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Kish: Where Customers Pay As *They* Wish

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Abstract

New restaurants often do not manage to succeed within a reasonable amount of time. Exotic restaurants especially face the problem that price promotions may not attract new customers because prospective customers might associate very low prices for unfamiliar food with a high functional risk. This paper describes how Pay-What-You-Want (PWYW), a new pricing mechanism, was successfully implemented at Kish, a moderately priced Persian restaurant in downtown Frankfurt. After the initial testing phase, which had the characteristics of a promotional offer, the restaurant decided to permanently offer its buffet lunch under PWYW conditions. We report the long-term effects of this decision as well as a simulation demonstrating that profitability is mainly based on 'trading up' the continuous inflow of new customers to the more profitable dining offer where prices are fixed.

KEYWORDS: Pay-What-You-Want, pricing

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Company Background and Problem

In early 2007, Pourya Feily was launching Kish, a moderately priced Persian restaurant in downtown Frankfurt (Germany) with capacity for approximately sixty guests. Mr. Feily offered a la carte menus for dinner, and a buffet lunch priced at €7.99. However, a few months after opening, the restaurant was not reaching capacity as Mr. Feily had expected it would and often there were only a few places occupied. It was clear that something had to be done to attract new customers to the restaurant, or business viability would be at great risk. Since Persian cuisine is perceived as rather exotic and unfamiliar to many in western countries such as Germany, customers have high trial costs. Lowering prices might increase customers' risk tolerance. But Mr. Feily was afraid to cut prices as this could signify low quality. He was well aware that rather than helping to attract new customers low prices for exotic food could be associated with an even higher functional risk.

Located only a few hundred meters away from the old campus of Frankfurt University, Mr. Feily had heard about an innovative and participative pricing mechanism to be tested by local researchers. Based on previous literature on participative pricing, we explained to Mr. Feily that participative pricing mechanisms account for consumer heterogeneity and thus, enable service to additional buyers. Additionally, we illustrated that participative pricing mechanisms may lead buyers to higher perceptions of control over prices, which in turn can positively influence their intent to purchase and their fairness perceptions (Chandran and Morwitz 2005; Haws and Bearden 2006). We also clarified the associated risks with the use of this pricing mechanism. But Mr. Feily was optimistic about the test as he hoped that potential customers might perceive this approach as innovative and preferable.

Outline of the approach

The approach adopted by Mr. Feily is Pay-What-You-Want (PWYW) (sometimes also described as Pay-As-You-Wish), a new pricing mechanism that is classified as a participative pricing mechanism. The customer participates in the price-setting process by determining the price he or she wants to pay. The seller has to accept any price the customer offers. How can an application of this pricing mechanism seem sensible to a seller if customers can exploit their pricing power with PWYW to pay a very low price, or even nothing at all? Results from experimental economics and marketing literature indicate that this need not be the case (Kim et al. 2009).

Experimental economics provides evidence that consumers are strongly motivated by concerns of fairness and reciprocity (Andreoni and Miller 2002).

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 (Fehr and Schmidt 2003) or the Dictator Game, 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 interact by allocating an endowment. The Proposer suggests that a fixed amount of the endowment be allocated to the Responder, with the balance of the endowment retained by the Proposer. The Responder can then either accept or reject the proposal. If the Responder decides to reject, neither of them receives anything. Empirical results from ultimatum games show that the most frequent offer is observed to be half the endowment. Researchers interpret this finding as a behavior that conforms to the fairness norm (Rabin 1993, Roth 1995). It was also found that Responders tend to reject offers that are below 20% of the endowment, even though this is somewhat irrational because this small amount is still better than nothing. This is interpreted as a reaction of punishment to unfair offers. A variant of the Ultimatum Game, the Dictator Game, additionally controls for strategic behavior, as the Responders must accept any amount offered by the Proposers (Bohnet and Frey 1999). Although the offers were lower on average in the Dictator Game than in the Ultimatum Game, Proposers still allocated money to the Responders, a behavior that was interpreted as altruistic and fair (Andreoni and Miller 2002, Bolton et al. 1998, Forsythe et al. 1994). Furthermore, under PWYW conditions the relationship between seller and customer is governed by social exchange norms, like norms of distribution or cooperation, rather than market exchange norms, since the customer can pay any price, including a price of zero. The norm of distribution provides an additional explanation for this behavior in Ultimatum and Dictator game experiments because it motivates people to seek an equal allocation of resources (Elster 1989). Violating these norms may result in distress and social disapproval by other people (Ariely et al. 2009).

Previous literature in marketing suggests that customer satisfaction (Homburg et al. 2005) and loyalty (Lynn and McCall 2000) may positively affect a customer's price alignment. If the seller offers a high quality product, consumer satisfaction and utility increases (Anderson et al. 2004). Based on the findings of Azar (2007), loyal customers may be reluctant to pay less for fear of uncomfortable feelings or future embarrassment. Finally, as many researchers have shown (Adaval and Monroe 2002, Winer 1986), reference prices may be used as an anchor to determine prices in PWYW applications.

Thus, based on findings from experimental economics and marketing research, it is most likely that customers, although they have full power to determine the price of a product or service with PWYW, will pay reasonable

prices. Examples from practice support this assumption. In October 2007, the British rock band Radiohead asked their fans to set their own prices for the band's newly released album on the internet. During the first two months, the album was downloaded more than two million times. Due to PWYW, their sales figure for first quarter sales was more than three times the figure for first quarter sales of their previous album. Furthermore, the band stated that they profited from PWYW. Additional examples of PWYW can be found worldwide, mostly in gastronomy (e.g., Little Bay in London, Sobo in Sydney) and the hotel industry (e.g., IBIS hotels in Germany and Singapore).

PWYW can help to attract new customers, as it reduces consumer's risk in trying a new product or service. If the customers are unsure about the product's quality, they will be able to adjust the price downwards. Furthermore, given its unconventional and innovative nature, PWYW implementations attract customers by appealing to their curiosity. The application of PWYW may also signal the seller's confidence in the quality of his or her products.

In 2006, the authors were initially testing the new pricing mechanism PWYW in a delicatessen close to Frankfurt. The test succeeded in terms of revenues and prices paid by customers. However, the delicatessen could not fully benefit from the mechanism's ability to attract new customers since it was already operating at full capacity. By comparison, this was definitely not the case for Kish, which had plenty of excess capacity (i.e., empty tables) before implementing PWYW. Especially during lunchtime, only a few guests visited the restaurant, sometimes leading to a huge waste of buffet lunch food. In late summer of 2008, we were seeking new partners to implement the pricing mechanism. Given his capacity situation and situational pressure, Mr. Feily was quite enthusiastic about our plan and agreed to convert his fixed-price buffet lunch into a PWYW buffet lunch for a testing period of two weeks. Due to very positive results during the testing period, he decided to continue implementing the PWYW pricing model after the testing period.

Impact on Revenues and Unit Sales in the Testing Period

We observed the performance of the restaurant for three weeks prior to implementation of PWYW and the performance of the new business model during two weeks of testing with the PWYW mechanism. During that time we collected daily sales data. During the experimental phase, the regular price of the buffet lunch was removed. The buffet was ordered by 253 customers during the two testing weeks. After asking for the bill, the restaurant guests would be given a receipt that simply noted the prices for the drinks. Then the waiter would ask the customers to pay what they wanted to pay for the buffet. During the two-week period, 172 restaurant guests were surveyed after paying for their meals (68%

survey response rate). Respondents 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. Since we were studying factors that would affect the amount customers paid for the service, we also collected data to measure fairness, altruism, loyalty, price consciousness and satisfaction (Kim, Natter and Spann, 2009).

To analyze the impact of the PWYW application on the seller's unit sales and revenues, we compared revenues and sales during the test period with an appropriate baseline. Baseline revenues were defined as the measure of average daily revenues during the pre-implementation observation period (three weeks of daily data).

On average, revenues (sales value) rose significantly for the restaurant owner throughout the testing phase - by 32.35%. Except for one day, PWYW sales were higher than baseline sales, increasing by up to 61.21%. Although the average price paid was significantly lower than the regular price (€6.44 vs. €7.99), Mr. Feily could realize more revenues owing to an increasing number of unit sales. Overall, we found an increase in unit sales of 61.14% for the restaurant. The sales increase was mainly driven by new customers: compared to a daily average of approximately 11 new customers at fixed prices, the number of new customers rose to approximately 17 per day. In addition, approximately 70% of new customers stated that they would most likely visit the restaurant again. Most of the customers (87.3%) also stated that their preference for PWYW over a fixed price was medium to high. Hence, the implementation of PWYW was beneficial for Mr. Feily. After the success of the testing period and after receiving positive feedback from his guests, Mr. Feily decided to continue with the new price format in the long run.

Impact on Revenues and Unit Sales after the First Year

The decision to stay with the new pricing format permitted us to investigate two relevant questions: (1) whether the new pricing mechanism works well in the short term (ST) only (i.e., as a sales promotion tool) or can continuously attract new customers in the long term (LT); and (2) whether average prices paid would decline over time, leading to an erosion of revenues. Approximately 12 months after introducing PWYW for the buffet lunch, we again measured the prices paid and the number of customers at lunchtime over a period of one week. Although Mr. Feily still reported positive results from the new pricing mechanism, it was interesting to see that the average price paid had increased over time and that the number of new customers was still considerably. In October 2008 (LT), the average price paid was 4.7 percentage points higher than in the initial testing period, weekly revenues were up 16.9 percentage points and the weekly number of customers was up 11.7 percentage points. It seems that the initial test, which

was promoted by flyers, had attracted more price-conscious customers compared to the period after announcing its long term implementation. Table 1 summarizes the major changes between short-term (ST) and long-term (LT) effects.

Table 1: Short-term vs. long-term comparison of avg. prices, revenues and customers at buffet lunch

	Posted-Price (baseline)	PWYW short-term (ST)	PWYW long-term (LT)	PWYW development (LT-ST)
Avg. Prices	0%	-19.4%	-15.6%	+4.7%
Revenues	0%	+32.4%	+54.7%	+16.9%
Customers	0%	+61.1%	+83.4%	+11.7%

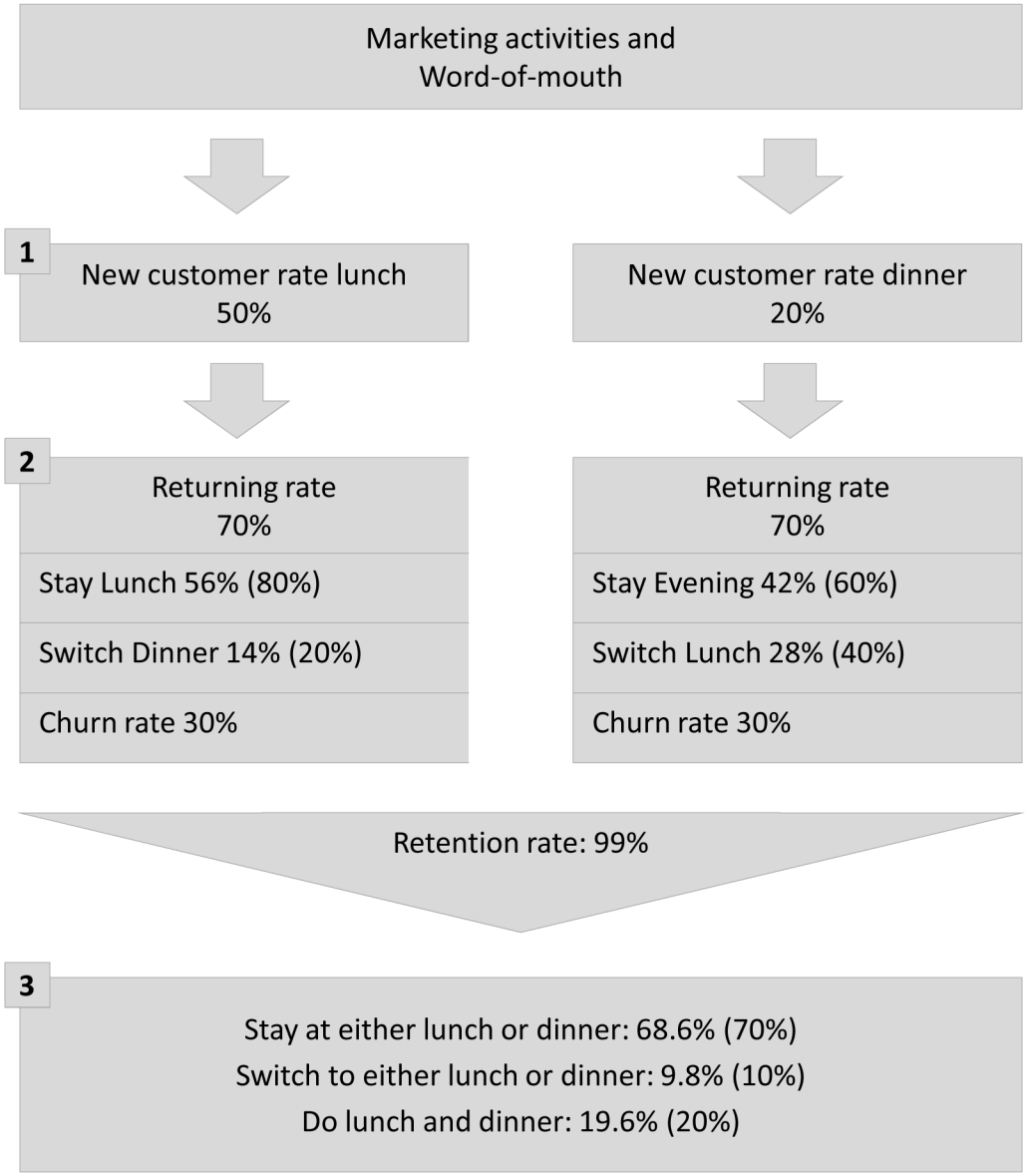
The amount of food offered had to be increased due to the larger number of guests. However, due to the relatively high fixed costs and low variable costs of self-serving customers at the buffet, Mr. Feily essentially faces a revenue maximization objective. In addition to the prices paid for the PWYW buffet lunch, beverages are still offered at posted prices. Since drinking behavior did not change significantly after introducing PWYW, the additional number of customers directly contributes to higher revenues and profits through beverage sales.

According to Mr. Feily, revenues almost doubled during dinner hours (when he still charges posted prices) after the testing period. Obviously, PWYW also had an enormous impact on evening sales and profits, due to lunch customers returning to the restaurant in the evening. In the evening, the average revenues per customer are approximately € 21 and expenditures for beverages are higher as well (€3.4 compared to €1.7 at lunch). Hence, the buffet lunch provides a continuous influx of (new) customers who can be "uptraded" to the more profitable evening offer, which represents the bulk of Mr. Feily's total revenues. To illustrate this switching process and the resulting change in profits, we calibrated a switching model, based on data from the field experiment in the testing period and information gathered from an interview with Mr. Feily (see Figure 1). Mr. Feily provided us with additional information about his cost structure, the new customer rate at dinner, and switching rates from lunch to dinner and vice versa. To calibrate our model we also accounted for restricted capacity, and used average price information (€6.44 for the buffet, €1.70 for beverages per person).

We divide our switching model into three different stages (see Figure 1). At stage 1, we use the lunch data from our field study. This data reveals that of all daily customers half of them are new customers, leading to a new customer rate of

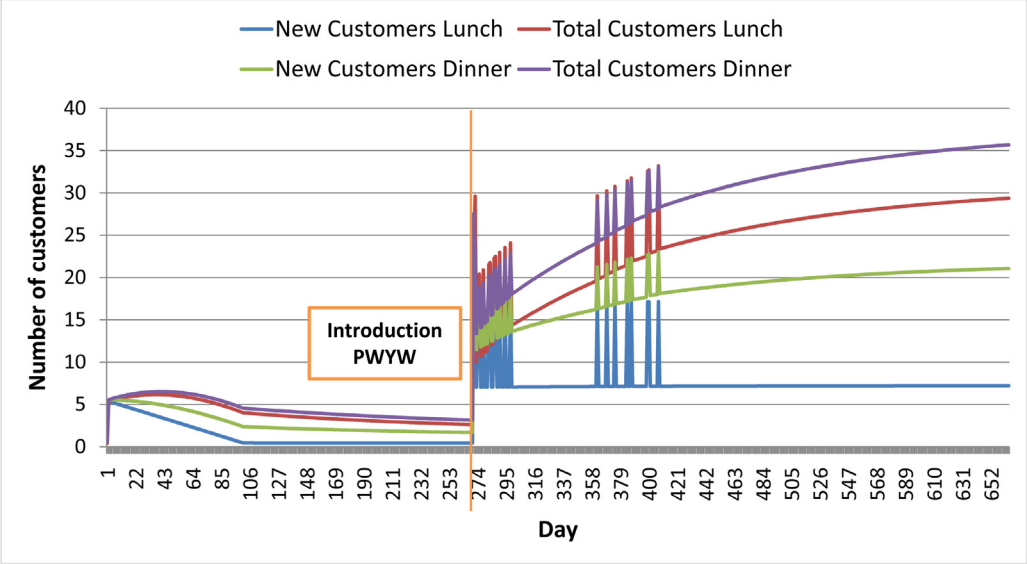
approximately 50% during lunchtime. From our survey, we find that this new customer rate is mainly driven by marketing activities, such as the storefront display (A-board), distributed flyers and word-of-mouth communication. Especially when introducing PWYW, press articles and TV news reports boosted the new customer rate for a short period of time. Since we asked the surveyed customers via which channel they had learned about the restaurant, we can estimate daily new customers as a function of different marketing activities in our model. According to Mr. Feily's statement, the new customer rate is 20% for evening business. Since Mr. Feily offered PWYW only during lunch and not during dinner, it is not surprising that the new customer rate is lower in the evening. The surveyed data also reveals that approximately 70% of new lunch customers intended to come again, implying a return rate of 70% and thus, a lunchtime churn rate of 30% (stage 2). We assume the same return and churn rate for evening customers, as the quality of products should not differ from the daytime. Regarding the customers' switching behavior from lunch to dinner and from dinner to lunch, respectively, Mr. Feily provided us with the following information: 20% (40%) of returning customers return to try dinner (lunch), whereas 80% (60%) return exclusively for lunch (dinner). Stage 3 refers to already loyal customers of the restaurant. Here we assume a retention rate of 99%. At first glance, this rate appears rather high, but daily data indicate this rate seems reasonable. In our interview with Mr. Feily, he estimated that 70% of loyal customers (70% of 99% loyal customers = 68.6%) either stay at lunch or dinner, 10% switch to either lunch or dinner and 20% visit the restaurant during both lunch and dinner times.

Figure 1: Switching model



Using the data of new customer, returning and switching rates, we can simulate the development of the customer base (existing and new) at lunch and evening times, from the opening of the restaurant Kish to the introduction and establishment of PWYW. Figure 2 shows the daily development of new and total customers for both lunch and dinner.

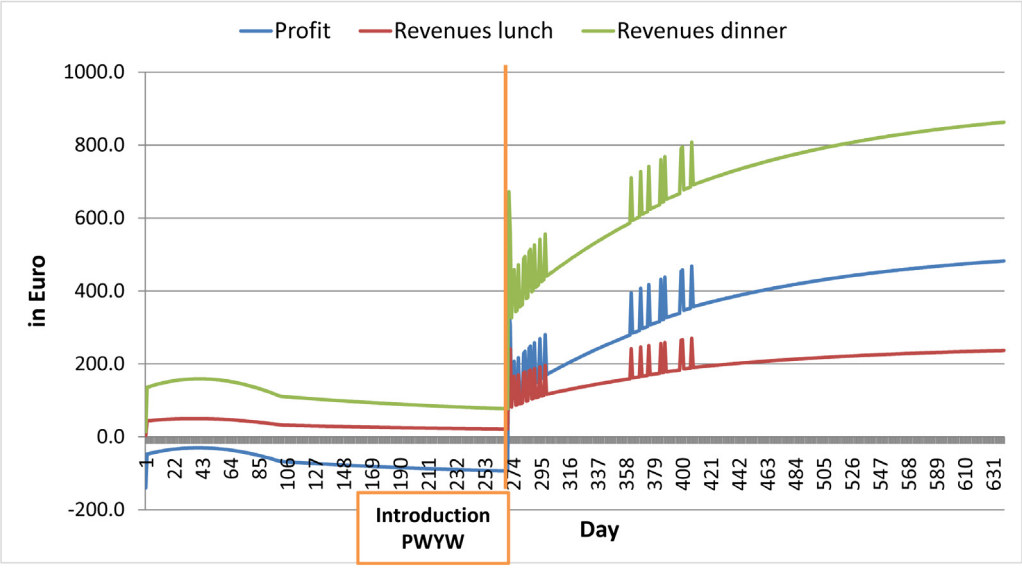
Figure 2: Customer development at lunch and dinner times



Our model seems valid as the number of customers and new customers are consistent with those reported by Mr. Feily (approximately 13 new customers per day after three months of PWYW). The peaks in Figure 2 display the customer boost caused by the initial introduction of PWYW (day 271) and the broadcasted TV news reports and press articles. Figure 2 shows that the introduction of PWYW, as well as TV news reports and press articles (as a consequence of PWYW), have had an additional effect on customer development at dinnertime.

Mr. Feily additionally stated that his overall revenues are about four times as high as they were before PWYW implementation. Calibrating our model, we can confirm his statement. To simulate daily profit, we multiplied the daily customer basis with the average sales per customer and subtracted corresponding costs (fixed and variable costs). Figure 3 illustrates the resulting profit and revenue development.

Figure 3: Development of profit and revenues



Since profit is a function of the customer basis, we find the same peaks we have already observed in Figure 2. Due to the introduction of PWYW, Mr. Feily profits from a higher number of visits during both lunch and dinner times. In our model long-run total profits remain rather stable at approximately €400-€500 per day.

Kish cleverly makes use of PWYW implementation by: offering PWYW pricing for the buffet lunch, thereby attracting new customers, as well as repeat visits from existing customers; selling beverages at posted prices; and inducing ”uptrading” to the evening dining offers, which operate at higher margins and revenues. Of course, the higher number of customers at lunchtime also helps to (partially) cover the fixed costs associated with running the restaurant (i.e., rent, insurance, etc.).

The case of the restaurant Kish illustrates the potential of PWYW as a marketing instrument for new businesses. By implementing PWYW, Mr. Feily could attract more customers, increase revenues during lunch and dining hours as well as signal price fairness to his customers. The absolute profit impact of this implementation is huge for Mr. Feily. Furthermore, the implementation of this new pricing mechanism has not gone unnoticed. Soon after the launch of the new pricing mechanism, mass media became aware of our implementation and provided extensive press coverage, both nationally and internationally: TV news reports (e.g., N24, Pro7, Sat1, Sat3, RTL, RTL2, Ukrainian TV, 3Sat, HR, NTV, and Kabel1), press (e.g., The New York Times, Neue Zürcher Zeitung, Frankfurter Allgemeine Zeitung, China Today, Greenpeace Magazine, Capital,

and CIO) and radio interviews (e.g., SW1, SW3, and Radio Brandenburg) with Mr. Feily and/or the authors ensued, reaching an audience of millions. According to Mr. Feily, more than 30 national and international TV camera crews from all over the world visited his restaurant during the first few months following our introduction of PWYW. Of course, running a restaurant is a local business, and Mr. Feily's Kish cannot benefit a lot from international media coverage. However, due to this enormous media presence, many small and well-known businesses became interested in PWYW and the opportunities from its use. Especially in the last few months of the financial crisis (resulting in excess capacity at many businesses) several new implementations were reported (e.g., in tourism), essentially validating the results of our implementation at Kish. They also reported approximately 20% lower prices accompanied by significantly increasing numbers of customers. Recently, Fernandez and Nahata (2009) found similar results in a game theoretic framework, showing that if at least one consumer has a positive valuation for a good, then free-riding is not an equilibrium when the goods is offered under PWYW conditions. In this situation, paying a positive price becomes a dominant strategy. Fernandez and Nahata (2009) also derive conditions under which PWYW becomes more profitable than uniform pricing.

Conclusion

We conclude that the PWYW mechanism is a promising pricing alternative for companies in the service industry and businesses with excess capacity and low variable costs.

For a better understanding of the limitations of PWYW and potential transportability to other industries, we conducted two additional studies where we investigated the relevance of varying conditions for PWYW, based on findings from experimental economics literature (Hoffman et al. 1994, Hoffman et al. 1996). Our results show that design settings, such as the type of contact (direct, online), duration of the implementation (short-term promotion, long-term mechanism), the effects of additional (reference price) information and price levels, are important and contribute to the success of an implementation (Kim et al. 2008, Kim et al. 2009). The results indicate that personal interaction and provision of external reference prices are advantageous for the seller, as prices paid increase. We further found that more costly products will typically result in lower relative prices (as compared to posted prices). Thus, the seller should avoid offering products with high product value under PWYW conditions. Furthermore, the short-term application of PWYW lowers the prices, but the correlation is not significant. Finally, we found that payment after positive evaluation of the quality of the service/product leads to higher prices, compared to situations where payment takes place before experience with the product.

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