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Buying behaviors when similar products are available under pay-what-you-want and posted price conditions: Field-experimental evidence

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ABSTRACT

This work analyzes relationships between product- and pricing-related attitudes of customers and their choice or rejection of a product offered under the Pay-What-You-Want-(PWYW) pricing mechanism in a situation in which the same supplier simultaneously sells a similar item at a posted price. In a between-person field experiment, we sell two types of freshly prepared sweet treats. In the first experimental condition, we supply waffles under PWYW and crêpes at a posted price. In the second condition, we reverse the allocation of the pricing methods to the two focal treats. Our sweet snacks stand attracts 125 different customers in the first and additional 163 buyers in the second experimental condition. Overall, we find that the customer share opting in favor of a product among all buyers acquired in an experiment is not significantly influenced by the pricing mechanism used in selling the item. The probability that customers choose the PWYW offer increases as they like the underlying product more than the posted price substitute. Several price-related buyer attitudes are also significantly related to customer choice of a PWYW offer. The more customers are concerned about their social image in the context of their payment method choice and behaviors, the more they appreciate to actively participate in price setting and the less difficulty they experience in figuring out a reasonable product price the more probable it is that they opt for a PWYW offer. The results imply that practitioners should carefully reflect consumer attitudes evoked by the PWYW mechanism in case of considering its introduction and in designing its details. In addition, the findings suggest that we need more research on the influence of various product- and price-related cognitions of consumers on their acceptance or rejection of PWYW offers. This holds in particular for goods with higher price levels than the product categories covered in our experiment.

1. Introduction

Pay-what-you-want (PWYW) sellers supply goods to consumers who are not directly competing with each other to obtain the specific product or service from a focal provider and who are given the power to set any price for the offer which they believe to be adequate. The sellers commit themselves to complete PWYW transactions even if the buyers pay amounts which do not cover the providers' costs or nothing and thusly get offerings for free (Kim et al., 2009). PWYW pricing implies a remarkable delegation of power from sellers to consumers (Park et al., 2016). The method "is a means of endogenous price discrimination because different consumers pay different prices for the same product even though no exogenous constraints are imposed on them" (Schmidt et al., 2015, p. 1218; see also Krämer et al., 2015). Such an individualized pricing strategy may attract more buyers than conventional posted prices that are unilaterally set by suppliers. However, PWYW offers also involve the risk for sellers that voluntary payments of selfish shoppers are so low that sellers earn lower profits compared to sales at conventional posted prices or that they even lose money. In addition, a considerable share of potential customers could reject to buy under PWYW conditions because this price setting approach imposes a substantial cognitive burden on them, namely to figure out payment amounts on their own, which they believe to be "right" and do not negatively affect their self-image (Gneezy et al., 2010; Gneezy et al., 2012; Kunter & Braun, 2013; Mendoza-Abarca and Mellema, 2016; Park et al., 2016). In fact, the inevitable necessity to reflect about one's payment makes PWYW different

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from (promotional) offers of goods for free (Mao, 2016; Niemand et al., 2015; Shampanier et al., 2007): The consideration of a price is not part of the exchange between the seller and the buyer in case of the zero price approach but it remains relevant in case of the PWYW method.

In spite of possible disadvantages of the PWYW method, organizations in quite a range of different industries (for example, catering, music, book publishing, cultural entertainment) have been intrigued by the opportunities of this pricing strategy and have therefore started to experiment with the sales of various goods under PWYW conditions (Gahler, 2016; Kim et al., 2009; Mak et al., 2015; Schons et al., 2014). Two widely cited examples of supposedly economically successful real world PWYW applications are the online sales of a music album entitled "In Rainbows" by the English rock band Radiohead under PWYW conditions in 2007 and the Pakistani restaurant Der Wiener Deewan, in Vienna, which empowers its customers to self-determine the prices for their meals since its market entry in 2005 (Bourreau et al., 2015; Kim et al., 2009). At the same time, the PWYW method has attracted considerable attention among management and marketing scholars. Several reviews of the literature reveal that meanwhile far more than 50 empirical academic investigations of the PWYW approach have been published (Greiff and Egbert, 2016; Krzyzanowska and Tkaczyk, 2016; Natter and Kaufmann, 2015; Pöyry, 2015; Stegemann, 2014).

Most earlier empirical PWYW studies describe the distribution of voluntary payments among buyers. Furthermore, prior work explores correlations between socio-demographic (e.g., age, gender) and attitudinal (e.g., concern for fairness, price consciousness) characteristics of buyers as well as features of the design of the payment procedure (e.g., presentation of a descriptive or normative reference price, preservation of the anonymity of buyers) on the one hand and the amounts consumers give in PWYW settings. Investigations of hypothetical or actual PWYW purchases are typically designed in such a way that potential buyers are confronted with a PWYW offering and then decide about the amount they wish to pay for the good supplied. Unfortunately, this predominant research design ignores that in real-life purchase situations consumers are not forced to accept a PWYW offering. Rather they frequently have at least the possibility to buy the focal category of goods at posted prices. Thus, PWYW purchase processes comprise two empirically interconnected, but conceptually distinct phases: First, consumers decide whether to buy a certain type of goods they are interested in under PWYW or posted price conditions. In the second phase, consumers who principally opted for a PWYW purchase set the amount they pay to the seller. The overwhelming majority of prior empirical PWYW work has analyzed the second phase. In contrast to this, the focus of the present study is on the decision to prefer a PWYW over a posted price offering, i.e., on the first stage of purchase processes.

Only very few researchers have noted that the outcome of the basic choice between a PWYW offering and a buy at a posted price may be significantly influenced by consumer "cognitions that PWYW situations evoke" (Stegemann, 2014, pp. 29–30). Hence, the present work contributes to the literature by analyzing how consumer liking of the focal products and perceptions related to the role of prices in purchase decisions as well as to some up- and downsides of the PWYW method as such are associated with the behavioral acceptance or rejection of a PWYW offer. More specifically, the purpose of the present study is to test the extent to which specific product- and pricing-related consumer attitudes contribute towards explaining whether consumers choose a PWYW or a posted price buy when they face a situation with a product offering under PWYW conditions and a close posted price substitute is available at the same time. As we base our tests on actual consumer buying and payment *behaviors*, we circumvent the "hypothetical bias" that threatens the validity of numerous earlier paper and pencil consumer surveys on purchase and payment *intentions* in fictitious PWYW scenarios.

2. Development of hypotheses

2.1. General background: consumer options in multi-product and multi-seller PWYW environments

Consumers who face PWYW offerings in a real-world environment typically do not just have the leeway for setting the amount they wish to pay voluntarily. Instead, they can pursue different paths (Greiff and Egbert, 2016). Firstly, they have the option to completely refrain from purchasing the focal good, at least from the PWYW supplier. Several studies contain evidence showing that consumers actually make use of this option. For instance, Regner and Riener (2012) find that the number of music albums sold online under PWYW conditions dropped significantly once the seller informed the artists about the names of their buyers and the amounts each individual had paid to them compared to a PWYW offering in which buyers remained anonymous and their individual payments were not disclosed to the recipients. Furthermore, Gneezy et al. (2012) detect that the share of potential consumers who did not buy a picture of themselves taken during a boat cruise was significantly lower (higher) if the picture was provided at a high (low) posted price in comparison to offering the picture under PWYW conditions. Likewise, Jung et al. (2014) observe that the proportion of consumers shying away from purchasing a specific product (grocery bag) was significantly higher if the product was offered under PWYW conditions in conjunction with a pro-social charity element than if it was sold in a purely commercial PWYW setting. Similarly, Kunter and Braun (2013) report that more than a third of the consumers who the researchers invited to buy a ticket for a wildlife park under PWYW conditions declined to buy one because they preferred to pay a posted price. The empirical identification of the effects of introducing the PWYW method on the take-up rate of offers for a specific good is challenging because it requires to estimate the number of consumers in the relevant market who are "deterred" by the uncommon pricing scheme and/or the number of units customers purchase at posted prices under otherwise equivalent sales conditions.

Secondly, in many instances consumers can switch to competitors' offerings of the same product category sold at a conventional posted price. Almost no previous PWYW study has examined this second option. An exception is a laboratory study of students involved in a series of purchase situations conducted by Schmidt et al. (2015). The authors report that a considerable share of their subjects voted against a PWYW offering and favored a posted price purchase from a competitor. Similarly, Machado and Sinha (2012) provide qualitative evidence from a golf resort in the US suggesting that a significant percentage of the resort's customers who were confronted with a PWYW offer claimed that they would switch to a competitor if the rival provides access to its facilities at a (reduced) posted price. A rigorous assessment of the impacts of a PWYW offering of one supplier on the firm's customer switching rates to its main competitors (and vice versa) is also demanding because it requires data on sales units and revenues from several suppliers.

Thirdly and finally, consumers frequently have the possibility to buy a similar type of goods sold at a posted price by the same supplier which is a close substitute of the other good offered under PWYW conditions (e.g., purchase of a red orange juice provided at a posted price instead of a yellow orange juice offered under PWYW). An analysis of consumer behavioral reactions when the same supplier offers similar products under different pricing schemes is somewhat easier to accomplish: It necessitates data