# Pay-what-you-want for high-value priced services: Differences between potential, new, and repeat customers 

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## A R T I CLE I N F O

## Article history:

Received 1 August 2016
Received in revised form 1 October 2016
Accepted 1 October 2016
Available online xxxx

## Keywords:

Innovative pricing
Pay-what-you-want (PWYW)
Natural experiment
Price margins
Profitability
Price personalization


#### Abstract

This study contributes to the limited literature on the pricing method of pay-what-you-want (PWYW) in the context of a high-value service. The study evaluates the applicability and profitability of PWYW by comparing the minimum, maximum, and PWYW prices to traditional list prices of Europe's biggest dance festival (ImPulsTanz). Results from an analysis of secondary data from ImPulsTanz reveal a pricing structure mainly demographicbased. Survey results show that PWYW prices differ between three customer groups (potential, new, and repeat). Comparing potential, new, and repeat customers, the latter is willing to pay the highest prices. Despite all customers indicating their willingness to pay for the service, PWYW prices are lower than traditional list prices. Findings also confirm the existence of three segments of customers with diverse price consciousness and quality, and value perceptions. Implications for the pricing and promotion of high-value services using PWYW are offered.


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## 1. Introduction

Pricing is the only element of the marketing mix that generates profit. Setting prices low enough for customers to perceive the purchase as valuable and high enough to generate profits for the seller is an art (Palmer, 2011). Pay-what-you-want (PWYW) is a participative pricing method that allows customers to pay the price they want, thereby taking away the seller's ability to set the price. As such, the customer is free to set any price (even zero) and the seller has to accept the offering (Kim, Natter, \& Spann, 2009). Existing research on participative pricing approaches examines their impact on customers' fairness perceptions (Haws \& Bearden, 2006), willingness to pay (Spann, Skiera, \& Schäfers, 2004), and purchase intentions (Chandran \& Morwitz, 2005). PWYW literature also provides insights into why the approach works in certain societies (Gneezy, Gneezy, Riener, \& Nelson, 2012), which factors impact on the PWYW price people pay, and profitability level for various services (Chao, Fernandez, \& Nahata, 2015; Kim et al., 2009; Schons et al., 2014). PWYW is more effective than traditional pricing approaches for services that tend to follow an economy pricing strategy (Schons et al., 2014) and when customers are aware of the cost structures (Greiff, Egbert, \& Xhangolli, 2014). Apparently, PWYW is a poor strategy for luxury goods (Balan, 2014).

[^0]Studies that directly compare the profitability of PWYW for different customer groups for high-value priced service settings are absent from the literature. A high-value service is positioning a service as high quality but sold at a medium price (Kotler \& Armstrong, 2001). Accordingly, the question informing this study's research objective is whether different customer groups will pay different PWYW prices in comparison to traditional list prices. As such, the study's contribution is two-fold. First, this study identifies price margin differences (i.e., minimum, maximum, and PWYW prices) and profitability for three groups of customers (potential, new, and repeat). Further, unlike studies which reveal PWYW profitability by contrasting PWYW prices with one-price-fits-all prices determined by the service provider (e.g., Kim et al., 2009), this research compares PWYW with a more sophisticated traditional list price structure (i.e., various price groups and discounts). Second, this study identifies PWYW price differences regarding price perception/consciousness and quality/value perceptions to customers. These variables are relevant to customers' willingness to pay different prices in the context of PWYW.

## 2. Literature review

### 2.1. The success of PWYW

New pricing methods allow personalized prices at the individual customer level (Grewal, Roggeveen, \& Nordfält, 2014). Existing studies reveal contradictory findings on the success of PWYW. For example,

PWYW works well for charity events (Gneezy, Gneezy, Nelson, \& Brown, 2010), golfing tickets (Machado \& Sinha, 2013), and gastronomy (Kim et al., 2009; Riener \& Traxler, 2012). However, prior studies do not support PWYW's effectiveness for cinema tickets (Kim et al., 2009), holiday packages (León, Noguera, \& Tena-Sánchez, 2012), and luxury products (Balan, 2014). Measuring the success of PWYW goes beyond a higher price paid by customers in comparison to traditional prices. PWYW also works well when the decrease in individual payment leads to higher sales volumes and revenues (Machado \& Sinha, 2013). PWYW also increases word-of-mouth, forms a positive pricing image (Kim et al., 2009), and serves as non-traditional promotion method (Kim, Natter, \& Spann, 2014).

### 2.2. Price perceptions and PWYW prices

Price perceptions develop through either external (i.e., the advertised price) (Mayhew \& Winer, 1992) or internal sources by consumers. The internal reference or fair price is the amount a customer expects to pay based on past experience (Lewis \& Shoemaker, 1997) or the expected future price (Jacobson \& Obermiller, 1990). Comparing the external and internal prices allows buyers to decide whether or not a service is expensive. Diverging definitions on internal reference prices lead researchers to conclude that a reference price is a range rather than a single point (amount) (Alford \& Engelland, 2000). Consumers have different reference price ranges (Mazumdar, Raj, \& Sinha, 2005). These price ranges are usually based on maximum, minimum, and the fair price points (Lewis \& Shoemaker, 1997).

Price perceptions also form through consumer's judgements of quality and value (Oh, 2003). A higher price often serves as a signal for higher quality and vice versa (Kotler \& Armstrong, 2001). Studies on price as an indicator for quality mainly examine the relationship between price and value judgements (Oh, 2003). The difference between quality and value is that the latter is at a higher level of abstraction, comprising of factors such as prestige and convenience (Holbrook \& Corfman, 1985).

Both internal and external reference price roles change in a PWYW context. Fig. 1 shows the main differences between a traditional service purchase and a PWYW setting. Prior studies show (e.g., Kim et al., 2009; Schons et al., 2014) that no external or advertised reference price exists in a PWYW setting. Also, customers do not have to commit to pay a certain amount of money before they experience or consume the service they only make a consumption commitment. In addition, customers pay a price after consumption based on price perceptions and payment triggers such as satisfaction, service quality, and/or fairness.

As Fig. 1 shows, internal reference prices play an important role in a PWYW context by impacting the price customers pay (Kim et al., 2009) and the upper PWYW price limit (Schons et al., 2014). This role differs from that found in the traditional service purchase setting where reference prices and price consciousness impact the service offering's evaluation and subsequent purchase decision. Kim et al. (2009) show that
price consciousness affects PWYW prices, but other studies suggest that price consciousness negatively affects willingness to pay (Marett, Pearson, \& Moore, 2012) and initial prices paid (Schons et al., 2014). Kunter (2015) argues that making a bargain is a key motivation relating to PWYW payment factors, leading to higher price consciousness and resulting in lower prices paid. Most customers do not exploit the lower price limit of PWYW which is zero because they know that this behaviour would result in a loss for the service provider. To sustain a PWYW offer in the long term, which potentially allows a customer to pay prices below traditional ones, customers strive to pay a fair price based on cost estimates (Kim et al., 2009) which are their lower limit of a fair PWYW price (Schons et al., 2014).

### 2.3. Repeat customers' price behaviour

The relationship between repeat customers and price perceptions continues to interest researchers after decades of study. Prior study results indicate that loyalty increases profitability due to positive word-of-mouth, repeat business, and customers' willingness to pay a higher price (Wieseke, Alavi, \& Habel, 2014). Loyalty decreases price sensitivity and consequently results in higher prices (e.g., Chaudhuri \& Holbrook, 2001). Azar (2007) argues that loyal customers tend to pay more as they fear to feel uncomfortable but this result remains inconclusive. Other studies show that repeat customers expect higher discounts as reward for their loyalty (Reinartz \& Kumar, 2002; Wieseke et al., 2014).

PWYW research examining repeat customers and their price behaviour remains scant. Kim et al. (2009) examine loyalty in the three different contexts of a restaurant, hot beverages, and cinema tickets and find that loyalty only impacts the PWYW price in the restaurant context. More recently, Kim, Kaufmann, and Stegemann (2014) confirm the positive effect of PWYW pricing on loyalty in restaurants. Machado and Sinha (2013) demonstrate that the voluntary payment increases by around one-fourth of the average payment when customers intend to come back. However, loyalty intention for frequently bought services does not impact prices paid (Schons et al., 2014). The nascent body of PWYW research provides contradictory results on how this pricing strategy affects different customer groups.

## 3. Methods

### 3.1. The research context and approach

ImPulsTanz is Europe's biggest festival for contemporary dance, offering $>200$ workshops to dancers instructed by internationally renowned teachers/choreographers (ImPulsTanz, 2015). According to experts in this field, these workshops are at the highest international standard while the price is set at the mid-range. This company positions the offer as a high-value service.

Experiments are not necessarily either qualitative or quantitative in nature, but they can include a continuum of data collection and


Fig. 1. Comparison between a traditional and a PWYW service purchase setting.
analytical techniques (Sørensen, Mattsson, \& Sundbo, 2010). The present study uses a natural experiment method (e.g., Brüggen, Foubert, \& Gremler, 2011; Nair, Manchanda, \& Bhatia, 2010). A combination of secondary and primary survey data achieves the research objective.

From ImPulsTanz secondary data, the evidence shows that prices are based on demographics and relate to three customer groups (potential, new, and repeat) who have varied exposure to the workshops. The first group (potential) consists of customers who had indicated an interest in workshops, but they never actually bought the service. The second group of customers bought a workshop at least once but less than three times (new) while the third group refers to customers who previously bought at least three or more workshops (repeat).

The survey data gathered through an online questionnaire measures previous participation in the workshops (for the past five years), the level of interest in workshops, the respondent's price category, and their eligibility for the $10 \%$ discount. The survey asked customers to specify the following prices: a) the maximum price they are willing to pay before they consider a workshop as being too expensive, b) the minimum price they are willing to pay before they would question the quality (Lewis \& Shoemaker, 1997), and c) the price they are actually willing to pay if they can pay whatever they wish (Kim et al., 2009). Given that the secondary data does not include questions about price and value perceptions, questions related to these areas were included (see Table 1) and measured using a six-point Likert-scale ( $1=$ strongly disagree to $6=$ strongly agree). All workshop participants and interested/potential customers registered in the dance festival's database (15023 persons) received the questionnaire via email. The survey took place in November and December 2015, resulting in 334 fully useable questionnaires.

### 3.2. Data analysis

Data were analysed in two stages. First, the secondary data from ImPulsTanz which consists of a database of prices and a survey in 2014/2015 shed light on the pricing structure related to different customer groups. The database comprises prices for each workshop for the time period 2001-2016. The second stage reveals the profitability of PWYW for potential, new, and repeat customers and compares the maximum, minimum, and PWYW prices with actual prices using the authors' survey data. Actual prices were calculated by deducting the $10 \%$ discount (revealed through the questionnaire) from the three regular price groups set by the organizer.

To identify the PWYW prices' effect on the three different groups (potential, new, and repeat customers), the survey data were segmented using the neural gas algorithm used by the Typology Representing Network (TRN-32) software (Mazanec, 2009) based on respondents' price perception/consciousness and quality, and value perceptions. The weighted Simple Structure Index (wSSI), a heuristic between 0 and 1 (a higher value indicates a higher contrast), helps to identify the cluster number. Based on 50 repetitions, the percentage of uncertainty reduction (\%UR) examines stability of the identified segments (Mazanec \& Strasser, 2000). The Kruskal-Wallis-H test and paired
tests (i.e., Mann-Whitney $U$ tests) examined differences between the segments. Significant values were adjusted with Bonferroni correction to control for Type I errors (Field, 2009).

## 4. Findings

### 4.1. Results from secondary data analysis

Data from ImPulsTanz show that they had 2929 workshop participants in 2015 who took on average 2.34 workshops and paid an average price of $€ 119.34$. Reviewing the ImPulsTanz price structure (see Fig. 2) reveals that in 2016 the regular fee (price category P1) for the first workshop is $€ 150$ ( $25 \%$ price increase since 2001). For the second and every subsequent booked workshop, the price is $€ 130$ ( $23.8 \%$ price increase since 2001). A reduced fee of $€ 130$ for the first ( $23.8 \%$ price increase since 2001) and $€ 110$ for subsequent workshops ( $20.9 \%$ price increase since 2001) applies for young professional dancers, dance teachers, and students (age < 27; price category P2). The reduced fee for participants of the category Golden Age (55+; price category P2) was introduced in 2006 and these participants' fees are the same as for the previous category, $€ 130$ and $€ 110$, respectively, ( $18.2 \%$ and $10 \%$ price increase since 2006). Participants under 18 years pay $€ 85$ and $€ 60$, respectively, (introduced in $2002,17.65 \%$ and $16.67 \%$ price increase since 2002; price category P3). Further, ImPulsTanz Workshop Card owners get an additional discount of $10 \%$. These prices create a tiered approach allowing various customer groups to pay different prices. ImPulsTanz estimates that the average customer is 30 years old. Further, ImPulsTanz believes that repeat customers are very common. The company implicitly takes into account this assumption when developing the price structure, but the proposition remains untested. Since many customers book workshops regularly, management assumes that they are part of the "Golden Age" category. Further, a survey by ImPulsTanz in 2014 and $2015(N=4158)$ shows that $84 \%$ of workshop participants are female. Few customers are 18 years and younger (6.7\%) or at least 55 years old ( $6.5 \%$ ), suggesting a fairly narrow age range for most customers.

### 4.2. Results from the survey in 2015

From the 334 useable questionnaires, 92 can be categorized as potential customers ( $27.5 \%$ ), 139 new customers ( $41.6 \%$ ), and 103 repeat customers ( $30.8 \%$ ). Most respondents are female ( $85.1 \%$ ) with no significant gender differences between the three customer groups ( $p>0.05$ ). The average age is 36.4 years ( $\mathrm{SD}=12.0$ ). Repeaters primarily are intermediate or advanced dancers; potential customers generally are beginners ( $p<0.001$ ). Not surprisingly, repeat customers view themselves as more loyal than new customers ( $p<0.001$ ). Table 2 summarizes the sample's main characteristics as well as their price and value perceptions. Results show that none of the groups really know the workshops' cost structure ( $p>0.05$ ). Price perception is lowest for repeat customers ( $p<0.05$ ). The perceived value is lowest for potential customers ( $p<0.01$ ). The second and third price categories (P2 and P3) are most

Table 1
Constructs and items.

| Constructs | Items |
| :---: | :---: |
| Price perception/consciousness | - I am not willing to go the extra mile to find lower prices ${ }^{\text {a }}$. <br> - The money saved by finding low prices is usually not worth the time and effort ${ }^{\mathrm{b}}$. <br> - I am sensitive to differences in prices of dance workshops ${ }^{\mathrm{c}}$. <br> - A person can save money by shopping around for dance workshop bargains ${ }^{\text {d }}$. <br> - I pay attention to special deals and sales regarding dance workshops ${ }^{\mathrm{d}}$. |
| Value and quality perception | - The quality of dance workshops is important to me ${ }^{\text {a }}$. <br> - When purchasing a dance workshop, I always try to maximize the quality I get for the money I spend ${ }^{\text {a }}$. <br> - Dance workshops must meet certain quality requirements for me to buy them ${ }^{\text {a }}$. <br> - When I buy dance workshops, I like to be sure that I get value for my money ${ }^{\text {a }}$. |

Adapted from (a) Lichtenstein, Netemeyer, and Burton (1990), (b) Lichtenstein, Ridgway, and Netemeyer (1993), (c) Wakefield and Inman (2003), and (d) Wells and Tigert (1971).


Fig. 2. Price structure of ImPulsTanz.

Table 2
Profiles of the potential, new, and repeat customers.

|  | Potential customer | New customer | Repeat customer |
| :--- | :--- | :--- | :--- |
| Gender | $79.1 \%$ females | $86.5 \%$ females | $91.1 \%$ females |
| Age | $\mathrm{M}=36.0, \mathrm{SD}=10.3$ | $\mathrm{M}=33.3, \mathrm{SD}=11.9$ | $\mathrm{M}=40.8, \mathrm{SD}=12.4$ |
| Workshop level | $50 \%$ beginner | $25.6 \%$ beginner | $14.6 \%$ beginner |
|  | $31 \%$ intermediate | $34.1 \%$ intermediate | $45.8 \%$ intermediate |
| \# workshops booked last time | $19 \%$ advanced | $40.3 \%$ advanced | $39.6 \%$ advanced |
| Cost structure knowledge | Not booked yet | $\mathrm{M}=2.4, \mathrm{SD}=2.1$ | $\mathrm{M}=2.3, \mathrm{SD}=2.0$ |
| Classified themselves as loyal | $\mathrm{M}=2.2, \mathrm{SD}=1.4$ | $\mathrm{M}=2.4, \mathrm{SD}=1.5$ | $\mathrm{M}=2.5, \mathrm{SD}=1.4$ |
| Overall experience satisfaction | No customer yet | $\mathrm{M}=4.0, \mathrm{SD}=1.6$ | $\mathrm{M}=5.1, \mathrm{SD}=1.2$ |
| Pay less but book more | No experience yet | $\mathrm{M}=5.4, \mathrm{SD}=1.0$ | $\mathrm{M}=5.5, \mathrm{SD}=0.6$ |
| Price perception (index) | $\mathrm{M}=4.2, \mathrm{SD}=1.5$ | $\mathrm{M}=4.5, \mathrm{SD}=1.6$ | $\mathrm{M}=4.6, \mathrm{SD}=1.4$ |
| Value perception (index) | $\mathrm{M}=3.5, \mathrm{SD}=1.5$ | $\mathrm{M}=3.3, \mathrm{SD}=1.7$ |  |
| Actual prices ${ }^{\text {b }}$ | $\mathrm{M}=3.5, \mathrm{SD}=1.5$ | $\mathrm{M}=5.2, \mathrm{SD}=1.0$ | $\mathrm{M}=5.3, \mathrm{SD}=0.9$ |
| (x\% reduced $=10 \%$ discount) | $\mathrm{M}=4.9, \mathrm{SD}=1.2$ | $2.2 \% \mathrm{PO}$ | $1.0 \% \mathrm{PO}$ |
|  |  | $9.4 \% \mathrm{P} 1(31 \%$ reduced) | $6.8 \%$ P1 (28\% reduced) |
|  | $2.2 \%$ P1 (100\% reduced) | $48.9 \% \mathrm{P} 2(34 \%$ reduced) | $48.6 \% \mathrm{P} 2(30 \%$ reduced) |

${ }^{a}$ The price and value perception index represent the mean value index of the various items of the respective construct.
${ }^{\text {b }}$ P0: $0 € ;$ P1: 1 st workshop $=85 € /$ subsequent $=70 € ; \mathrm{P} 2: 1$ st $=130 € /$ subsequent $=110 € ; \mathrm{P} 3: 1$ st $=150 € /$ subsequent $=130 €$.
popular, but within these categories - set by the supplier - many people ( $25 \%$ to $100 \%$ ) take advantage of the $10 \%$ discount.

### 4.3. Price margins based on maximum, minimum and PWYW prices

Following the Bonferroni correction, the critical value is $0.05 / 3=$ 0.02 (Field, 2009). Table 3 shows that repeat and new customers on average pay more than potential customers for all prices except for the actual price. The results show that no differences exist between the new and repeat customers for all prices. The PWYW price customers are willing to pay for the first and the subsequent workshops is lowest for potential, higher for new, and highest for repeat customers.

Fig. 3 visualizes the price margins for the three groups and highlights that the price range between minimum and maximum price range is
similar for potential and new customers (1st workshop $71.01 €$ and $71.88 €$; subsequent $€ 56.47$ and $€ 56.07$ ). ImPulsTanz has less leeway in price setting for repeat customers ( 1 st $€ 64.69$; subsequent $€ 51.44$ ). Potential customers pay $22 \%$ (15.8\%) and $29.7 \%$ (21.6\%) lower PWYW prices than repeat customers (new customers) for the first workshop and subsequent workshops respectively.

### 4.4. Profitability of PWYW for potential, new, and repeat customers

As existing customers qualify for discounts on their actual price, Table 3 shows that no price discrimination exists regarding the actual price between the three groups. Further, comparing average PWYW prices with the actual price reveals significant differences between PWYW and actual prices ( $p<0.001$ ) for all groups (i.e., potential (P),

Table 3
Price margins for potential, new, and repeat customers.

| Prices | Workshops | Potential customers(P) |  | New customers <br> (N) |  | Repeat customers(R) |  | P:N:R ${ }^{\text {a }}$ |  | $\begin{aligned} & \mathrm{P}: \mathrm{N}^{\mathrm{b}} \\ & p \end{aligned}$ | $\begin{aligned} & \mathrm{P}: \mathrm{R}^{\mathrm{C}} \\ & p \end{aligned}$ | $\begin{aligned} & \mathrm{N}: \mathrm{R}^{\mathrm{d}} \\ & p \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M ( $¢$ ) | SD | $\mathrm{M}(\mathrm{€})$ | SD | M ( $€)$ | SD | $\chi^{2}$ | $p$ |  |  |  |
| Maximum | 1st | 117.38 | 98.52 | 135.40 | 61.53 | 133.28 | 47.40 | 12.06 | 0.003 | 0.002 | 0.002 | 0.869 |
|  | Subsequent | 92.31 | 88.33 | 105.48 | 55.00 | 108.13 | 36.43 | 13.62 | 0.001 | 0.004 | <0.001 | 0.296 |
| Minimum | 1st | 46.37 | 37.96 | 63.52 | 38.16 | 68.49 | 34.10 | 27.95 | $<0.001$ | <0.001 | <0.001 | 0.102 |
|  | Subsequent | 35.84 | 31.09 | 49.41 | 29.34 | 56.69 | 28.63 | 28.68 | $<0.001$ | <0.001 | <0.001 | 0.040 |
| PWYW | 1st | 74.18 | 63.59 | 88.13 | 43.52 | 94.65 | 34.76 | 21.40 | $<0.001$ | 0.002 | <0.001 | 0.094 |
|  | Subsequent | 54.43 | 40.53 | 69.44 | 35.02 | 77.42 | 29.38 | 27.05 | <0.001 | 0.001 | <0.001 | 0.034 |
| Actual | 1st | 133.23 | 13.46 | 125.91 | 26.23 | 128.28 | 20.41 | 3.33 | 0.189 | 0.074 | 0.202 | 0.615 |
|  | Subsequent | 114.07 | 12.34 | 107.53 | 23.32 | 109.68 | 18.39 | 3.33 | 0.189 | 0.074 | 0.202 | 0.615 |

[^1]

Fig. 3. Price margins: Minimum (MIN), maximum (MAX), PWYW - actual prices (A).
new ( N ), and repeat ( R ) customers) irrespective of first or subsequent workshop. Fig. 3 also shows that PWYW is lower than the actual price and less profitable than the traditionally charged price. The loss is least for repeat customers, followed by new and potential customers respectively (1st workshop: $\mathrm{P}=-44.3 \%, \mathrm{~N}=-30.0 \%, \mathrm{R}=-26.2 \%$; subsequent: $\mathrm{P}=-52.3 \%, \mathrm{~N}=-35.4 \%, \mathrm{R}=-29.4 \%)$.

### 4.5. Price differences regarding quality, value, and price consciousness

The nine items of quality, value, and price consciousness are segmented by means of TRN (Mazanec, 2009). Three segments are identified $(\mathrm{wSSI}=0.34 ; \%$ UR $=89.17 \%)$. These three segments differ by income levels ( $p$-value Clusters 1 and $2 p<0.001$ and Clusters 2 and 3 $p<0.05$, Clusters 1 and $3 p=0.05$ ) and age ( $p$-value between Clusters 1 and $2 p<0.001$, Clusters 2 and $3 p>0.05$, Clusters 1 and $3 p>0.05$ ) but not on gender ( $p>0.05$ ).

Cluster 1, Value for Money Seekers (37.2\%), is sensitive to differences in prices, is looking for bargains, and believes that searching for bargains is worth their time and effort. Not surprisingly, quality and value are of utmost importance to this group, but their income level is the lowest and they represent the youngest age group ( $\mathrm{M}=33.3$, $\mathrm{SD}=12.1$ ). Cluster 2, Quality and Value Prone Customers (32.0\%), values quality but hardly pays attention to deals and rarely puts energy into searching for low prices. These behaviours may be related to this group's high income level. The average age of this group is 39.5 years ( $\mathrm{SD}=12.2$ ). For Cluster 3, Price Aware Customers (30.8\%), quality and value are important; however, these customers pay less attention to such criteria in comparison to the other two clusters. They go the extra mile to find a
deal but are actually less price conscious than Cluster 1 . Their income level is higher than Cluster 1 but lower than Cluster 2. This group on average is 36.9 years old ( $\mathrm{SD}=10.9$ ).

To further profile these clusters, price differences are examined. Table 4 shows that differences (critical value of 0.02 due to Bonferroni correction) exist between all three segments for all prices (i.e., maximum, minimum, PWYW, and actual prices). Cluster 2 pays the highest prices (highlighted in bold in Table 4), while no differences exist between Clusters 1 and 3.

Considering new, potential, and repeat customers (always for 1st and subsequent workshops) within each cluster reveals that for the Value for Money Seekers (Cluster 1), potential customers pay significantly lower maximum, minimum, and PWYW prices than new customers ( $p<0.001$ to 0.02 ). Repeat customers pay higher minimum and PWYW prices than potential customers ( $p<0.001$ to 0.002 ) but no differences exist for the maximum prices ( $p=0.02$ to 0.07 ). For Cluster 2 , the Quality and Value Prone Customers, no price differences exist between potential, new, and repeat customers ( $p=0.08$ to 0.98 ). Price Aware Customers (Cluster 3) pay higher minimum prices for subsequent workshops ( $p=0.01$ ) as well as higher PWYW prices for the first and subsequent workshops than potential customers ( $p=0.01$ and 0.02). Fig. 4 also shows that some customers report a minimum price of zero. In the PWYW setting, nearly all participants pay more than a price of zero ( $<1 \%$ pays nothing for the first workshop; all pay for subsequent workshops). Comparing all price charts, the evidence shows that a traditional price setting approach (i.e., actual price) does not consider personalization. In other words, even though the organizers offer various prices for different customer groups and discounts, the customer's

Table 4
Price differences between the three clusters.

| Prices | Workshops | Cluster (1) |  | Cluster (2) |  | Cluster (3) |  | 1:2:3 ${ }^{\text {a }}$ |  | $\begin{aligned} & 1: 2^{\mathrm{b}} \\ & p \end{aligned}$ | $\begin{aligned} & 1: 3^{\mathrm{C}} \\ & p \end{aligned}$ | $\begin{aligned} & 2: 3^{\mathrm{d}} \\ & p \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M (€) | SD | M (€) | SD | M (€) | SD | $\chi^{2}$ | $p$ |  |  |  |
| Maximum | 1st | 125.19 | 82.97 | 145.06 | 52.41 | 119.25 | 70.21 | 17.00 | <0.001 | <0.001 | 0.933 | 0.001 |
|  | Subsequent | 98.18 | 71.56 | 114.35 | 45.35 | 98.39 | 61.13 | 14.30 | 0.001 | $<0.001$ | 0.793 | 0.012 |
| Minimum | 1st | 58.22 | 37.82 | 74.02 | 36.33 | 49.87 | 35.62 | 23.66 | <0.001 | $<0.001$ | 0.092 | <0.001 |
|  | Subsequent | 45.80 | 30.29 | 60.16 | 29.40 | 39.49 | 28.09 | 25.08 | <0.001 | <0.001 | 0.112 | $<0.001$ |
| PWYW | 1st | 82.84 | 54.61 | 100.49 | 38.61 | 76.29 | 46.68 | 23.16 | <0.001 | <0.001 | 0.470 | <0.001 |
|  | Subsequent | 62.04 | 34.37 | 81.95 | 33.54 | 60.25 | 36.36 | 25.59 | $<0.001$ | $<0.001$ | 0.077 | $<0.001$ |
| Actual | 1st | 124.90 | 25.96 | 130.95 | 17.53 | 131.65 | 15.42 | 9.01 | 0.011 | 0.015 | 0.007 | 0.886 |
|  | Subsequent | 106.47 | 22.92 | 112.07 | 16.25 | 112.77 | 14.35 | 9.01 | 0.011 | 0.015 | 0.007 | 0.886 |

[^2]

Fig. 4. Price comparison of potential, new, and repeat customers within the three clusters.
actual price range varies considerably. A more personalized pricing approach allows the organizer to get as much as $800 €$ for the first workshop and up to $250 €$ for subsequent workshops (see maximum prices in Fig. 4).

## 5. Discussion

This study examines whether or not different customer groups (potential, new, and repeat customers) will pay different prices in a PWYW context for a high-value service. Further, are these self-determined prices much different than actual prices? The study uses a more sophisticated price structure than previous studies, which either do not compare their PWYW results with actual prices (e.g., Schons et al., 2014) or compares one price that fits all customers (e.g., Kim et al., 2009) and ignores the effects of price reductions or discounts.

Similar to previous PWYW research (e.g., Kim et al., 2009), this study confirms that most customers pay a price different from zero. However, PWYW turns out to be unprofitable for high-value priced services. In fact, PWYW prices are lower than actual prices for all customer groups. Plausibly, customers are not aware of the service's cost structure. Prior studies suggest (e.g., Kim et al., 2009) that the lack of information on cost structures leads customers to pay lower than actual prices. Surprisingly, this behaviour extends to both potential and new/repeat customers although the latter have a reference price from the actual prices paid by attending previous workshops. As such, provision of accurate information on cost structures seems to be critical for this pricing method to work (Greiff et al., 2014; Kim et al., 2009).

From a managerial perspective, other studies also find that PWYW prices are below actual prices. Those researchers suggest that lower prices can be compensated with an increase in sales volume to make a profit (e.g., Kim et al., 2009; Machado \& Sinha, 2013). High-value
services such as ImPulsTanz may consider adopting a similar approach. Customers need encouragement to book more workshops using a PWYW price to boost workshop sales. Future research should examine whether or not this approach works for premium priced products where PWYW generally fails to be profitable (Balan, 2014).

Regarding profitability, PWYW prices make the least loss for the service provider with repeat customers and the highest loss for potential customers. Findings are consistent with the literature examining traditionally set prices. Results show that loyal customers are willing to pay a higher price (Wieseke et al., 2014), but the findings contradict studies claiming that customers expect a reward such as lower prices for their loyalty (Reinartz \& Kumar, 2002). Since repeat customers cause the least loss for high-value services, the results suggest that PWYW prices should be offered only to repeat customers. This strategy serves as a non-traditional promotional instrument (Kim et al., 2014) that can lead to a boost in word-of-mouth and form a positive pricing image for the service provider. Offering repeat customers a PWYW option would tap into their need to feel rewarded for their loyalty (Wieseke et al., 2014) and potentially increase their engagement levels. As such, a future research area beyond loyalty is the effect of a PWYW pricing method on consumer engagement and the service provider's reputation.

The fact that the Quality and Value Prone Customer segment pays the highest prices, suggests that PWYW prices individual customers are willing to pay vary and confirms that customers' internal reference price differs between people. Further, results show that price is a range rather than a point (Alford \& Engelland, 2000). Understanding how different segments perceive quality, value, and price consciousness is a pre-requisite for implementing PWYW (Holbrook \& Corfman, 1985; Oh, 2003). Such an understanding can help refine differentiation strategies with regard to the price for targeted customer groups. The results highlight that price reductions and discounts offered by service provider, based on a traditional pricing, are not able to capture the diversity of price ranges customers seek. A participative pricing strategy such as PWYW allows each customer to personalize the price according to their own internal reference prices that are triggered by perceived quality, value and price consciousness.

Despite the study's contribution to participative pricing literature, some limitations exist. First, the unexpected result of poor levels of profitability, using PWYW, for the service provider is specific to the type of service chosen (high value). A worthwhile extension would examine the profitability of PWYW for different segments using low priced services such as budget hotels and car rentals. Second, the study examines only a subset of factors (quality, value, and price perceptions) that influence PWYW prices. Future research should examine the influence of factors such as image and reputation of the service provider, motivation for purchase, and customers' knowledge of the cost structures for the service. Third, cross-sectional data is used to examine profitability of the service at one point in time. Future research should adopt a longitudinal approach to evaluate the profitability of PWYW for different segments and for different service bundles of the same provider.

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[^1]:    ${ }^{\text {a }} \mathrm{P}: \mathrm{N}: \mathrm{R}:$ Significant differences between all three groups.
    ${ }^{\text {b }} \mathrm{P}: \mathrm{N}=$ Differences between potential and new customers.
    ${ }^{\text {c }} \mathrm{P}: \mathrm{R}=$ Differences between potential and repeat customers.
    ${ }^{\mathrm{d}} \mathrm{N}: \mathrm{P}=$ Differences between new and repeat customers.

[^2]:    ${ }^{\text {a }} 1: 2: 3=$ Differences between all three clusters.
    ${ }^{\text {b }} 1: 2=$ Differences between cluster one and two.
    c $1: 3=$ Differences between cluster one and three.
    ${ }^{\text {d }}$ 2:3 $=$ Differences between cluster two and three.

