

Putting Customer Back into Customization: A Pricing Intervention

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ABSTRACT

The benefits of customization are not always self-evident to consumers who seek to minimize decision costs or are generally uncertain of what they really want. We argue that the mere posting of a starting price can increase a consumer's readiness to appreciate customized goods. We discuss this phenomenon in the context of a simple model of reference-dependent preferences and propose four experiments to support our predictions. In experiment 1 and 2, we show that announcing a starting price accentuates consumer sensitivity to the match quality and relevance of customization, respectively, enhancing purchase intent and perceived product value to the extent that these qualities are present. Experiment 3 reveals that the effect of starting prices implicates the judgments of novices more so than those of experts. In experiment 4, we revert the effect and demonstrate that consumers who seek conformism and avoid personalization will be more likely to reject customized products when exposed to a starting price.

Keywords: Product customization, pricing, starting prices, reference-dependence, consumer engagement.

At first glance, customization is a remarkable proposition that enables consumers to express their preferences and their identity more effectively than standard alternatives available on the market. From the standpoint of the firm, investing in customization can increase the probability of a transaction and help reduce wasteful marketing expenditure. For these and other reasons, many visionaries and consultants have praised this business concept as an innovative and increasingly efficient source of competitive advantage (Gilmore and Pine 1997; Pine 1999; Pine, Peppers, and Rogers 1995).

Yet, in reality, firms that develop processes of customization often run into two obstacles familiar to researchers in decision-making. The first problem is that people seldom know with precision or can articulate with clarity what they want (Simonson 2005). The second problem is that the additional choice steps and choice options that occur with customization can prove overwhelming and demotivating (Dellaert and Stremersch 2005). These factors inevitably curb the enthusiasm of shoppers who might otherwise appreciate the benefits of consuming products that provide a better match to one's tastes.

To overcome these obstacles the literature has put forward two distinct paths. Some researchers propose to shape the purchase encounter in a way that nudges consumers toward alternatives predicted to make them, the firm, or both, better off (Levav et al. 2010; Park, Jun, and MacInnis 2000; Wilcox and Song 2011). Other researchers have presented techniques to reduce the costs of search and consideration associated with customization processes (Dellaert and Stremersch 2005; Randall, Terwiesch, and Ulrich 2007; Valenzuela, Dhar, and Zettelmeyer 2009).

In the present paper we take a different approach. Instead of guiding decision-making or simplifying the purchase occasion, we propose a simple design intervention that increases people's consideration of and interest in the fruits of customization. Specifically, we propose that posting a starting price—that is, when a product is sold “starting from \$...”—draws attention to the contrast between the outcome consumers obtain from customization and the baseline, undifferentiated option that the starting price evokes. Focusing the consumer on this contrast accentuates the appeal of customization in several cases that we detail and test below. We generate four hypotheses based on a simple behavioral economics formulation of the process by which consumers evaluate customized goods. This model recognizes that valuation is essentially reference dependent in a manner that involves competing reference points or norms that vary in salience depending on contextual cues (Kahneman and Miller 1986)—such as the presence of a starting price.

The notion that price features can cause product evaluations to change by engaging consumers into a greater consideration of benefits has recently emerged in the literature (Bertini and Wathieu 2008, 2010; Wathieu and Bertini 2007). Proposing that starting prices can stimulate healthy engagement runs against the controversial role traditionally assigned to this tactic. Indeed starting prices have generally been dismissed as pure marketing gimmicks that lure unsuspecting deal-seekers into an exchange (Biswas and

Burton 1993). Consumer advocates and regulators are wary of “bait and switch” situations whereby the baseline choices are sold out or unappealing, yet consumers feel coerced to accept the cost of upgrading to a more expensive product instead of switching to a rival vendor (United Kingdom Office of Fair Trading 2010). But one could also cite loss aversion (Tversky and Kahneman 1991) or the idea of expectation confirmation (Oliver 1980) to argue that starting prices are simply bad business: consumers might experience a discouraging loss when asked to spend more than initially advertised, jeopardizing the sale.

Contrary to these views, we set out to show that starting prices can play a positive role as a contextual element that induces consumers to envisage the personal benefit of customization. The next section reviews the relevant literature. We then develop an analytical framework that captures our argument and briefly describe our empirical approach. We report the results of four experiments that support our theory. We conclude with a brief discussion of the conceptual and managerial implications of the findings.

BACKGROUND

There are at least four ways by which customization can appeal to consumers. The first seems straightforward and is most customarily evoked: customization can provide a closer match of product attributes to preferences, which leads to more satisfaction and potentially higher willingness to pay or loyalty. Viewed from this perspective, customization is analogous to product proliferation in the sense that it allows for more choices and finer price discrimination (Thisse and Vives 1988). Variety provides choice for customers, but not the ability to participate in the specification of the final product.

Second, it has been shown that people derive pleasure from the mere knowledge that they own an object that is uniquely linked to them (Franke and Schreier 2008; Herd and Moreau 2012). This suggests that a firm can also create value for customers by emphasizing the opportunity to distinguish oneself from others in the market. Third, research shows that the process of discovering one’s preferences is by itself a source of satisfaction (Huffman and Kahn 1998). Finally, it appears that people are generally more approving of their own creations than of those made by others (Bendapudi and Leone 2003; Fuchs, Prandelli, and Schreier 2010; Franke, Schreier, and Kaiser 2010). These last two factors suggest that, beyond the ideas of preference matching and self-expression, firms might highlight customization as an experience or to reinforce in buyers the feeling that they are the true originators of the products they purchase.

Several practitioners have adopted these arguments, in particular the first, to claim that firms should make the most of new technologies to finally give consumers exactly what they want, when they want it (Gilmore and Pine 1997; Pine 1999; Pine et al. 1995). Some experts view a well-executed customization strategy as a “literally insurmountable barrier to competition” (Peppers and Rogers 1997,

177). In fact, the principle of customization lies at the heart of contemporary interactive marketing approaches including one-to-one marketing and customer relationship management.

The academic literature is more cautious in this regard. One obvious complication is that the cost of supplying customization might simply be too high in certain instances. A second issue is competition. If two or more rivals offer consumers a product that perfectly addresses their tastes, competition will damage the profits associated with product differentiation (Lederer and Hurter 1986; Thisse and Vives 1988). Ways to overcome this problem include being the first to offer customization (Dewan, Jing, and Seidmann 2003), customizing on a different set of attributes than the competitor (Syam, Ruan, and Hess 2005), or combining both standard and customized products in a portfolio (Syam and Kumar 2006). Maintaining some imprecision when addressing consumer preferences can paradoxically improve the results of a customizing firm (Chen, Narasimhan, and Zhang 2001).

The present work, however, responds to more psychological criticisms of the alleged advantages of customization. Considerable research indicates that people have too uncertain or incoherent tastes for firms to generate tailored solutions that buyers will reliably identify as superior (Simonson 2005). In addition, customization processes are often criticized for being laborious, unnecessarily burdening shoppers with choice steps that trigger frustration and dissatisfaction (Dellaert and Stremersch 2005). The straightforward implication of these two factors is that consumers may struggle to appreciate the net contribution of customization. In fact, there is evidence that people frequently refuse to pay a premium for products configured to their personal tastes, design products that merely copy generic options already in the market, or opt for standard alternatives even when the opportunity to personalize is readily available (Bardakci and Whitelock 2004; Kramer, Spolter-Weisfeld, and Thakkar 2007; Schoder et al. 2006; Syam, Krishnamurthy, and Hess 2007).

The literature demonstrates convincingly that seemingly inconsequential variations in customization methods and processes can sway users' valuations and choices (Levav et al. 2010; Park et al. 2000; Wilcox and Song 2011). One solution to address the lack of appreciation for customization, therefore, is to exploit behavioral biases to guide consumers toward choice options expected to make them better off. The other, perhaps less manipulative solution is to simplify the customization environment with the goal of reducing cognitive and emotional load (Dellaert and Stremersch 2005; Randall et al. 2007; Valenzuela et al. 2009). Our goal in this paper is to propose and test a different solution; one that tackles consumers' disengagement directly by reviving the recognition that customization creates value. The next section introduces an instrument we believe can serve this purpose.

THEORY

This section describes a theory of the process by which consumers assess customized products. The theory leads to a set of hypotheses identifying conditions under which the posting of a starting price is predicted to influence evaluation.

Consider first a world without starting prices, in which a consumer is presented with a customized outcome x_c described as a set of attribute levels including a final price. Consistent with the tradition of prospect theory (Kahneman and Tversky 1979), we assume that the consumer evaluates this outcome relative to some reference outcome x_0 , which we do not need to specify for the purpose of this theory. The reference outcome might for instance be a familiar substitute option available on the marketplace outside the customization process. The evaluation of x_c in reference to x_0 can be described with the following utility model:

$$U(x_c | x_0) = u(x_c) + v(u(x_c) - u(x_0)) \quad (1)$$

where u is a function that captures consumption utility and v is an increasing value function applying to gains and losses in consumption utility, such that $v(0) = 0$. For a similar formulation of reference dependence, see Koszegi and Rabin (2006).

As highlighted by Simonson (2005), the decision maker will not necessarily perceive the customized outcome as a gain; that is, $u(x_c) \geq u(x_0)$ is not granted, even if the customization process is highly granular and in principle allows users to select an ideal outcome. First, consumers may be aware that every step of the customization process could cause judgmental mistakes about what is truly desirable (Syam et al. 2007), while the reference outcome may benefit from a status quo bias or be perceived as accurately targeted by a sophisticated firm (Moreau and Herd 2009). Second, the customized option may be viewed as costly to design and purchase (Dellaert and Stremersch 2005).

When a starting price is announced, it directs the consumer's attention to the presence of a baseline version of the customizable product. This baseline option, denoted by x_b , is cued as a potential second reference point in the evaluation of the customized outcome x_c . As suggested by Kahneman and Miller (1986), decision-making is often the result of comparisons involving multiple plausible reference points, or norms, and contextual cues determine their relative weight. We introduce weight $0 \leq \alpha \leq 1$ to capture the relative salience of x_b as follows:

$$U(x_c | x_0, x_b) = u(x_c) + v(u(x_c) - \alpha \cdot u(x_b) - (1 - \alpha) \cdot u(x_0)) \quad (2)$$

Incorporating the notion of focalism, according to which people tend to focus on one reference option at a time (Wilson et al. 2000), we propose that the announcement of a starting price has a dramatic impact on α .

Now, note that the utility function (2) can be rewritten as follows:

$$U(x_c | x_0, x_b) = u(x_c) + v(u(x_c) - u(x_0) + \alpha(u(x_0) - u(x_b))) \quad (3)$$

If we compare equations (1) and (3), we see that posting a starting price, which we assume implies an increase in α , has a positive effect on the evaluation of the customized product in relation to the sign and size of $u(x_0) - u(x_b)$. From this formal observation, we derive four testable implications.

First, if the best outside option is already personalized (if $u(x_0)$ is relatively high), which casts doubt on the incremental value of a customized outcome, the announcement of a starting price shifts attention to a less personalized baseline option and revives interest in the ability of customization to provide a higher level of match quality. Thus our first hypothesis:

H₁: Posting a starting price increases consumer sensitivity to the match quality associated with customization, and improves purchase intent accordingly.

Second, in contexts where customization is personally more relevant so that a baseline option is liked less (i.e., $u(x_b)$ is relatively low), the announcement of a starting price shifts attention to this frame of reference and helps buyers realize their attraction to customization. Thus our second hypothesis:

H₂: The positive effect of posting a starting price on the evaluation of a customized product increases with the importance of customization to the consumer.

Third, the impact of a starting price depends on the malleability of consumers' preferences. Specifically, weight α for a relative expert in the category is likely lower than for a relative novice. Similarly, we expect novices to be comparatively more affected by the level of the starting price, which they may use to infer the quality of the baseline option, so that a lower starting price is associated with a less desirable benchmark, enhancing the comparative value of the customized product:

H₃: Posting lower starting prices boosts the evaluation of a customized product, with category novices being more impacted by this cue than experts.

Fourth, the model suggests that there are cases where the announcement of a starting price hurts the evaluation of customized products. This occurs when we market to people seeking conformism and for whom $u(x_0) < u(x_b)$ and baseline options are inherently appealing. For these consumers, our theory predicts the following effect:

H₄: For consumers who have a principled preference for (aversion to) baseline, undifferentiated options, the evaluation of a customized product decreases (increases) when a starting price is posted.

We now turn our attention to four experiments that provide tests of these hypotheses and evidence in support of the theory.

EMPIRICAL APPROACH

Our empirical demonstration comprises four experiments in which participants considered customized goods in the presence or absence of starting prices. We refer to product and service markets where customization is commonplace: clothing, consumer electronics, footwear, and hospitality. Experiments 1 and 2 test H₁ and H₂, showing that consumer product judgments are more responsive to the match quality and personal importance of customization when a starting price is posted than otherwise, respectively. These experiments also track evidence of the underlying psychological process. Experiment 3 tests H₃ by comparing the purchase probability of category novices and experts across starting prices of different amounts, revealing that our intervention affects only the judgments of novices. Finally, experiment 4 tests H₄, showing that the higher engagement spurred by the announcement of a starting price will actually decrease the value of customized products for buyers who favor interdependence over independence.

In experiment 1, participants were asked to evaluate two Dell laptop computers, one that was personalized and recommended by the seller and one that was self-configured through a customization process. This treatment is within-subjects to reflect real-life access to different levels of participation in the choice process. There is considerable evidence that customer participation should be a valued ingredient of customization because of its relation to preference matching: the literature shows that people normally presume that self-determination, control, and design freedom lead to better-fitting and more satisfying products (Bendapudi and Leone 2003; Franke et al. 2010; Herd and Moreau 2012). Based on H₁, we expected that posting a starting price would make participants more appreciative of this ingredient, so that the valuation of the second (customized) laptop increases relative to the first (merely personalized) laptop.

Participants in experiment 2 were primed with a hedonic or a utilitarian motivation for the purchase of a customized pair of jeans. This treatment is between-subjects, as we cannot assume that participants envisage two alternate decision goals in the same task. The literature suggests that consumers pursuing a goal that is more hedonic than utilitarian in nature derive greater pleasure from customization because the social benefits from self-expression or signaling are more relevant and meaningful (Botti and McGill 2011). Accordingly, H₂ predicts that the valuation of the pair of jeans in consideration of a hedonic goal relative to a utilitarian goal is greater when a starting price is announced.

We use a moderation-of-process design to explore the underlying psychological mechanism in each of these experiments (Sigall and Mills 1998; Spencer, Zanna, and Fong 2005). Moderation-of-process calls for tests of two key assumptions: (1) The proposed moderator variable (our pricing intervention) influences the proposed mediator variable (perceived match quality in experiment 1, importance of customization in experiment 2), and (2) There is no plausible explanation for the effect of the proposed moderator on the indirect relation between the independent variable (customer participation in experiment 1, purchase motivation in experiment 2) and the dependent variable (evaluation of the customized product) other than the proposed mediator. Our theory contends that posting a starting price guides attention to the benefits of customization. The experiments manipulate two key ingredients, and we expect participants to be more responsive to these treatments when they encounter a starting price than when they do not. We then rely on related findings in the pricing literature and on direct tests of alternative explanations to argue against other plausible mechanisms.

In experiment 3, every participant was asked to evaluate the same pair of customized Nike running shoes. Participants encountered a low, medium, or high starting price, or no starting price at all. According to H₃, a lower starting price reduces the desirability of the baseline option and, correspondingly, heightens perceptions of customized outcomes. However, this effect is conditional on the initial malleability of consumers' preferences. Research certainly indicates that with greater familiarity come greater clarity and conviction, and, importantly, lesser susceptibility to contextual factors (Franke, Keinz, and Steger 2009; Kramer 2007; Puligadda et al. 2010). In the experiment we measured expertise, anticipating lower starting prices to improve the valuation of the customized running shoes for novices but not for experts.

Finally, experiment 4 illustrates a situation where the announcement of a starting price hurts the customizing firm. The preceding experiments take the perspective of a consumer who would value customization but may or may not fully appreciate its benefits, with starting prices predicted to stimulate deeper engagement. In fact, the different scenarios faced by participants all primed an initial interest in the customized product. Yet, in the review of the literature we pointed to instances where shoppers specifically prefer default configurations or some mainstream or generic option. H₄ makes the argument that announcing a starting price motivates consumers who naturally disdain customization to resist buying it. The rationale for this prediction is consistent with our theory: if starting prices draw attention to baseline versions of customizable products, consumers who are attracted to such goods are further encouraged to make a purchase.

In the experiment, we capture participants' attitudes toward customization by their tendency to pursue personal goals and to adhere to social preferences. We use Singelis' (1994) self-construal scale to measure the degree to which people define themselves in isolation to others or in relation to a larger

collective. Collectivistic (interdependent) consumers care to express their interdependence and connectedness, and they are therefore more likely to rely on external factors, act in accordance with the expectations of others, and shun customization. Individualistic (independent) consumers, on the other hand, display singularizing behaviors that make customization a more attractive proposition. Kramer et al. (2007) and Herd and Moreau (2012) have successfully studied the same or similar distinctions directly in the area of customization. We then test the individual and interaction effects of this personality trait and of our pricing intervention on the choice between tasting menus (the baseline options) and a à la carte dining experience (the customized product) in a restaurant setting.

EXPERIMENT 1

Participants

Participants (n = 86) were registered members of a subject pool managed by a business school in the United Kingdom. At the time of the experiment, this subject pool had 5,098 active members, of which 62% were female and 81% were completing undergraduate education. The median age was 24 years old. Participants were recruited via e-mail and assigned at random to one of two conditions. They were informed that the research examined consumer decision making, that there were no right or wrong answers to the questions, and that they should rely exclusively on their preferences when responding. Participation was voluntary, compensated by a £10 payment on completion. The experiment was grouped with several unrelated tasks to fill a one-hour laboratory session.

Method

The stimulus describes the possible purchase of a Dell laptop computer from the company's online store. Participants first read that Dell currently manufactures three models, each customizable along seven key dimensions. Critically, in one version of the scenario we added "prices for these laptop computers start from £478," while in the other version we omitted this detail.

Next, participants were introduced to two shopping tools developed by the company to aid decision-making. One is Dell's Product Finder, which takes users through a brief questionnaire on past and intended usage to recommend a personalized laptop configuration that builds on the baseline version of any of the three models. The other is Dell's Personal Configurator, where users control the specification process by manually specifying the levels of all customizable dimensions.

At this point, participants learned that they decide to test both tools on the Dell XPS15. They were then shown a table comparing the output (final specifications and purchase prices) of the Product Finder and the Personal Configurator. This information is reproduced in table 1.

 Insert table 1 about here

The stimulus closes with a series of questions. For both configurations of the XPS15, we asked participants to indicate purchase intent (1 = “not at all likely,” and 7 = “very likely”) and evaluate the products’ fit with personal preferences (1 = “very bad fit,” and 7 = “very good fit”), the percentage of attributes that are customized (0-100%), overall quality (1 = “low quality,” and 7 = “high quality”), and purchase price (1 = “very inexpensive,” and 7 = “very expensive”).

Results and Discussion

The primary dependent measure is purchase intent. We examine responses in a 2 (customer participation) \times 2 (starting price) mixed-factorial analysis of variance (ANOVA). The first factor is a repeated measure that characterizes Dell’s shopping tools in terms of relative buyer involvement: “low” for the Product Finder and “high” for the Personal Configurator. This analysis shows a main effect of customer participation: $M_{\text{High}} = 4.70$ vs. $M_{\text{Low}} = 3.62$; $F(1, 84) = 14.27$, $p < .001$. As discussed, this result is consistent with the argument that active participation improves the perceived match between product attributes and preferences and, in turn, boosts the appeal of the customized outcome (Bendapudi and Leone 2003; Franke et al. 2010; Herd and Moreau 2012). We test this causal sequence next. The analysis also reveals a main effect of starting price, with participants on average more intent on buying when aware of the initial £478 price point ($M = 4.54$) versus when they were not ($M = 3.78$, $F(1, 84) = 9.10$, $p = .003$).

These effects, however, are qualified by the two-way interaction displayed in the top panel of figure 1 and predicted by H_1 : $F(1, 84) = 4.29$, $p = .041$, $\eta^2 = .05$. We highlight two important elements of this interaction. First, participants reacted to the different levels of participation when the starting price was provided ($M_H = 5.37$ vs. $M_L = 3.70$; $t(42) = 3.79$, $p < .001$), but not when it was removed ($M_H = 4.02$ vs. $M_L = 3.53$; $p = .186$). Second, the announcement of a starting price impacted participants where customization is a priori more beneficial: in the case of the high-participation Personal Configurator ($F(1, 84) = 15.28$, $p < .001$), but not in the case of the low-participation Product Finder ($p = .694$).

 Insert figure 1 about here

Our explanation for this pattern of results is that announcing a starting price activated the baseline version of the XPS15 as a plausible frame of reference, projecting a stark contrast that motivated attention to match quality. Said differently, the prediction is that customer participation influences purchase intent indirectly through the perceived effectiveness of customization, but that this mediation is conditional on the announcement of a starting price. Consistent with a moderation-by-process approach (Spencer et al. 2005), we test this process by first investigating the relation between the manipulation of starting price and the proposed mediator variable, where the latter was measured in the experiment in terms of “fit with

personal preferences.” The bottom panel of figure 1 displays a pattern of ANOVA results similar to that obtained in the analysis of purchase intent: despite the positive association between participation and perceived fit ($M_H = 5.17$ vs. $M_L = 4.64$; $F(1, 84) = 7.36$, $p = .008$), the significant two-way interaction ($F(1, 84) = 6.13$, $p = .015$) clarifies that the relationship was perceived by participants who encountered the £478 starting price ($M_H = 5.51$ vs. $M_L = 4.49$; $t(42) = 3.95$, $p < .001$) and not by those who only saw the £725 final price ($M_H = 4.84$ vs. $M_L = 4.79$; $p = .965$).

The second step is to argue that the impact of announcing a starting price on the relation between customer participation and purchase intent is unlikely to occur via means other than our proposed mediator. To this end, we again emphasize that the pricing literature already contains several demonstrations of the ability of pricing techniques to stimulate attention (Bertini and Wathieu 2008, 2010; Wathieu and Bertini 2007). In addition, we test the plausible alternative account that posting a starting price conditions people’s expectations of customizable goods. The measures we collected seem to reject this possibility, at least in so far as beliefs about the percentage of attributes that are customized (p -values $\geq .228$), the quality (p -values $\geq .207$), and the price (p -values $\geq .137$) for each configuration of Dell’s XPS15 product.

In sum, the data collected in this experiment suggest that the simple inclusion of a starting price in a purchase situation can increase people’s appreciation for the match quality, and therefore value, afforded by customization. This is the underlying argument leading to H_1 : it appears that starting prices help firms and consumers where help is needed most, where the benefit of opting for customization is greatest.

EXPERIMENT 2

Participants

Participants ($n = 120$) were registered members of a subject pool managed by a business school in the United States. At the time of the experiment, this subject pool had 4,223 active members, of which 58% were female and 87% had completed undergraduate education. The median age was 26 years old. Participants were recruited via e-mail and assigned at random to one of four conditions. They were informed that the research examined consumer decision making, that there were no right or wrong answers to the questions, and that they should rely exclusively on their preferences when responding. Participation was voluntary, compensated by a \$5 payment on completion. The experiment was grouped with several unrelated tasks to fill a 20-minute online session.

Method

The experiment manipulates two independent measures in a 2 (purchase motivation) \times 2 (starting price) full-factorial design. Participants were presented with a scenario describing the purchase of a pair of jeans. This scenario opens with information on the reason for the purchase. Specifically, one group of

participants read that they are interested in a pair of jeans “that will be comfortable” and therefore should consider “how the jeans will feel when wearing.” The other group read instead that they are interested in a pair of jeans “whose construction is of high quality” and therefore should consider “how well the jeans are made.” Our intention was to manipulate the judgment criterion emphasized by participants such that the hedonic or utilitarian aspect of the purchase carried relatively more weight, respectively.

Next, participants were told that they have a particular model in mind, named Ranger. As in experiment 1, some participants now read “the starting price for this particular product is \$110,” while the remainder proceeded without this instruction. All participants were then directed to a table listing eight features that can be customized and the corresponding choice options (see table 2). The scenario concludes by revealing the configuration preferred by the participant together with its purchase price of \$185.

 Insert table 2 about here

Participants provided answers to eight questions. First, they evaluated the customized jeans on attractiveness (-5 = “very unattractive,” and 5 = “very attractive”), goodness (-5 = “extremely bad,” and 5 = “extremely good”), and desirability (-5 = “very undesirable,” and 5 = “very desirable”). We then asked them to assess the importance of customization in the category (-5 = “not at all important,” and 5 = “very important”). Third, participants evaluated the \$185 purchase price (-5 = “very low,” and 5 = “very high”), estimated the delay between purchase and delivery (in days), and judged how much control they exerted over the design of the product (-5 = “very little control,” and 5 = “a lot of control”). We measured delay to get a sense of the extent of customization assumed by participants. Finally, they indicated which of two criteria influenced their assessment the product (1 = “I only focused on how these jeans will feel,” and 9 = “I only focused on how these jeans are made”). This question serves to validate the manipulation of purchase motivation.

Results and Discussion

Our analysis starts with the manipulation check. A 2×2 ANOVA confirms the intended main effect of purchase motivation ($F(1, 116) = 22.64, p < .001$), with participants primed with the utilitarian goal reporting a higher average score ($M = 5.67$) than those primed with the hedonic goal ($M = 3.93$). Neither the main effect of starting price nor the two-way interaction is significant in this instance (p -values $\geq .644$).

Next, we turn to the three evaluative judgments, which we examine as a composite score (Cronbach’s $\alpha = .94$). For ease of exposition, we report scale scores using positive values from 1 to 11. The ANOVA shows a main effect of starting price ($F(1, 116) = 5.37, p = .022$), with participants who

encountered the starting price on average providing higher scores ($M = 7.58$) than those who only saw the \$185 final price ($M = 6.72$). Meanwhile, we fail to observe an overall effect of purchase motivation ($p = .208$), though directionally the data support the argument that customization is more important, and presumably more valuable, to consumers prioritizing a hedonic goal—a setting in which the significance of expressing one’s identity is amplified (Botti and McGill 2011).

In support of H_2 , we point to the significant two-way interaction displayed in the top panel of figure 2 ($F(1, 116) = 4.18, p = .043, \eta^2 = .04$). In particular, we note that participants presented with the initial \$110 price point responded as the literature predicts: participants primed with the hedonic goal found the jeans more appealing ($M = 8.18$) than those primed with the utilitarian goal ($M = 6.97, F(1, 116) = 5.39, p = .022$). Yet, participants aware only of the final price provided similar valuations irrespective of the hedonic ($M = 6.58$) or utilitarian ($M = 6.87$) goal ($p = .580$). We again see that in cases where customization is expected to create more benefit, when the purchase is serving predominantly a hedonic objective, posting a starting price significantly boosts valuation: $F(1, 116) = 9.51, p = .003$. Our intervention had no noticeable effect on the scores of participants primed to think of the purchase with respect to a more utilitarian motivation ($p = .847$).

 Insert figure 2 about here

As was the case in experiment 1, we investigate the underlying process in two steps. The bottom panel of figure 2 displays the participants’ assessment of the importance of customization in the category. An ANOVA shows a marginal effect of starting price ($F(1, 116) = 2.88, p = .092$) and, more important, a significant interaction between purchase motivation and starting price ($F(1, 116) = 4.19, p = .043$). Pairwise comparisons further reveal an effect of starting price on participants primed with the hedonic motivation ($M_{\text{Present}} = 7.76$ vs. $M_{\text{Absent}} = 5.97; F(1, 116) = 7.00, p = .009$), but no effect on participants primed with the utilitarian motivation ($M_{\text{P}} = 6.20$ vs. $M_{\text{A}} = 6.37; p = .806$). It appears that our manipulation of starting price affected the relation between purchase motivation and importance of customization, the proposed mediator, much like it affected the relation between purchase motivation and valuation.

Second, we report the results of three additional ANOVAs intended to rule out plausible alternative explanations. The data contain no indication that participants differed in their views of the jeans’ price (p -values $\geq .551$), of the likely delay between purchase and delivery (p -values $\geq .428$), or of how much control they exerted over the design of the product (p -values $\geq .669$). These null results, together with the evidence already in the literature on the motivational role of price, give us confidence that the announcement of a starting price is unlikely to have conditioned participants’ expectations of the jeans.

Rather, it appears that our intervention accentuated the importance of customization for the purchase, in turn impacting the judgments of participants.

EXPERIMENT 3

Participants and Method

Participants ($n = 112$) were recruited from the same subject pool and following the same procedure as those used in experiment 1. They were presented with a scenario describing the purchase of running shoes. The text explains that participants are interested in purchasing a pair of Air Pegasus 27, the latest version of a popular model sold by Nike. A picture of this product is included in the stimulus. We further explain that the participant is interested in purchasing from Nike.com, the company's online store, and that one can buy the base version of the product or customize three of its key features: the size of the varus wedge, the type of sockliner, and the midsole density. Brief descriptions of these characteristics are also included in the stimulus. Importantly, three groups of participants read that the starting price for the Air Pegasus 27 is £40, £60, or £80, respectively. The fourth group proceeded without this instruction. The stimulus concludes by informing all participants that they are keen on customizing the product and that the choices they make lead to a purchase price of £85.00.

The experiment manipulates one between-subjects factor, starting price, across four levels. The main dependent variable is purchase probability (1 = "very low," and 7 = "very high"). We also asked participants to rate their level of expertise with the category (1 = "very low," and 7 = "very high"). Third, we collected measures of perceived product quality (1 = "low quality," and 7 = "high quality") and price (1 = "very inexpensive," and 7 = "very expensive").

Results and Discussion

We examine purchase likelihood through a linear regression of mean-centered expertise scores, the starting price differential (the difference between the posted starting price, if any, and the \$85 price of the customized Air Pegasus 27), and their interaction. The starting price differential is set to zero when a starting price is not announced. As expected, estimates show a main effect of expertise ($\beta = .40$, $p = .001$) and a positive effect of starting price differential ($\beta = .02$, $p = .030$). Critically, the coefficient of the two-way interaction term is significant and negative, corroborating H_3 : lower starting prices improved the probability of purchase, but this effect diminished with expertise ($\beta = -.01$, $p = .029$). Similar analyses give no indication that participants differed in their perceptions of the product's quality (p -values $\geq .387$) or price (p -values $\geq .141$).

To study the interaction, we generate conditional effects at the 10th, 25th, 50th, 75th, and 90th percentile of expertise. This analysis shows a significant positive effect of the starting price differential at the first three levels ($\beta_{10} = .04$, $p = .004$; $\beta_{25} = .04$, $p = .004$; and $\beta_{50} = .02$, $p = .052$), but not at the last two levels (p -values $\geq .623$). It appears therefore that our manipulation of starting price had no impact on self-

reported experts. We use the Johnson-Neyman technique to identify the exact rating of expertise above which the effect of starting price was no longer significant (Johnson and Neyman 1936). The score is 3.99, suggesting that in the experiment a moderate level of familiarity with the category was sufficient for participants to be unaffected by our intervention.

EXPERIMENT 4

Participants and Method

The scenario for this experiment describes a dinner celebration among friends at Moto, an upscale restaurant in Chicago. The opening paragraphs contain background information on the restaurant, its Chef Homaro Cantu, and the unique cuisine that is served. Four pictures of signature dishes prepared at Moto are interspersed among the text.

Following this introduction, 95 participants recruited from Amazon's Mechanical Turk marketplace read that patrons are asked to choose one of three standard tasting menus or create their own customized dining experience. The tasting menus comprise 20 popular small dishes carefully selected by the Chef to satisfy a broad clientele. At this point, one group of participants read "prices for the tasting menus start from \$80." The remaining participants did not receive this information. The customized dining experience, in contrast, ensures customers get exactly what they want, giving each person complete freedom to pick 20 dishes from the entire menu. The price of this is option \$140.

The scenario ends with one task and several personality questions. Participants moved a marker to indicate on a 100-point sliding their relative preference between one of the standard tasting menus and the customized dining experience (0 = "I would definitely order one of the standard tasting menus," and 100 = "I would definitely order the customized dining experience"). They then completed Singelis' (1994) self-construal scale, which measures 12 independent dimensions (e.g., "I am comfortable with being singled out for praise or reward," Cronbach's $\alpha = .75$) and 12 interdependent dimensions (e.g., "Even when I strongly disagree with group members, I avoid an argument," Cronbach's $\alpha = .81$) of the self on separate 1 ("strongly disagree") to 7 ("strongly agree") scales.

Results and Discussion

We ran a linear regression with self-construal, starting price, and the corresponding two-way interaction as independent measures and relative preference as dependent measure. The variable self-construal represents the mean-centered differences between independent and interdependent scale scores, while the variable starting price is a contrast-coded variable capturing our experimental manipulation. The results of the regression show a main effect of self-construal ($\beta = 10.67$, $p < .001$) but no simple effect of starting price ($p = .620$). Importantly, the coefficient of the two-way interaction is significant: $\beta = 8.01$, $p = .002$. We plot estimated means at three values of self-construal in figure 3.

 Insert figure 3 about here

To test H_4 , we first examine the slopes of self-construal at each level of a dummy variable for whether the initial \$80 price point for Moto's three tasting menus was posted or not. The slope of self-construal was significant and positive when this starting price was posted ($\beta = 18.68$, $p < .001$), but not when it was omitted ($p = .485$).

Next, spotlight analyses at one standard deviation above and below the mean of self-construal show significant and contrasting differences across starting price conditions for high and low self-construal participants, respectively. Participants with a high self-construal score display greater individualistic tendencies than other participants in the sample. For them, the announcement of a starting price increased the appeal of the customized dining experience ($\beta = 20.78$, $p = .010$)—an effect that essentially replicates the main result of the other experiments. In fact, the Johnson-Neyman procedure reveals that the effect of starting price is significant and positive at self-construal values equal to or greater than .74.

Participants with a low self-construal score, however, are comparatively more collectivistic. For them, the announcement of a starting price increased the appeal of the standard tasting menu ($\beta = 15.26$, $p = .053$). This last effect corroborates the key prediction of the experiment: that posting a starting price can also benefit consumers who generally prefer baseline options, presumably because doing so confirms the viability and acceptability of the purchase. The effect of starting price is significant and negative for values equal to or less than -1.02.

CONCLUSION

One approach to realize the potential of customization is to tweak the work required from customers—to make the process easier, more intuitive, and simultaneously more likely to identify an ideal option. Another approach is to accept people's uncertainty and confusion vis-à-vis their preferences and engineer the customization process to intelligently guide users toward choices that improve their payoff. In contrast, or in addition, we propose to improve the customer rather than the customization process—to put the customer back into customization. We recommend making consumers more mindful of the benefits of customization through a minimal cue, the starting price, which induces them to draw a stimulating contrast between the customized product and some baseline, undifferentiated, and presumably unappealing alternative.

In support of this alternative, we show that posting a starting price makes consumers more appreciative of customization, boosting evaluation when the benefit is substantial and truly deserving of attention—for instance, when customization is more participative (experiment 1) or when hedonic goals are driving the purchase (experiment 2). This result is good news for firms who provide customization but

may otherwise struggle to profit from the investment. It is also good news for consumers who stand to benefit from realizing the economic and psychological potential of consuming products that better fit their needs and wants.

We also provide evidence that the effect is stronger for (limited to) novices who have a relatively weaker initial sensitivity to the fruits of customization than for experts. In fact, experiment 3 suggests that the announcement of a starting price can cancel out the behavioral limitations of being a novice. Finally, in experiment 4 we find that announcing a starting price helps the cause of people interested in conformity as much as it helps the cause of people craving singularity. A starting price projects a stark comparison to a counterfactual where there is no customization. Just how this comparison is interpreted and used differs depending on the initial orientation of the person contemplating the purchase.

The idea that involvement has a positive effect on the benefit derived from customization was posited by Simonson (2005) and tested Franke et al. (2009). In these articles, involvement related to the product category and was conceptualized as an individual characteristic. In our experiments, involvement relates to the decision making process and is triggered by a feature of the shopping environment, something that the firm can actively control.

An interesting angle to our paper is its contribution to the literature on tensile price claims (Mobley, Bearden, and Teel 1988). That line of work concludes that tensile claims are purposely vague to mislead customers into suboptimal decisions. We propose that even an ambiguous claim can be informative, or at least empowering, illustrating a case where consumers are encouraged to apply greater attention to product benefits. In fact, we could claim that starting prices are the opposite of a gimmick: they stimulate deliberation instead of praying on bounded rationality. But it is important to point out that we only study settings where customization is a choice and adds some benefit, while consumer advocates and regulators often complain of firms that use starting prices to project a favorable price image when in fact all subsequent charges are unavoidable.

The results of our experiments can be used at a very concrete level to help decide whether a starting price should be posted. Simply stated: if consumers are unsecure of their tastes but still care to find what suits them best, announcing a starting price improves the perception of customized offerings—not as a trap that speak only to deal-seeking, but as an anchor that highlight the product’s ability to match preferences or to express one’s unique identity. Starting prices can be used to compete against rival offerings that provide some component of personalization and when the target consumer responds predominantly to hedonic motivations. We also believe that starting prices can be useful to support consumers who do not necessarily want to express specific preferences. They can do this by legitimizing baseline options in a context where there might be an expectation to purchase products that are more tailored to one’s tastes.

At a more abstract level, one can interpret this paper as an essay on engagement as an alternative approach to marketing. While traditional commercial thinking focuses on bringing product benefits to the consumer through the effective implementation of the marketing mix, the tactic examined here proposes to jolt customers into exerting greater effort and conviction in decision making. The fact that price is an ingredient capable of triggering personal relevance and of determining a change in evaluation is intriguing, as conventional thinking presumes that price merely captures or signals value. Moreover, one could also argue that a firm is more likely to find success in guiding people's attention by using an objective market mechanism such as price than by using advertising or some other tactic that runs the risk of being misinterpreted as a clever attempt at persuasion.

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TABLE 1

Technical Specifications and Purchase Price of the Customized Dell XPS15 Laptop Computer

	Product Finder	Personal Configurator
Model Name	XPS15	XPS15
Screen Size	15.6 Inches, HD	15.6 Inches
Memory Size	6144 MB	8192 MB
Battery Life	Up to 9 Hours	Up to 7 Hours
Hard Drive Space	750 GB	840 GB
Processor Speed	2.20 GHz	3.40 GHz
Optical Drive	8× DVD/Blu-Ray	8× DVD
Operating System	Windows 7 Ultimate	Windows 7 Premium
Price	£725.00	£725.00

TABLE 2
Customizable Dimensions and Choice Options for a Pair of Jeans

Dimension	Choice Options
Fit	Classic, Straight, Skinny, Boot Cut, Tapered
Stitching	Double, Triple
Wash Type	Classic, Light, Vintage, Faded
Coin Pocket	Yes, No
Fabric Weight	Light (12oz), Medium (14oz), Heavy (15.5oz)
Fly	Zipper, Buttons
Finish	Clean, Distressed, Whiskered, Distressed and Whiskered
Garment Dyeing	Single, Double

FIGURE 1

Purchase Intent for and Perceived Fit of Two Dell XPS15 Laptop Configurations

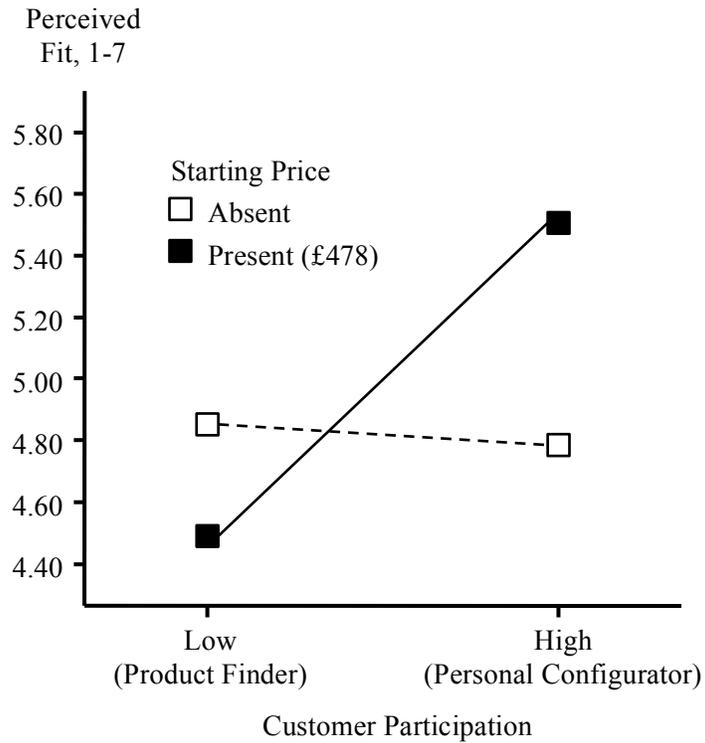
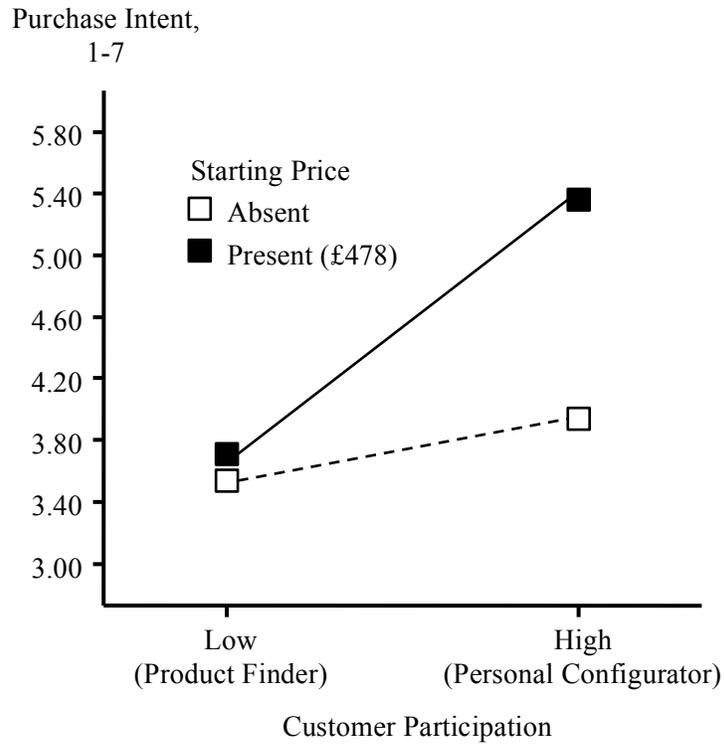


FIGURE 2

Composite Valuation of and Importance of Customization for the Ranger Jeans

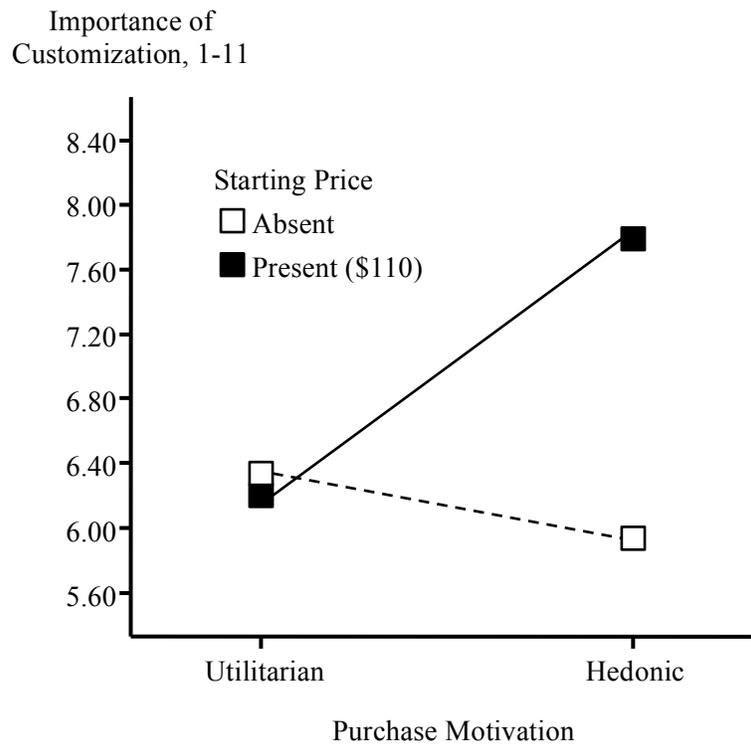
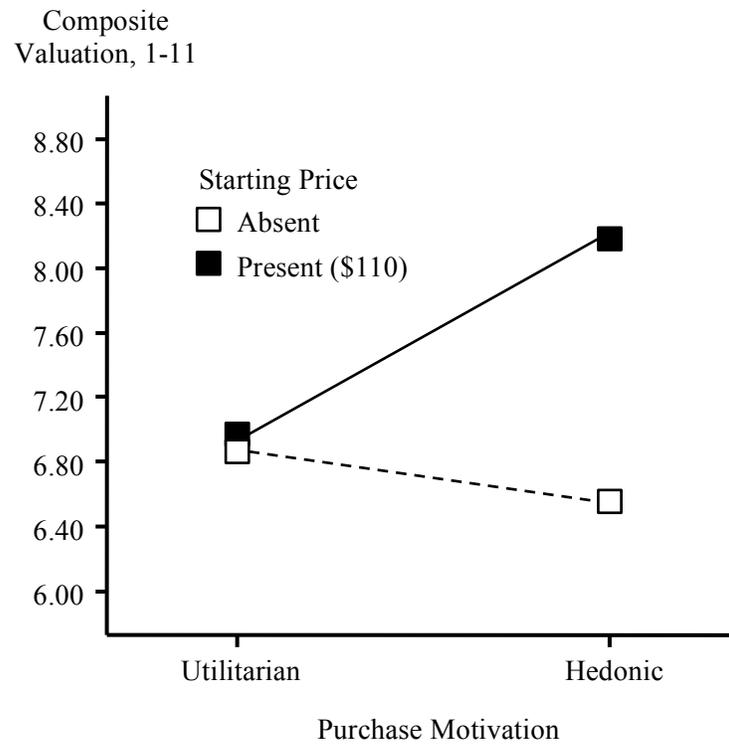


FIGURE 3

Relative Preference between Standard Tasting Menus and the Customized Dining Experience

