a seven-point semantic differential scale anchored at “definitely not-definitely will.”

Manipulation Checks. A pretest was conducted with 33 students not participating in the main study to see if the four brands of products were perceived differently. In response to an open-ended question at the end of the survey respondents mentioned that differences were “minor”, “cosmetic”. To test the universal vs. customizable versions of websites we used the mean score of responses to questions on identification, adaptability and closeness (De Wulf et al. 2001) of website. The difference in score for customized vs. universal versions were significant across the promotion-type versions 6.9 (s.d.=2.9) vs. 3.7 (s.d.=1.2), $t=3.12$, $p<0.001$, indicating that the customization manipulation was successful. Almost all subjects had purchased from online stores in the last 6 months. Respondents did not significantly differ in their familiarity with Internet or digital camera use across conditions.

Results

A two-way multivariate analysis of variance (MANOVA) was conducted. Since we expect our dependent variables to be correlated we use MANOVA instead of several univariate ANOVAs to test our other hypotheses to avoid inflating Type I error. Univariate (ANOVA) follow-up analyses were conducted where appropriate. F-ratios were evaluated with an alpha level of 0.05 for all main effects and post-hoc comparisons. Effect size, or strength of relationship, associated with univariate analyses was reported using partial Eta squared (η^2_p). Detailed MANOVA results are available from the authors, Table 1 presents results for the effects that were found significant.

Table 1. Multivariate and Univariate Effects

Source	Multivariate		Univariate	Hypotheses test results
	F	df (v ₁ ,v ₂)	F	
<i>Main effects</i>				
Customization	3.03*	9, 2386		H3 supported
Purchase intent		1, 1387	2.47*	
Perceived deal value		1, 1387	3.5**	H1 supported
Promotion type	4.75**	9, 3386		
Perceived fairness		3, 1387	2.67*	
Purchase intent		3, 1387	8.44**	
<i>Interaction effects</i>				
Customization*Promotion type	4.12**	9, 3386		
Perceived deal value		3, 1387	1.2	H4a rejected
Perceived fairness		3, 1387	3.94**	H4b supported
Purchase intent		3, 1387	0.77	

*p<0.05, **p<0.01

Customization offer by promotion type (2x4) MANOVA shows a borderline significant main effect for offer customization, $F(9,3386)=3.03$, $p=0.056$ ($R^2=0.35$) and for promotion type, $F(9,3386)=4.75$, $p=0.005$ ($R^2=0.31$). Follow-up ANOVAs and mean comparisons revealed a significant difference between offer customization for purchase intent, $F(3,1387)=8.44$, $p<0.025$ ($\eta^2_p=0.24$) and perceived deal value ($\eta^2_p=0.009$), but not for perceived fairness ($\eta^2_p=0.007$). Follow-up univariate ANOVAs and mean comparisons for the promotion type main effect are explained separately for each perceptual measure.

Perceived Deal Value of Promotion: The mean comparisons show significant differences between universal and customization conditions ($p=0.03$, $\eta^2_p=0.03$) thus *H1* is supported. These results suggest that respondents perceive customized promotions as good deals but not universal promotions even though the objective saving is the same in both conditions.

Perceived Fairness: Table 1 indicates a significant ANOVA for perceived fairness across promotion type ($p=0.001$, $\eta^2_p=0.19$), but not for customization. Thus *H2* is not supported. Mean comparisons revealed a significant difference between no promotion and free shipping ($p=0.04$, $\eta^2_p=0.09$), between free shipping and discounted price ($p=0.005$, $\eta^2_p=0.16$), and between free shipping and \$off ($p=0.001$, $\eta^2_p=0.15$). These results suggest shipping charges drive unfairness perceptions, and offering promotions while charging for shipping is perceived as more unfair than not offering promotions at all.

Purchase Intent: Table 1 indicates that the mean purchase intent score in customized promotion was 5.6 (s.d. 1.2), while in the universal promotion it was 2.9 (s.d. 2.8), hence *H3* is supported. There is also a significant main effect of promotion type for purchase intention ($p=0.002$, $\eta^2_p=0.16$). Mean comparisons revealed a significant difference between free shipping and no promotion ($p=0.009$, $\eta^2_p=0.14$), but not between free shipping and no promotion ($p=0.69$, $\eta^2_p=0.003$), nor between free shipping and discounted price ($p=0.41$, $\eta^2_p=0.018$). These results suggest that offering dollars off promotion sends negative signals, but free shipping or discounted price doesn't.

Interactions: A significant customization x promotion type multivariate interaction effect was found but it was significant only for perceived fairness, thus rejecting *H4a* but supporting *H4b*. Mean comparisons suggest that consumer perceptions of fairness for free shipping and \$ off in the customized condition are significantly higher and lower respectively compared to the universal condition, thus supporting *H4b*. Perceived fairness for no promotion

and temporary price reduction are insignificantly lower and higher in the universal offer condition compared to customization condition. This may suggest that consumers may be wary of manipulation efforts directed to them through customized promotions, however free shipping offers are perceived to be less threatening compared to \$off or reduced price offers. Further, asymmetry in gains and losses may suggest that if free shipping cannot be offered, a retailer using customized promotions may be better off not offering any promotions at all.

Discussion and Future Research

This study has a number of important implications for understanding how consumers perceive price promotions at online retail websites. Customized promotions may lead to higher perceived deal value and purchase intentions compared to promotions offered to all consumers. Further contrary to popular belief regarding privacy concerns, the use of customized promotions does not lead to higher unfairness perceptions. However the significant customization by promotion type interaction for perceived fairness suggests that customized promotions are not perceived to be unfair compared to universal promotions, rather it is the type of promotion used in customized promotion that may lead to unfairness perceptions. This indicates that certain types of customized promotions may have a net positive impact on increasing purchase conversion at online retail sites which may not work if made available to all consumers (universal). Please note however, that subjects in our experimental study are university students who are familiar with use of the Web and most (61%) have purchased online in the prior 6-month period. They expect to be rewarded with promotion offers in exchange for the information they provide for customization. Negative impact of privacy concerns and reactance may play a bigger role among the general population, especially those who are less skilled or intimidated by the technology. Future research should investigate the mode of presentation of promotion offers and technical competence in perception of universal and customized offers.

We find there is a differential impact of free shipping as a promotion type on consumer perceptions. In general, free shipping is perceived to be as good or superior to all other promotion types in perceptions of fairness, perceived promotion value and purchase intent irrespective of whether promotions are customized or offered to all consumers. For equivalent dollar savings, and where shipping charges are communicated, free shipping represents the most attractive promotion type. We find evidence of this on the web, most retailers offer free shipping above a threshold order size. In certain product categories, free shipping above a minimum purchase is instituted as standard policy by all major firms. In this research, we focused on customization effects and however future research can be directed towards investigating if this effect is robust across various levels of the product base price and depth of discount. Further if shipping prices are unknown or offer lower or higher savings in \$ compared to other promotion types free shipping may not be as critical as we find and is an interesting avenue for future research.

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