

Pay What You Want: A New Participative Pricing Mechanism

Pay what you want (PWYW) is a new participative pricing mechanism in which consumers have maximum control over the price they pay. Previous research has suggested that participative pricing increases consumers' intent to purchase. However, sellers using PWYW face the risk that consumers will exploit their control and pay nothing at all or a price below the seller's costs. In three field studies, the authors find that prices paid are significantly greater than zero. They analyze factors that influence prices paid and show that PWYW can even lead to an increase in seller revenues.

Keywords: pay what you want, pay as you wish, participative pricing, service pricing, voluntary contributions

Companies can attempt to differentiate themselves from competitors through their products and services or through their marketing strategy. A key element of the marketing strategy is companies' pricing strategy. Tellis (1986) discusses various pricing strategies that companies can pursue. The key objective of pricing strategies is maximizing sellers' profits by capturing consumers' heterogeneous product valuations and accounting for competition and cannibalization. Furthermore, consumers' reactions to different pricing strategies may not be purely rational but rather driven by behavioral aspects, such as perceptions and preferences. Therefore, consumers' perceptions of different pricing models may be an additional opportunity for companies to differentiate themselves from competition (by applying a preferred or innovative pricing mechanism).

Participative pricing mechanisms, such as auctions and name your own price (NYOP), can be considered innovative, in the sense of being unconventional, because they involve consumers in the price-setting process. Thus, innovative pricing models can be anything that is different from the usual way of setting the price for a specific product. With the advent of the World Wide Web, auction-based pricing mechanisms have been perceived as innovative in selling small-value items, such as collectibles (Lucking-Reiley 2000). Similarly, the NYOP mechanism, in which consumers bid for a product against an undisclosed threshold price set by the seller, can be considered innovative (Amaldoss and Jain 2008; Chernev 2003; Spann and Tellis

2006). Common aspects of these mechanisms are that they allow for differentiated prices accounting for consumer heterogeneity and enable consumers (buyers) to exert some control over the final price for the transaction (i.e., participate in the price-setting process; Spann and Tellis 2006). Chandran and Morwitz (2005) find that participative pricing, and thus the higher perceived control of the buyers, leads to a greater intent to purchase. Moreover, they show that consumers who have experience with participative pricing mechanisms prefer them to predetermined (i.e., posted) prices. In this case, the participative pricing model may attract consumers' attention, potentially leading to (new) customers. Furthermore, the mechanism may increase a seller's popularity by word of mouth. We conjecture that participative pricing models can be perceived as (1) innovative and (2) preferable owing to their inherent delegation of some control over the price-setting process to consumers.

Pay what you want (PWYW) is a participative pricing model in which a buyer's control over the price setting is at a maximum level; the buyer can set any price above or equal to zero, and the seller cannot reject it. The most prominent, recent example of an application of PWYW is that of the rock band Radiohead. For two months, the band offered fans the chance to download its new album from its Web site and to pay as much as they wanted. The album was downloaded more than two million times, and the band reported afterward that this price format was profitable.¹ Among other online downloads (e.g., www.sheeba.ca,

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¹Radiohead made the offer between October 10 and December 10, 2007. Fans could even pay nothing if they wanted. Only the credit card handling fee of 45p was mandatory. In total, the album was downloaded approximately two million times, and prices ranged from 45p (the transaction fee) to £99.99. According to the lead singer, Thom Yorke, Radiohead profited from the PWYW format, making more money from digital downloads of "In Rainbows" than from digital downloads of all the band's other studio albums combined (see http://www.wired.com/entertainment/music/magazine/16-01/ff_yorke?currentPage=all).

open-source software), PWYW is also applied in areas such as gastronomy and hotel industries. For example, the Pakistani restaurant Wiener Deewan, in Vienna, has been allowing clients to self-determine the prices for their meals since opening in April 2005. Prices for drinks are fixed, but customers can decide how much they want to pay for the food. According to press reports and direct interviews with the owner, the business model has been successfully established, and the restaurant even expanded just two months after opening. Similar concepts can be found worldwide, such as in Berlin (www.weinerei.com), Seattle (www.terrabyte.org), and Melbourne (www.lentilasanything.com). Thus, PWYW appears to be a pricing mechanism that marketers and researchers should consider.

Given greater purchase intentions and the preference for participative pricing mechanisms (Chandran and Morwitz 2005), consumers may prefer PWYW because of the level of control offered and the novelty of the mechanism. The obvious risk is that customers could exploit their control and pay nothing at all or a price well below the seller's cost. In such a situation, the seller would not survive for long. In contrast to NYOP and auctions, no minimum price that could protect the seller against such low prices is implemented. However, we have observed several sellers that use PWYW successfully and have even expanded their business. Thus, it is worthwhile studying customer usage behavior and acceptance of PWYW as well as the effect of its application on the seller's performance. To the best of our knowledge, no previous research has studied PWYW.

The goal of this study is to explain buyers' pricing behavior in PWYW and to analyze the impact of PWYW on sellers' revenues and unit sales. We structure the remainder of the article as follows: In the next section, we outline the functionality and classification of PWYW and summarize previous research on participative pricing mechanisms to draw important insights into and conclusions from similar pricing mechanisms, such as NYOP and auctions. From related literature, we discuss the motives underlying payment and derive hypotheses for buyer behavior in PWYW. This discussion leads us to our proposed model, which we test empirically with data from three field studies. The three studies test our model of buyer behavior for different products in service industries: a restaurant lunch buffet, movie screenings in a cinema, and hot beverages at a deli. We also analyze the effects of PWYW on sellers' revenues, comparing prices and sales obtained under PWYW conditions with baseline sales at posted prices. Finally, we discuss the implications of our findings.

PWYW

Definition and Classification

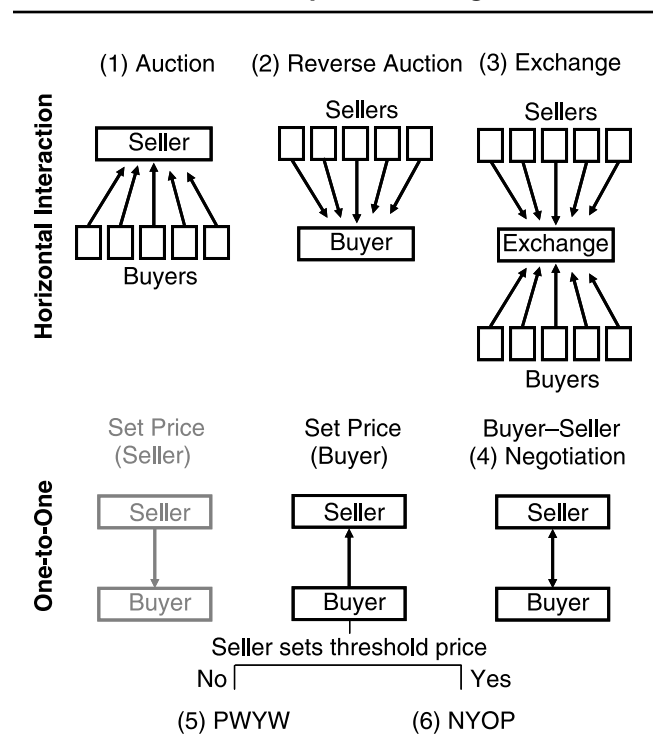
We define PWYW as a participative pricing mechanism that delegates the whole price determination to the buyer. The seller simply offers one or more products under PWYW conditions, whereas the buyer decides on the price. After the buyer has set the price, the transaction automatically proceeds. Thus, the seller must accept the buyer's price and cannot withdraw the product offer.

Pay what you want is classified as a participative pricing mechanism characterized by buyers' participation in the price determination. Our classification (see Figure 1) of alternative participative pricing mechanisms builds on the market-making mechanisms of Dolan and Moon (2000). We distinguish different participative pricing mechanisms in Figure 1 according to the type of interaction: one seller and one buyer ("one-to-one") or several buyers and/or several sellers ("horizontal interaction"). We include the non-participative posted price ("set price") set by a seller as a reference.

The most prominent examples of participative pricing mechanisms with horizontal interaction are (1) classic auctions, in which multiple buyers compete with their (increasing) bids to buy a product from a seller; (2) reverse auctions, in which multiple sellers compete with their (decreasing) bids to sell a product to a buyer; and (3) exchanges, in which multiple sellers and buyers compete on both sides of the market. Participative pricing mechanisms characterized by the interaction between one seller and one buyer are (4) negotiations, in which the buyer and seller haggle over the price for the product, and (5) PWYW and (6) NYOP, which are both characterized by the buyer setting the final price. However, the most important difference between PWYW and NYOP is that in NYOP, the seller can reject a buyer's bid if it is below an undisclosed threshold price set by the seller in advance.

Therefore, NYOP sellers can influence the final price by setting this (minimum) threshold price, thus protecting themselves from having to accept bids that are too low. Cur-

FIGURE 1
Classification of Participative Pricing Mechanisms



rent examples of sellers using NYOP are priceline.com, which specializes in selling flights, rental cars, hotel accommodation, vacations, and cruises; eBay, with its “Best Offer” feature; discount airlines, such as LTU.com and Germanwings.com; and the software seller ashampoo.com. Because priceline.com combines the NYOP mechanism with opaque products such that the actual seller (airline) will be revealed to buyers only after the purchase, it adds horizontal interaction among sellers to its mechanism.

In contrast to NYOP, no minimum threshold price exists in PWYW that could protect the seller against low prices. The seller must accept any price set by the buyer, including a price of zero. Pay what you want does not entail competition among the buyers, unless the seller offers a product of limited availability. In that case, consumers who buy first are served first.

Previous Research on Participative Pricing

Research on participative pricing mechanisms, such as NYOP, auctions, and price negotiations, has recently gained popularity (Chernev 2003; Ding et al. 2005; Kamins, Dreze, and Folkes 2004; Spann and Tellis 2006), though the literature on NYOP is still limited. Participative pricing has become more popular because the Internet provides a direct link to consumers and has made it easier for firms to implement pricing mechanisms, such as auctions and NYOP (Kannan and Kopalle 2001). In what follows, we limit our discussion to a brief summary of some key findings in this area. Although auctions and NYOP are mostly implemented by online retailers, the following findings on participative pricing mechanisms refer to both online and offline applications.

Participative pricing mechanisms allow for (individually) differentiated prices as an outcome of the interaction, which accounts for heterogeneous valuations of consumers and, thus, increased efficiency (Spann and Tellis 2006). In addition, the seller can serve buyers who would otherwise be priced out of the market (Bakos 1998). This also implies a benefit to the buyer arising from the pricing mechanism. Sellers can attract new customers’ attention as a result of the mechanism’s high level of innovativeness by permitting the consumers to participate in the price-setting process. Chandran and Morwitz (2005) show that consumers prefer to participate actively in setting the final price rather than to accept posted prices. Moreover, their results indicate that a higher perceived control on behalf of the buyers led to a greater intent to purchase. Consumers have greater fairness perceptions and satisfaction when they play a role in the price-setting process than when the retailer sets the prices (Haws and Bearden 2006). Haws and Bearden (2006) find that prices set through bidding were perceived as fairer than posted prices, even when the participants paid prices that were (equal to or) higher than their reference price. Finally, participative pricing mechanisms can provide useful information about consumers, such as their willingness to pay (Spann, Skiera, and Schaeffers 2004). For example, power sellers on eBay, who repeatedly sell similar products in auctions, can use the individual prices paid for sales forecasts. Pay-what-you-want sellers can also use the individual

prices for internal forecasting and for adapting the cost structure to the actual prices paid.

Buyer Behavior at PWYW

In a PWYW setting, consumers can determine any price for the product they buy. Theoretically, the range of possible prices is unlimited starting from zero because no threshold price exists. An economically rational customer, who maximizes his or her single purchase utility, may exploit the mechanism to pay a price of zero, but we observe from successful implementations of PWYW, in both online and offline applications, that this is predominantly not the case. As an example of typical behavior, according to the owner of the restaurant Wiener Deewan, which offers meals under PWYW conditions, prices paid range from €0 to €20, with a mean price of €7.49. Consumers’ motives differ from the assumption in neoclassical economic theory that consumers purely maximize their utility. Thus, other factors must play a role when the PWYW price is determined. Subsequently, we first discuss motives as to why we expect consumers to pay positive prices at PWYW, and then we develop a model to explain prices paid to PWYW sellers.

Motives Underlying Payment

Drawing on Fiske’s (1992) theory of social relationships, Heyman and Ariely (2004) define two general categories to describe exchange relationships: money-market relationships and social-market relationships. In money-market relationships, exchange between at least two parties is regulated by the use of a value or utility metric (e.g., the price for a product). In contrast, social-market relationships are characterized by nonpayment, and exchange partners act according to social exchange norms (i.e., norms of reciprocity, norms of cooperation, or norms of distribution), whereas money-market relationships invoke market exchange norms (Shampanier, Mazar, and Ariely 2007). Pay what you want dissolves the usual money-market relationship between seller and buyer by leaving the complete price determination to the buyer. Because a buyer can pay any price, including zero, the relationship is governed less by market exchange norms than by social exchange norms, which in turn influence the buyer’s behavior (Osterhus 1997). This involves norms of distribution, which imply that people seek an equal allocation of resources and which are particular strong in democratic societies (Elster 1989). Violating these social exchange norms—in the case of PWYW, by paying nothing at all—may result in distress and social disapproval by other people (Ariely, Bracha, and Meier 2007; Elster 1989; Venkatesan 1966). Therefore, the benefit of nonpayment must be greater than the anticipated distress and fear of disapproval associated with the violation of social norms. Relatedly, Kahneman, Knetsch, and Thaler (1986) find that people are more willing to incur a loss than to accept an unequal distribution. Lynn (1990) provides an additional explanation for why consumers may pay more than zero. He finds that customers of a restaurant chose to pay more than they needed to for entrees they had already consumed. Lynn concludes that some people might

use the price as an impression management tool to avoid appearing poor or cheap.

Because our empirical study is embedded in a democratic society, we expect that most consumers will conform to social norms and may not want to appear cheap in face-to-face interactions. Thus:

H₁: Prices paid at PWYW in face-to-face interactions are greater than zero.

Model of Prices Paid

Our model of prices p_{ij}^{PWYW} paid at PWYW consists of two principal components, buyers' reference price, RP_{ij} , for the product (the amount of money they think it normally costs) and the proportion, a_{ij} , of consumer i 's RP_{ij} that he or she is willing to discharge to the seller for a specific product j . Thus, the remaining $(1 - a_{ij})$ proportion of RP_{ij} is the customer's deal profit. Equation 1 states our basic model:

$$(1) \quad p_{ij}^{PWYW} = a_{ij} \times RP_{ij} \quad a_{ij} \geq 0.$$

Neoclassical economic theory would suggest that consumers pursue a strategy to maximize their utility, resulting in $a_{ij} = 0$. Mostly, however, we can observe successful applications of PWYW, in which buyers pay positive prices; that is, $a_{ij} > 0$. This leads to a question about the relevant factors that motivate buyers to discharge part of their reference price to the seller, thus reducing their deal profit. In the following, we derive hypotheses pertaining to the determinants of the final price paid. Therefore, we differentiate between drivers affecting a_{ij} and the consumer's reference price.

Drivers of the Proportion of a Buyer's Reference Price Discharged to the Seller

Recently, several studies in experimental economics have provided evidence that consumers are strongly motivated by concerns of fairness and reciprocity (Andreoni and Miller 2002; Bolton and Ockenfels 2000; Fehr and Schmidt 1999, 2003; Rabin 1993). Rabin (1993) developed the concept of the fairness equilibrium, which is based on the assumption that people help those who are kind to them and punish those who are unkind. Microeconomic experiments, such as the "ultimatum game" (Bolton 1991; Fehr and Schmidt 2003; Henrich 2000; Roth 1995), also weaken the hypothesis that consumers mostly act in a selfish and rational manner. Instead, the results indicate that many consumers are willing to cooperate and that their behavior is strongly driven by fairness concerns. In the ultimatum game, two participants (consumers) interact in the allocation of an endowment. The proposer determines the allocation of the endowment, such as a fixed sum of money between him- or herself and the responder. The responder can either accept or reject the proposal. If the responder decides to reject, neither of them receives anything. Neoclassical economic theory, which assumes that people maximize utility, would suggest that the proposer offers the responder the smallest amount possible and that the responder always accepts because even a small amount of money is better than no money at all. However, empirical results show that a 50:50

split is common and that responders often reject proposals of less than 20%. This behavior is explained by individual preferences for a balance of equity and a fair split (Roth 1995). The practice of voluntary contributions and tipping also provides empirical evidence that consumers pay for a service even if they do not need to do so. According to equity theory, fairness in social exchange implies a proportional allocation of resources (Adams 1965; Carrell and Dittrich 1978). Equity theory acknowledges that subtle and variable individual factors affect each consumer's assessment and perception of his or her relationship with relational partners (Guerrero, Andersen, and Afifi 2007). If a consumer perceives the ratio of his or her inputs to outcomes as equivalent to that of his or her relational partner, the consumer will consider that he or she has been treated fairly. Conversely, when a consumer participates in inequitable relationships, he or she will become distressed. In return for the received product or service, we expect that the buyer will reward the seller in appropriate monetary units to keep the balance of fairness. If a buyer chooses a high deal profit (low a_{ij}), he or she will need to anticipate the distress of the incurred inequity. Thus:

H₂: Fairness has a positive influence on the proportion (i.e., a_{ij}) of a buyer's reference price discharged to the seller.

Beyond the concern of fairness, we believe that buyers also pay higher prices because of altruism (Maner and Gailiot 2007; Piliavin and Charng 1990), defined as a "behavior carried out to benefit another without anticipation of rewards from external sources" (Macaulay and Berkowitz 1970, p. 3). The existence of such pure altruism—that is, when a person does not care for any reward per se (Andreoni 1990)—is evident when people donate to children's villages or AIDS funds or when they tip waiters for bad service. Experimental results, derived from the "dictator game," also emphasize the importance of altruism to explain economic behavior (Andreoni and Miller 2002; Bolton, Katok, and Zwick 1998; Forsythe et al. 1994). In the dictator game, the proposer determines a split of money between him- or herself and the responder. In contrast to the ultimatum game, however, the responder has no option to reject the offer and must accept any proposal. The responder's role is entirely passive. Several researchers have shown that, on average, proposers allocate money to the responders and thus reduce their deal profit, which implies pure altruistic behavior. On the basis that consumers donate or allocate money to others without expecting a reward, we can conclude that pure altruistic behavior actually exists. Therefore, we assume that buyers with altruistic characteristics set a higher a_{ij} .

H₃: Altruism has a positive influence on the proportion (i.e., a_{ij}) of a buyer's reference price discharged to the seller.

Previous literature has distinguished two types of satisfaction: transaction-specific and cumulative satisfaction. Transaction-specific satisfaction refers to consumers' postchoice evaluations of a particular product transaction or service encounter (Jones and Suh 2000; Olsen and Johnson 2003). In contrast, cumulative consumer satisfaction is an overall evaluation of a product or service based on the con-

sumer's total purchase and consumption experience to date (Anderson, Fornell, and Mazvancheryl 2004; Fornell 1992). In our study, satisfaction refers to the consumer's postconsumption evaluation of the perceived quality and/or service. If the seller offers a product with high quality, consumers' satisfaction and utility increase (Anderson, Fornell, and Lehmann 1994; Anderson and Sullivan 1993; Bolton 1998; Fornell 1992; Fornell et al. 1996). Therefore, satisfaction may lead to a higher a_{ij} .

H₄: Satisfaction has a positive influence on the proportion (i.e., a_{ij}) of a buyer's reference price discharged to the seller.

Repeated purchases at the same store or a long-term relationship with the seller may also have an impact on the buyer's decision making. The purpose of a repeated purchase or, even stronger, the loyalty to a store may increase the price paid as a result of strategic behavior. Paying a price that does not even cover the expenses might harm the seller so much that the seller will not be able to survive. In the context of tipping, several researchers have examined the relationship of tip size and patronage frequency. Lynn and McCall (2000) and Conlin, Lynn, and O'Donoghue (2003) find a significant, positive correlation between these two variables. Bodvarsson and Gibson (1997) observe that, on average, regular buyers in seven restaurants tipped 1.05% more of the bill than others. Azar (2007) provides a possible explanation for such behavior. He assumes that customers fear uncomfortable feelings or embarrassment in the future when they tip less. Therefore, we expect that buyers pay higher prices because (1) they want the seller to survive and (2) they fear the feeling of embarrassment in the future when they pay a low price.

H₅: Loyalty has a positive influence on the proportion (i.e., a_{ij}) of a buyer's reference price discharged to the seller.

In addition, price consciousness (when consumers focus exclusively on paying low prices) (Lichtenstein, Ridgway, and Netemeyer 1993) and income may affect the proportion of a consumer's reference price discharged to the seller. Price-conscious consumers are likely to shop for special offers and to react to price savings. From this behavior, we expect that buyers will try to enhance savings and increase their deal profit under PWYW conditions.

Both neoclassical economic theory and theories on fairness predict that consumers with a higher income contribute more to the public good, all things being equal (Borck, Frank, and Robledo 2006). Most empirical studies of voluntary contributions prove such a positive correlation. Many research articles (Hamilton, Sunding, and Zilberman 2003) also find evidence for a positive income effect on consumers' willingness to pay. Thus, we control for price consciousness and income in our analyses.

The Buyer's Internal Reference Price

In the marketing literature, reference prices are considered to have a strong impact on consumer behavior (Mayhew and Winer 1992; Rajendran and Tellis 1994). Empirical studies on consumers' price evaluations have shown that consumers use past prices to create a reference level that

affects their perceptions of current prices (Adaval and Monroe 2002; Della Bitta and Monroe 1974; Kalwani and Yim 1992; Lattin and Bucklin 1989; Winer 1986). These internal reference prices are created in different ways; consumers can derive them from the previous period's price (Winer 1989) or from a weighted or smoothed average of past prices (Greenleaf 1995; Kalyanaram and Little 1994). They have also been defined as the price of the last brand purchased (Hardie, Johnson, and Fader 1993; Kalwani et al. 1990).

For example, if consumers perceive a specific product as being on sale often, their internal reference price decreases, leading to a decreasing willingness to pay (Krishna 1991). This finding is related to the notion of constructed preferences; consumers are often uncertain about their valuation of a product and use cues to determine their willingness to pay (Bettman, Luce, and Payne 1998). Such cues can be consumers' internal reference price or an external reference price for the same or a competing product. We use the internal reference price in our model because external reference prices are often not available when products are offered under PWYW conditions. In addition, consumers form the internal reference price on the basis of externally provided prices, such as advertised prices (Grewal, Monroe, and Krishnan 1998). Another reason we include the internal rather than external reference price in our model is due to the pricing mechanism itself. Applying PWYW, sellers can benefit from (individually) differentiated prices. With a given external reference price, the seller will probably reduce high variances of prices paid. In our studies, we operationalize the reference price as the memorized price of past purchases of the same (or comparable) products or services.

Integration of the drivers that affect the proportion a_{ij} of customer i 's RP_{ij} for product j he or she is willing to discharge to the seller into the model of Equation 1 yields the following estimation model to explain prices set by consumers under PWYW conditions:

$$(2) \quad p_{ij}^{PWYW} = \beta_0 + (\beta_1 \times Fair_{ij} + \beta_2 \times Altru_i + \beta_3 \times Satis_{ij} + \beta_4 \times Loy_{ij} + \beta_5 \times PriceConsc_i + \beta_6 \times Income_i) \times RP_{ij} + \epsilon_{ij}.$$

Empirical Studies

To test our model (Equation 2), we conducted three field studies with products in service industries. Thus, we observed three different product categories: (1) a lunch buffet meal at a restaurant, (2) movie screenings at a cinema, and (3) hot beverages at a delicatessen. In addition, we analyzed the impact of PWYW on revenues and sales. First, we describe the experimental design of the different field studies. Second, we evaluate our proposed model for each field study. Third, we analyze the impact of the implementation of PWYW on the sellers' revenues and sales.

Study Design

Study 1. We conducted our first field experiment at a Persian restaurant in downtown Frankfurt (Germany) in

November and December 2007. For a period of two weeks, the seller offered the buffet lunch, which originally cost €7.99, under PWYW conditions. This restaurant can be classified as a middle-priced restaurant, and it can accommodate approximately 60 guests. The study lasted eight weeks, including three observation weeks before the two experimental weeks. During that time, we collected daily sales data.

The product appeared to be appropriate for this experiment because the buffet lunch has high fixed costs but low variable costs. In addition, the opening of the restaurant took place only nine months earlier. Thus, the implementation of PWYW as a short-term promotional tool appeared to be particularly useful to win new customers and to use the spare capacity of the restaurant. The PWYW offer was advertised with flyers, which were distributed in different areas of the city center. In addition, two posters on an A-board (which we used to advertise the buffet lunch and its price before our experiment) helped publicize the promotion.

During the experiment, the regular price of the buffet lunch was removed. The buffet was ordered by 253 customers during the two experimental weeks. After asking for the bill, the restaurant guests received a receipt that contained only the prices for the drinks. Then, the waiter asked the customers to pay what they wanted for the buffet. During the two weeks, 172 restaurant guests were surveyed after they had paid for their lunch meal (for a 68% response rate). They were asked to declare the explicit price paid for the buffet lunch per person (i.e., the price paid for one buffet without tips and drinks). To test our model of buyer behavior in PWYW, the surveyed guests were asked a series of questions to measure their evaluation of fairness, altruism, loyalty, price consciousness, and satisfaction. We measured responses to all questions on a five-point Likert-type scale ranging from “strongly disagree” (1) to “strongly agree” (5). A further question referred to customers’ internal reference price. We operationalized the internal reference price as the memorized price of the past purchases of the same (or comparable) products or services. The constructs measured by this series of questions and their Cronbach’s coefficient alphas of reliability appear in Table 1. These questions have been used previously in other studies and have high reliability. In addition, customers were asked to estimate the seller’s cost for one additional product or customer and to state a fair price for the product they had consumed.

Study 2. The second field experiment took place in a multiplex cinema in a medium-sized town near the Frankfurt metropolitan area in November 2007. For three days (Monday–Wednesday), the management decided to offer the cinema tickets, usually ranging from €4.00 to €9.50, under PWYW conditions. A regular price of €4.00 or €4.50 was charged only on the cinema’s discount day, which is Tuesday. The multiplex cinema consists of eight different movie theaters that provide seats for 99 to 355 guests, with a maximum total capacity of 1428 guests. The experimental study lasted three days. For calculation of baseline sales, management provided 53 weeks of daily data.

Movie screenings at a cinema appeared to be an appropriate product for an application of PWYW because movie theaters are capacity-constrained services. In the past few years, the capacity of the motion picture industry has not been fully used. According to an interview with Stefan Arndt, chief of the German movie academy, consumers perceive an increase in prices, though the prices of cinema tickets have risen only marginally. According to recent consumer surveys, current prices of cinema tickets are perceived as unfair. Thus, PWYW appeared to be a good alternative to other price promotions, such as a discount day; because the consumers can self-determine the prices—in other words, have full control over the price—PWYW is expected to be a preferable pricing mechanism. At the same time, we were curious as to whether PWYW would generate higher prices per customer than the discount day.

Unlike Study 1, the price experiment was not advertised. Only posters, which described the functioning of PWYW, were hung up inside the movie theater. As usual, buyers were asked to pay before seeing the movie. At the ticket office, the cashier asked people to pay what they wanted for the respective movies. In contrast with the previous study, regular prices were not hidden but were accessible on each price list attached next to the ticket boxes. After the customers named the price, the transaction took place, and they were handed a questionnaire. Note that prices paid per person were collected and 247 ticket buyers participated in the survey (for a 64% response rate), which contained the same items as in Study 1. Buyers were asked to state the prices paid for the specific product separately, subtracting any tips or other purchases, such as gift vouchers. In contrast to Study 1, we asked respondents to answer how satisfied they were with the cinema itself (e.g., friendliness of cashiers, atmosphere, cleanliness of cinema) instead of asking them questions about the specific product to be consumed (i.e., the movie). This was necessary because the buyers paid before watching the movie.

Study 3. We conducted the third field experiment at a delicatessen located close to the main shopping street of a medium-sized city, Wiesbaden, which is part of the Frankfurt metropolitan area, in June and July of 2006. The delicatessen’s stock includes various products, such as wine, chocolate, antipasti, sandwiches, and beverages (hot and cold). The shop also has seats for approximately 15–20 customers to eat inside.

Our study lasted for six weeks, with observation periods two weeks before and after the two experimental weeks. During the first experimental week, regular prices of all products were hidden, whereas external reference prices of some of the observed products (five of the ten products randomly chosen) were provided in the second experimental week. We wanted to test whether the existence of external reference prices would affect the final price paid.

A poster in the shop window, an A-board outside the shop, and flyers on the tables indicated that there was a special promotion in which the customers could pay whatever they wanted for the hot beverages. During the experimental weeks, 813 hot beverages (e.g., coffee, tea, hot chocolate) were sold under PWYW conditions. We limited the experi-

TABLE 1
Overview of Items and Constructs Measured

Construct	Items	Relevant Literature for Scale Items	Cronbach's Alpha		
			Study 1	Study 2	Study 3
Fairness	•My price paid was fair toward the seller.	Bolton, Warlop, and Alba (2003); Campbell (2007)	—	—	—
Altruism	•I love to help others. •I have a good word for everyone. •I am concerned about others. •I make people feel welcome. •I anticipate the needs of others.	International personality item pool	.849	.837	.870
Loyalty	•I'm a regular customer. •I say positive things about this store to others. •I encourage friends and relatives to shop at this store. •I make an effort to use this store for covering a large part of my shopping.	Bettencourt (1997)	.749	.822	.810
Price consciousness	•Before I buy a product, I often check the prices of different retailers to obtain the best benefit. •I usually purchase items on sale only. •I usually purchase the cheapest item.	Donthu and Gilliland (1996)	.730	.684	.479
Income	•Please state your monthly net income.	Coleman (1983)	—	—	—
Satisfaction	•I'm satisfied with the buffet/cinema/hot beverage. •I liked the ambience. •The waiter/waitress/cashier was friendly. •The waiter/waitress/cashier was attentive. •Customers are treated well in this store. ^a •Employees of this store are not too busy to respond to customers' requests promptly. ^a	Baker, Grewal, and Parasuraman (1994)	.809	.748	.845
Reference price	•What did you pay for the same or similar product on your last shopping trip?	Bearden et al. (1992)	—	—	—

^aNot applicable at cinema (Field Study 2).

ment to the products that could be consumed at the delicatessen; we excluded beverages that were offered to go. We analyzed a total of ten products.² The regular unit prices of these products were hidden from buyers by removing the price board and pasting over the prices in the list of beverages. After consuming the products, specifically at the time of payment, buyers were asked by the waiter to determine the price of the PWYW product. As in the previous studies, they were asked to deduct potential tips and prices of products consumed contemporaneously from the price paid. In addition, a random sample of 271 delicatessen guests was surveyed after they consumed and paid for the analyzed

products (for a 33% response rate), which contained the same items as in Study 1.

We chose beverages as experimental products because variable costs were low, narrowing the risk for the seller. Thus, the seller could still achieve a positive profit margin even if the buyer's proportion of his or her reference price discharged to the seller was low.

Results

Distribution of prices paid. Table 2 summarizes descriptive statistics from the three experiments, including all collected data (i.e., survey data of prices paid plus the price information from customers who did not fill out the questionnaire). Table 2 also shows regular unit prices and unit sales. Consistent with H₁, prices paid were significantly different from zero ($p < .01$) in all three studies. However, we

²The ten products were regular coffee, tea, cappuccino, latte macchiato, caffè latte, espresso, espresso doppio, espresso macchiato, iced coffee, and hot chocolate.

TABLE 2
Price, Unit Sales, and Revenues

Products	Study 1	Study 2 (Cinema Ticket)		Study 3
	Buffet Lunch	Regular Ticket	Discount Day Ticket	Hot Beverages
∅ Price PWYW in € ^a	6.44**	4.87**	3.11**	1.94**
∅ Regular unit price in €	7.99	6.81	4.43	1.75
% Price increase ^b	-19.37**	-28.49**	-29.80**	10.62**
Number of units sold PWYW	253.00	273.00	113.00	813.00
Number of units sold regular	157.00	394.00	139.00	872.00
% Sales volume increase ^b	61.14**	-30.67 (n.s.)	-18.71 (n.s.)	-6.74 (n.s.)
Revenues PWYW in €	1660.26	1329.97	351.89	1577.14
Revenues regular in €	1254.43	2681.74	615.68	1529.20
% Sales value increase ^b	32.35*	-50.41 (n.s.)	-42.85 (n.s.)	3.14 (n.s.)

* $p < .05$.

** $p < .01$.

^aTest of deviation of prices paid from zero (one sample t-test).

^bTest of different means PWYW and regular (independent sample t-test).

Notes: n.s. = not significant.

were surprised to find that average PWYW prices paid in Study 3 were significantly higher ($p < .01$) than average regular prices. Overall, customers paid 10.62% ($p < .01$) higher prices for hot beverages, 28.72% less ($p < .01$) for the cinema tickets, and 19.37% less ($p < .01$) for the restaurant buffet lunch compared with regular prices.

The survey data indicate that, on average, consumers paid approximately 86% of their RP_{ij} to the sellers (i.e., a_{ij} is on average .86). A one-way analysis of variance reveals that the average values of the proportion a_{ij} of how much the consumer is willing to discharge of his or her RP_{ij} to the seller differ significantly ($p < .01$) across the three studies, whereas the average a_{ij} is highest for hot beverages ($M = 1.01$, $SD = .34$) and lowest for the cinema ($M = .66$, $SD = .30$). At the restaurant, the guests paid an average of 82% of their RP_{ij} for the lunch buffet, with a_{ij} ranging from .07 to 1.67 ($SD = .26$). The distribution of prices paid shows that only a few customers paid very low prices and that none decided to pay zero in the three studies (see Figure 2).

Estimation of model for prices paid. In total, we collected 690 questionnaires during the experimental treatment periods. After elimination of observations with missing price information, 167 observations remained from the restaurant, 171 remained from the cinema, and 270 remained from the delicatessen.

We averaged responses to multiple-item scales for all constructs in all our studies. These constructs have been previously used in other studies and show high reliability. The constructs and their Cronbach's alpha levels appear in Table 1. The results indicate that the reliabilities of the constructs are high. Cronbach's alpha for price consciousness is satisfactory for Study 1, but it falls below the cutoff criterion of .70 (Nunnally 1978) in Studies 2 and 3.

According to our estimation model (Equation 2), we account for comparability across products by multiplying each driver of a_{ij} by the internal reference price RP_{ij} . The internal reference prices counterbalance different levels of prices paid due to category disparities. Table 3 depicts the results of our model estimation over all field studies and separately for each study.

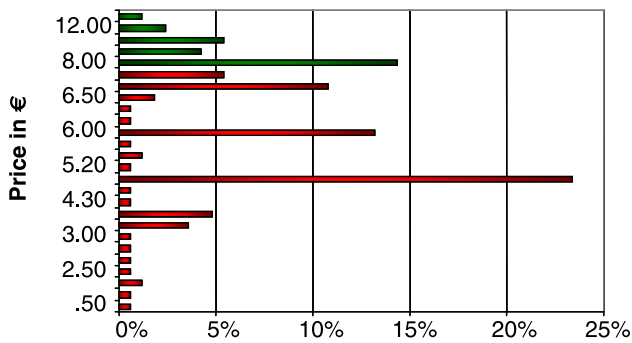
We estimated the parameters of our proposed model using ordinary least squares estimation. Testing the assumptions of the linear regression, we can justify the use of this model. For all our estimations, the condition index is below the cutoff criterion of 30, indicating that multicollinearity is not a problem. The assumptions of linearity, homoskedasticity, independence of errors, and normality of the error distribution are met. The value of R-square indicates that our proposed model explains 62% of the variation of buyer behavior across all field studies and 15%–30% in the separate estimations. In the following, we first discuss the results for our overall model and then provide a more detailed examination of the estimation results of each study separately.

As Table 3 shows, fairness positively affects the final price paid p_{ij}^{PWYW} . This finding is in line with H_2 ; people who reported having paid a fair price offered higher prices to the seller. However, H_3 is not supported, because the influence of altruism is not significant. Overall, altruism does not seem to play a considerable role when prices are determined within the PWYW context. Consistent with H_4 , satisfaction significantly increases the price that the buyer is willing to pay to the seller. The more satisfied the buyer, the more of the deal profit he or she is willing to give up in favor of the seller. The effect of loyalty is not significant, thus yielding no support for H_5 . We discuss this result in more detail when we analyze the studies separately. Consistent with our expectations, both control variables—price consciousness and income—significantly affect prices paid.

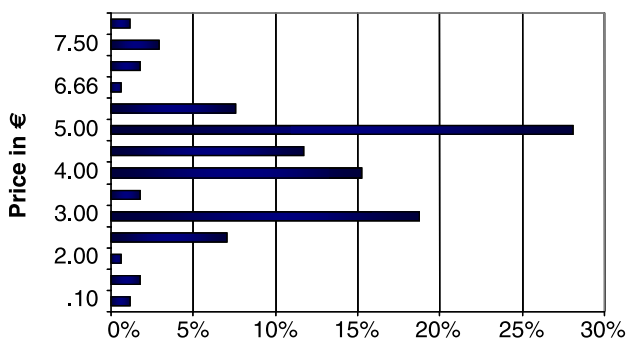
Overall, fairness has a significant impact on prices paid, but this result does not hold for the separate studies, as Table 3 suggests. The guests of the restaurant did not pay a higher price to the seller because of concerns for fairness or altruism. Instead, prices paid were solely driven by the buyer's level of loyalty, price consciousness, and income. In contrast to the results from the overall estimation, loyalty is a significant driver of prices paid for the lunch buffet. This might be due to the setting; the face-to-face interaction between customer and waiter is much more distinctive than in the other studies. Furthermore, approximately 70% of the

FIGURE 2
Distribution of Prices Paid in Percentage

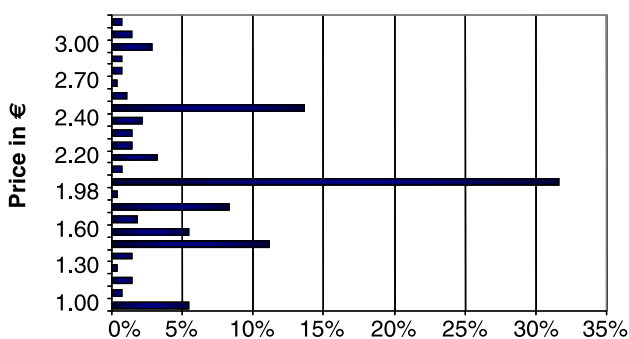
A: Study 1: Restaurant Buffet Lunch (ø regular unit price: €7.99)



B: Study 2: Cinema Tickets (ø regular unit price: €6.81; ø regular unit price at discount day: €4.43)



C: Study 3: Hot Beverages (ø regular unit price: €1.75)



surveyed guests expressed a strong desire (scale points 4 and 5) to come again. The fear of embarrassment in the future could have been exceptionally high at the restaurant. At first glance, it is rather striking that satisfaction has no significant effect on prices paid at the restaurant. Research on tipping behavior also reports controversial findings when analyzing the correlation of tip size and service quality. For example, Lynn and Simons (2000) find a positive correlation between service quality and tip size in the evening but not at lunchtime. Our results from the restaurant (buffet

lunch) support the finding that a higher price paid is not associated with higher service or product quality. Examining the distribution of the responses regarding satisfaction, we observe that most of the respondents admitted to having a medium to high satisfaction with the service. Only a marginal percentage of surveyed buyers (Study 1: 4.8%; Study 2: 8.8%; Study 3: 2.9%) were displeased with either the product or the service.

Analyzing the estimation results of the potential determinants of prices paid for cinema tickets, we show in Table 3 that the results differ from what we discussed previously. At the cinema, fairness seems to be an important factor when determining the prices. The level of fairness significantly and positively influences prices paid. Although the consumers paid only 66% of their reference price to the seller, they believed that they had behaved fairly; the survey data show that approximately 90% of the consumers considered a price \leq €6 fair. Similar to the results from the overall model, altruism does not significantly influence prices paid. The reasons can be twofold. First, the survey data indicate that only a marginal proportion (8.2%) of surveyed buyers evaluated themselves as selfish (averaged construct rating $<$ 3). Perhaps buyers were ashamed to admit that they were selfish rather than altruistic. Second, as we already mentioned, in general, moviegoers perceive a recent increase in ticket prices and even evaluate them as unfair. In addition, we believe that altruism does not play a role when consumers pay a large theater chain rather than small businesses that need to get paid adequately to survive. Satisfaction with the cinema itself and the friendliness of the cashiers positively affect the prices paid and support H₄. Neither control variable (i.e., price consciousness and income) has a significant effect on prices paid by consumers.

At the delicatessen, we find a significant impact of altruism. This finding corresponds to our expectation in H₃ but is not generalizable, because the effect is not significant in our overall model. Especially at the delicatessen, face-to-face interaction was particularly high. The owner of the delicatessen used to chat with his guests, so almost every consumer knew who they were paying. This might be an explanation of why altruism significantly influenced the final price. In contrast, fairness is not a significant driver of a_{ij} . Perhaps fairness does not play such a great role when consumers determine the price for convenience products, such as hot beverages. In addition, satisfaction and loyalty do not influence prices paid. A possible explanation for the lack of effect of satisfaction is that only a marginal percentage of surveyed buyers (2.9%) were displeased with either the product or the service. In their empirical studies, Reinartz and Kumar (2002) show no existing correlation between loyalty and customers' willingness to pay more. Instead, they provide evidence that particularly long-term customers believe that they deserved lower prices. Finally, we find no significant relationship between price consciousness and prices paid for hot beverages. This strengthens our assumption that some consumer characteristics, such as fairness and price consciousness, are not relevant when it comes to small convenience products. The effect of income is significant.

TABLE 3
Estimation Results

Variables ^a	Overall Studies		Study 1: Restaurant Buffet		Study 2: Cinema Ticket		Study 3: Hot Beverages	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	.808**	.118	2.892**	.676	2.982**	.432	1.222**	.161
Fairness	.049**	.011	.031	.020	.046**	.015	-.015	.017
Altruism	.016	.015	.020	.027	-.037	.021	.062**	.022
Satisfaction	.073**	.016	.016	.031	.056**	.021	.014	.026
Loyalty	.018	.014	.072*	.034	-.018	.017	.027	.020
Price consciousness	-.032**	.012	-.055*	.024	-.014	.015	-.029	.018
Income	.000**	.000	.000**	.000	.000	.000	.000**	.000
R ²	.619		.299		.163		.154	
Adjusted R ²	.615		.271		.132		.133	
N	608		167		171		270	

* $p < .05$.

** $p < .01$.

^aAll variables (except the constant) are multiplied with the internal reference price RP_{ij} .

Notes: Dependent variable = price paid at PWYW.

In Study 3, we experimentally provided external reference prices for the second week of the PWYW offering for five products (latte macchiato, espresso doppio, espresso macchiato, coffee, and tea). Therefore, we can test the robustness of our estimation results by including a dummy variable for observations from the second week with reference price information present. We find that the existence of reference price information is significant (coefficient = .131, $p < .01$) without substantial changes to the parameter estimates of the other variables, as reported in Table 3. Higher prices were paid when the guests of the delicatessen consumed one of the five products whose reference prices were provided. On average, guests provided with a reference price paid 104% ($a_{ij} = 1.04$) of the regular prices to the seller.

According to our estimation results, we conclude that final prices paid are mainly driven by what consumers believe is fair, by their satisfaction with the product or service, by their price consciousness, and by their net income. In addition, an external reference price provided by the seller can have a positive impact on final prices paid. In contrast, altruism and loyalty only partially influence the product prices when consumers have the chance to pay whatever they want for them.

Impact on revenues and unit sales. To analyze the impact of the PWYW application on sellers' unit sales and revenues, we compared the revenues and sales during the experimental period with an appropriate baseline. Baseline revenues are defined as the measure of average revenues per day derived from the preexperimental observation periods (at the restaurant: 3 weeks of daily data; at the cinema: 53 weeks of daily data; at the deli: 2 weeks of daily data). Figure 3 illustrates the percentage deviation of revenues in the PWYW treatment periods to baseline revenues.

In Study 1, on average, revenues (sales value) rose significantly by 32.35% across the experimental days for the restaurant owner ($p < .05$; see Table 2). Except for one day, PWYW sales were higher than baseline sales, increasing by

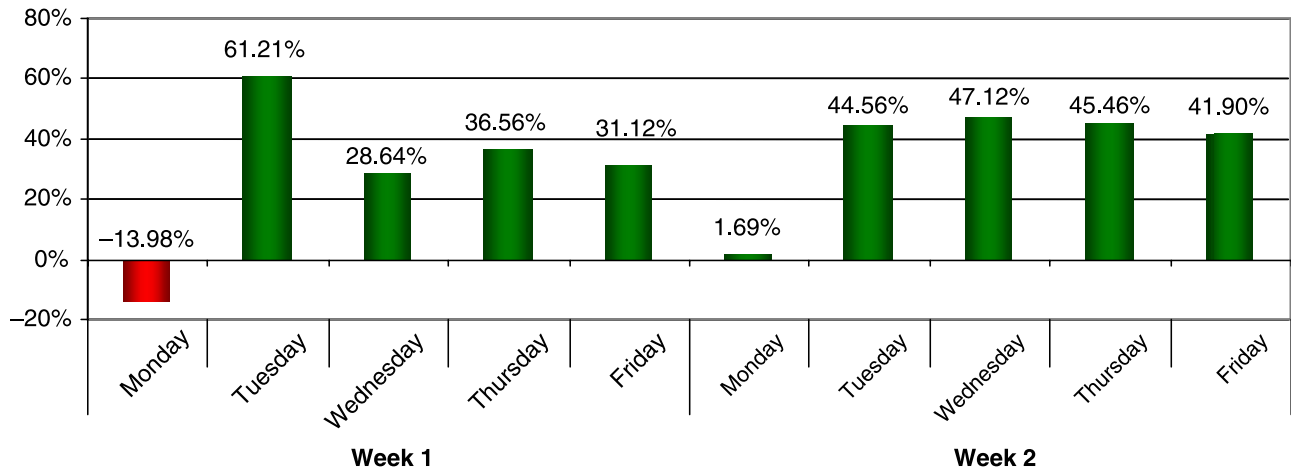
as much as 61.21%. Although the average price paid was significantly lower than the regular price (€6.44 versus €7.99; $p < .01$), the seller could realize more revenue by increasing the number of unit sales (see Figure 3). Overall, we find an increase in unit sales of 61.14% ($p < .01$). The sales increase is mainly driven by new customers; compared with the average number of new customers at fixed prices (approximately 11 new customers per day), the number of new customers rose to approximately 17 per day for the restaurant. Conducting an independent sample t-test, we find that the increase in the number of new customers is significant ($p < .01$). In addition, approximately 70% of new customers stated that they would most likely visit the restaurant again. Most of the buyers (87.3%) also stated that their preference for PWYW over a fixed price was medium to high. Thus, we can conclude that the use of PWYW was beneficial for the seller. The seller decided to retain PWYW as a pricing mechanism for the buffet lunch.

In Study 2, on average, customers paid 28.49% lower prices on regular days (not a discount day) compared with regular prices ($p < .01$) and 29.80% lower prices on the discount day ($p < .01$; see Table 2). As Figure 3 shows, revenues mostly decreased when PWYW was applied. Except for two screenings, the revenues of the cinema suffered strongly both on a regular day and on the discount day (Tuesday). Because of only a few observations (i.e., number of screenings), this finding is not significant. However, in this case, PWYW does not seem to be a profitable pricing mechanism. The large decrease in sales units compared with baseline sales cannot be explained by the application of PWYW, because it was not advertised and consumers became aware of it only after entering the cinema. Therefore, we can explain this sales decrease only by chance.

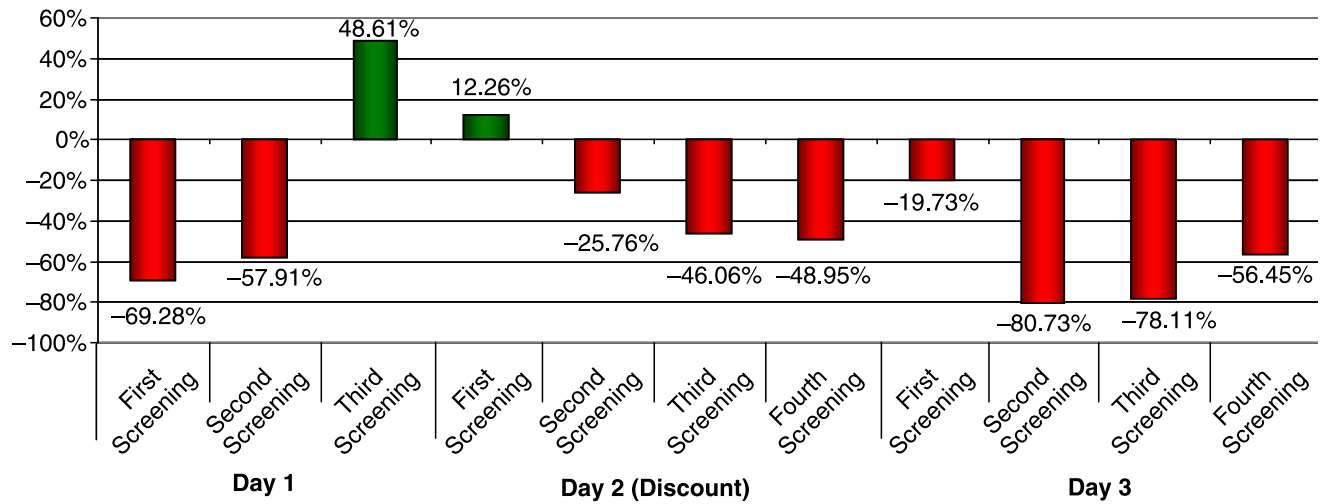
In Study 3, PWYW sales values were higher in 9 of the 12 days (the store was closed on Sunday) at the delicatessen. On average, revenues across the experimental days were approximately 3.14% higher than baseline revenues (not significant) during the promotion period, though

FIGURE 3
Comparison of PWYW Revenues with Baseline

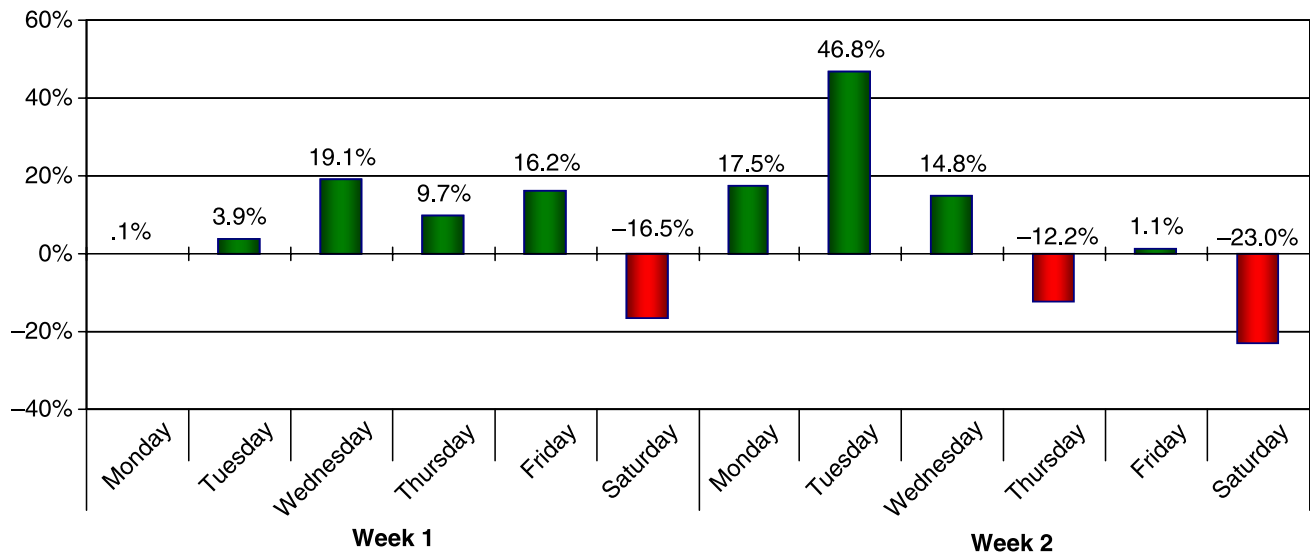
A: Study 1: Restaurant Buffet Lunch (relative deviation of PWYW revenues to baseline)



B: Study 2: Cinema Ticket (relative deviation of PWYW revenues to baseline)



C: Study 3: Hot Beverages (relative deviation of PWYW revenues to baseline)



the beverages were not sold more frequently (see Table 2). Except for one day, the average prices paid for all ten products were significantly higher (10.62%, $p < .01$) than the average of regular prices, explaining the increase in revenues. Possible reasons PWYW did not lead to a significant rise in unit sales (but a decrease of 6.74%, not significant) could be because the delicatessen had existed for a few years and thus was already established and had a low level of vacant seats/capacity. As the survey data reveal, 12.9% of new customers visited the deli because of the PWYW promotion. Unfortunately, no historical data of new customers are available to analyze potential differences in the rate of new customers generated by the pricing mechanism. Because the implementation of PWYW did not cause additional costs, however, the owner of the store inferred that PWYW had a positive effect on profits.

Discussion

This article provides a first classification and analysis of the innovative pricing mechanism PWYW. We discuss how PWYW, which is classified as a participative pricing mechanism similar to auctions and NYOP, can realize price differentiation and generate additional sales and revenues as well as useful information for the adoption of marketing instruments.

We analyze buyer behavior and revenue effects of PWYW for different sellers. Conducting three field studies, we experimentally test PWYW and find that consumers do not behave as rational as traditional economic theory suggests. In contrast, our findings show that final prices paid are significantly ($p < .01$) greater than zero for all three cases; none of the buyers chose to pay a price of zero during the experimental period. Our results also indicate that the final price paid depends on the buyer's internal reference price and the proportion of how much the buyer is willing to share of his or her (potential) deal profit with the seller. We found that this proportion is mainly driven by the consumer's fairness, satisfaction, price consciousness, and income. Contrary to our expectations, altruism and loyalty are insignificant factors in our overall model. However, a more detailed examination of each study separately revealed that altruism and loyalty are not negligible influences. Instead, loyalty is a significant driver of a_{ij} in Study 1 (lunch buffet), and altruism has a strong, significant impact on prices paid for hot beverages in Study 3.

When examining the effects of PWYW on the sellers' revenues, we find that revenues in two of the three observed product categories were higher at PWYW prices than baseline revenues. At the restaurant buffet lunch, the difference was significant. After the success of the experimental weeks and after receiving positive feedback from his guests, the owner of the restaurant decided to keep the price format in the long run. Seven months after introducing PWYW permanently for the buffet lunch, the owner still reports positive results and even plans to open up another restaurant with the same pricing mechanism. The case of the restaurant illustrates the potential of PWYW as a marketing instrument for new businesses. By implementing PWYW,

the restaurant owner attracted more customers and increased revenues.

It was surprising that average prices paid were higher than regular prices at the delicatessen. These higher prices at PWYW imply an opportunity to raise product prices in the future. Overall, the results of the experiments imply that PWYW might be suitable as a price promotion tool, even though it did not lead to a revenue increase for cinema tickets. Our study showed that buyers had a high variance for the estimated variable costs of a ticket at the cinema. This could explain why some buyers believe that ticket prices are unfair.

In addition, PWYW may help improve a seller's credibility by letting the consumers decide the prices of products. Some pricing policies, such as hi-lo pricing, are losing consumers' confidence in the retailer's credibility (Hoch, Dreze, and Purk 1994; Ortmeyer, Quelch, and Salmon 1991). With PWYW, the seller gives buyers the chance to self-determine the prices that may lead to an overall increase of perceived fairness (Haws and Bearden 2006). By implementing PWYW, the seller can demonstrate to consumers that he or she believes in the quality of the products because lower prices can compensate for inferior quality. The application is also simple and easy to communicate to consumers. It may also increase the chance of word of mouth and build up a positive pricing image among consumers.

From the seller's point of view, however, PWYW poses a risk that the price paid by buyers will be much lower than the seller's cost, or even equal to zero. Especially for high-priced products, PWYW does not seem to be an appropriate pricing mechanism, because the incentives to realize a large deal profit may outweigh aspects of fairness and loyalty. In such a situation, revenues will probably suffer if the seller cannot set a minimum price threshold. Furthermore, products with high fixed but low variable costs are more appropriate for the application of PWYW because low variable costs limit the risk of prices below costs for the seller. In our field studies, a personal interaction between the seller and buyers existed, and we believe that such an interaction supports the applicability of PWYW. However, the recent success of Radiohead's digital album sales indicates that PWYW may even be applied to the anonymous interactions on the Internet.

Our study has several limitations. According to the owner of the restaurant, revenues almost doubled in the evening (when he still charges posted prices) after we conducted the field experiment. It seems clear that PWYW also had an impact on evening sales, but because of the owner's concerns that evening customers might be disturbed by another survey, we could not collect the data to analyze this effect. A similar effect might have occurred at the delicatessen (e.g., sandwich) and the cinema (e.g., popcorn), where (promotion-triggered) customers might also have purchased other products. Thus, the reported sales effects are a conservative estimation of the "benefits" of PWYW. Our findings from the model estimation reveal that other factors, depending on the product category or specific setting, may have an impact on final prices paid. Finally, hot beverages are convenience products for which consumers'

involvement in determining the “right” price is probably not as high as when they determine the price for a lunch buffet.

We conducted three studies in different industries, but these were all part of the services sector. Although the services sector is already the dominant contributor to industrialized countries’ gross domestic product, we cannot generalize our findings to other industries.

Because PWYW is a new pricing mechanism, several directions for further research can be identified. One important research aspect is the analysis and comparison of various designs of this pricing mechanism with respect to the objectives of the seller in experimental studies. Furthermore, the mental mechanisms underlying payment in PWYW could be delineated in laboratory studies. In addition, a more detailed analysis of consumers’ preferences regarding different designs of PWYW or related participative pricing mechanisms, as well as the extent to which they may influence the consumers’ decision processes, would be worth studying. Further research should also be conducted in the field of sales promotion activities for products (e.g., whether PWYW is an alternative to free samples). If buyers

pay a price greater than zero, PWYW might be less costly than giving away free samples. Also of interest is whether a seller can achieve an effect such as a money-back guarantee when PWYW is implemented. Similar to the money-back guarantee, the buyer can compensate for lower perceived quality by reducing the price paid. Furthermore, the dynamic effects of PWYW on consumers (e.g., learning and long-term viability of the seller) represent a worthwhile avenue for further research. Another research aspect could be a test of suitable products or suitable categories for an application of PWYW to identify favorable product attributes (e.g., what product quality is necessary to be profitable with PWYW). The analysis of intercultural differences in buyer behavior is another promising extension. Cultural differences and the level of democracy in a society are likely to influence the proportion of the (potential) deal profit consumers discharge to the seller. Finally, an application of PWYW does not seem to be suitable for all distribution channels. A comparison of the suitability of different distribution channels is another aspect for further research.

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