

Pay As You Wish as a Museum Pricing Mechanism

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Abstract

Currently, museums show difficulty in setting their ticket prices, as well as in increasing their revenue while remaining inclusive. Pay As You Wish is a pricing mechanism in which visitors are allowed to pay whatever value they wish for the museum visit, including zero. In order to evaluate if this pricing mechanism could be profitable in a museum while increasing inclusivity, online experiments were conducted to evaluate people's willingness to pay. The results have shown that PAYW can be a profitable pricing mechanism in museum settings, translating into an increase of almost 40% in the museum's return.

Keywords:

Museum, Pricing, Pay-As-You-Wish

Museums and pricing

Historically, museums have been associated with the “moral and intellectual well-being” (Rentschler et al, 2007) of the communities in which they are. Today, they have a different purpose added to them, which is the one of enjoyment (Rentschler et al, 2007).

Since 2007, the International Council of Museums defines a museum as “a non-profit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment” (ICOM, 2007). In the world of today, museums are no longer associated with learning purposes only, but rather with experiences, and ‘edutainment’ (Rentschler et al, 2007). This change in the museum’s ambition brings a larger base of possible customers or, in this case, visitors, but it also brings about a much larger range of activities and institutions to compete with for the attention and visits of the public. Because of this new gained competition, museums need to develop effective marketing strategies to reach their target audiences and bring them inside the museum.

These marketing strategies can be based on different marketing tactics. Though we recognize that all of them are fundamental in devising a marketing strategy, we have decided to focus on price, as we know that is one of the existing access barriers to museums (Bailey et al, 1998), and the limited number of articles on this matter (Rentschler et al, 2007) has shown us that, despite it being a crucial factor, there is very limited research about it. Rentschler (2007) has even written that the decision of what price to charge is one of the most important ones that marketing managers are faced with. Yet, despite this, the decision is a complex one, and the basis for it is still often not understood.

Should museum entrances be free?

In between museum professionals, one often finds people to be divided in relation to whether or not museums should charge for admission.

Many museum professionals believe that admissions to museums should not be charged. However, according to Bailey (1998), the decision not to do so has often created financial necessities in the museums. Furthermore, there is the fact that museums often don't enjoy the autonomy to make these decisions, as they are made by external authorities. For these reasons, amongst others, the decision of whether to charge entrances or not has always been, and remains, a complicated one.

Professionals in favor of not charging museum entrances use several arguments to defend their position. One of these is the marginal cost argument, which states that, after having the basic needs of the museum taken care of, the marginal cost of each new visitor is zero, and that therefore entrances shouldn't be charged (Bailey et al, 1998). Bailey's research (1998), however, has found that this is only applicable in the short term, and to museums operating below capacity. In the long term, and for museums working at or above capacity, this is not the case. Every new visitor comes with more cost to the museum, be them in lighting, space, heating, and even in surveillance. And even in the short term, the space of every marginal visitor could be used for other purposes, such as conservation. Moreover, as museums approach full capacity, there is also the congestion cost, that decreases the quality of the visit.

Another commonly used argument in favor of free museums is called the equity argument, which states that charging deters access by low-income groups (Bailey et al, 1998). However, research has shown that the demand for museum visits is not price elastic, but rather income elastic (Bailey et al, 1998), which means that a decrease in price does not

translate into more access for low-income groups. According to Kirchberg (1998), income is only one of the three main personal factors that influence the assessment of whether a museum price is a barrier to entry, though it is the strongest one. Two other factors that have a lower, but still significant impact on the assessment of price as an entry barrier are education and occupation.

Professionals in favor of charging museum entrances argue that commissions can be a way to increase access by low-income groups. Along with it, they defend that the additional revenue that museums make from charging means that they can have fewer cost cuts, which allows them to remain open for more hours, and even create outreach programs for the underserved communities (Bailey et al, 1998).

Another argument in favor of charging museum entrances states that the lack of revenues in museums may lead to lower possibilities in terms of visitor education, which deters value from the visit and goes directly against one of the museum's purposes, which is to educate.

Kirchberg (1998) argues against paid museums by stating that, by increasing entrance fees, museums will cause a change in the socioeconomic composition of visitorship, thus contributing to an elitist composition of museum attendance. However, as mentioned above, Bailey's research (1998) has shown that changes in price do not cause a change in demand.

There is, however, a detail that is worth being explored. Later in his research, Bailey (1998) mentions that 'demand appears to be unresponsive to modest increases in admission charges *once levied*'. The last part of the sentence leaves for the possibility that the inelasticity in demand is only existent *after* the prices have been set, meaning that there might be a difference in demand between the free and paid museum. The discussion then seems to be between having a fully inclusive museum, or a profitable one.

The case in Portugal

All twenty-three Portuguese state monuments, palaces, and museums are governed by a General Direction (DGPC - General Direction of Cultural Heritage) (Património Cultural, n.d.). As previously mentioned, in these cases the decision of whether or not to charge for a museum entrance, as well as that of what to charge, is not taken by the museum workers or directors. As in other countries, the total revenue of these museums is pooled and the government then allocates a financial amount per museum for its needs and expenses. It is believed that this makes it difficult for museum teams to be motivated to increase its demand (by means other than price), given that it will not necessarily translate into an increase in their allocated financial resources.

Recently in Portugal, there have been numerous discussions about the financial and managerial independence of the museums from the governmental organs (Xavier, 2018. Canelas, 2018. Pimentel, 2018). In the eventuality of this transition taking place, as well to argue for their autonomy, these museums would need to be profitable enough to at least match their own costs. All the while, and remembering the museum definition given by the International Council of Museums, museums need to remain open to the public, inclusive, to fulfill their main duties. Having this in mind, this study will explore the usage of an alternative pricing mechanism called Pay-As-You-Wish in Portuguese museums. To my knowledge, this pricing mechanism has not yet been used in Portugal. However, the MoMA PS1 museum in New York uses this pricing system, with a suggested price (MoMA, n.d.). To the extent of my knowledge, there are no studies on this case that can tell us more about the profitability of the model in the MoMA PS1. Similarly, the Cartoon Art Museum, in San Francisco has been employing this pricing mechanism once a month for over 10 years (Jung

et al, 2014). Jung's research (2014) was not promising, showing that people paid less than the normal ticket value when under a Pay As You Wish pricing mechanism. However, as mentioned, the Cartoon Art Museum had been using this mechanism for over 10 years, and in addition, other museums in the country were also using the same idea, which means that it could not be seen as very alternative. In Portugal, being this a new pricing mechanism, it could benefit from the newness.

Pay-As-You-Wish pricing

Pay-As-You-Wish (or PAYW), also known as pay-what-you-want, is a consumer elective pricing mechanism. In consumer elective pricing mechanisms, the buyers can choose to pay any price they want to for a good or service (Jung et al, 2014), including zero, and the seller must accept that price. Jung's (2014) research has shown that under mechanisms of consumer elective pricing, people often pay for a product or service that they could have for free, which indicates that people are influenced by social concerns, rather than only by self-interest. Kim (2009) has found that consumers prefer to have an active role in setting the final price, rather than accepting posted prices, and that the higher perceived control they have from these pricing mechanisms leads to higher intents to purchase.

Furthermore, because they are different from the usual way of price setting, these mechanisms can be seen as innovative, which can attract customers' attention, and even potentially bring new customers in, as well as increase word of mouth around the seller (Kim et al, 2009). PAYW is one such pricing mechanism.

There is, of course, the risk that people will pay nothing, or a value well below the seller's cost. However, previous research has shown that people are not purely self-interested, even when their environment promotes self-interest (Jung et al, 2014), being instead

motivated by concerns of fairness and reciprocity. A customer that is economically rational might want to maximize his or her purchase utility, thus exploiting the mechanism and paying zero, but previous successful implementations of PAYW, both online and offline, have shown that this is not the predominant behavior (Kim et al, 2009). Because transactions under PAYW invoke concerns of reciprocity and fairness, people feel obligated to pay, even though they have an opportunity not to do so (Jung et al, 2014).

When in uncertain situations, such as that in PAYW situations, people look both inwards and outwards for references. People will look for their own internal cues of what an appropriate behavior would be in the situation (in this case, what value to pay). These cues can be, for instance, their references for competitors' prices (Kim et al, 2009).

People will also look at social norms to guide their behavior. The problem is that, oftentimes, these can be ambiguous, uncertain, and even unknown, depending on their context. When this happens, people look to the beliefs they have of others' behavior and let those beliefs guide them in their own behavior (Jung et al, 2014). PAYW transactions are such a case, where the 'appropriate' price to pay is ambiguous, and there are no references of what others' behaviors were. In these situations, as explained, people will look to their beliefs of others' behaviors to guide them. Research (Jung et al, 2014) has shown that in non-caritative situations, people judge others to be more willing to pay for the same products, even when considering that the others want the product just as much as them. People will then try to match their behavior (in this case, their payment), to the one they believe others have had, to match the social norms that they have just implied.

Furthermore, in PAYW situations, the usual money-market relationship between sellers and buyers, where the exchange between the parties is regulated by a value, is partially dismissed, since the buyer is the one determining the price. Since the customer can pay any

price they want to, including zero, social norms (such as fairness and reciprocity), rather than market norms, come into place (Kim et al, 2009). The violation of such norms can result in distress and fear of disapproval from the customers (Kim et al, 2009). Considering all of the above, customers are expected to pay relatively high prices because they feel concerns about the survival of the seller, and they fear the future embarrassment that might come with paying a lower price (Kim et al, 2009).

But there are other benefits that come with the implementation of a PAYW pricing mechanism. Previous research (Chen et al, 2017) has shown that PAYW can help achieve maximal market penetration, implement price discrimination, and moderate price competition. Maximal market penetration is achieved by taking away the last obstacle faced by consumers when buying a product or service, the price. Since consumers pay whatever value they wish to, price discrimination is an autonomous process in PAYW. Finally, by setting a PAYW pricing mechanism, competitors are no longer capable of competing on the basis of price, and thus must focus on other factors. These competitors are both other museums and other activities competing for people's attention and time, such as entertainment and education activities (cinemas, concerts, workshops, amongst other activities).

Bringing Pay-As-You-Wish into museums

As we have seen previously, though museums need to increase their revenue, that need seems to go against one of their main concerns, maintaining (and fostering) inclusivity.

We have also seen that a modest increase in entrance prices should not translate into a change in demand. Further research about the demand for museum visits was not found, but it should be done in the future, to better understand it.

From the above mentioned, we can see that price is a barrier, that might be surpassed by certain personal characteristics. It is therefore important that it is studied, in accordance with the museum's goals and needs.

The hypothesis presented in this paper is that a PAYW pricing mechanism may allow for the museum to keep a larger inclusivity, serving a more heterogeneous sample of the population, while potentially increasing its revenues. By allowing people to pay whatever price they want, including zero, there could be a reconciliation of the two sides of the pricing discussion. On one hand, there is no fixed price imposed on visitors, and on the other, the museum might still increase its revenues. The elimination of this barrier might allow for the groups that see it has a barrier to start visiting. As for those who had already surpassed this barrier, according to the research explained above, they may pay a higher price than the usual full-ticket price.

I chose the National Museum of Ancient Art (MNAA) in Lisbon to test this hypothesis. I did so because it is one of the museums governed by the Direção Geral do Património Cultural, it has been at the center of the recent museum autonomy discussion, and it is one of the most important Portuguese museums. Located in the capital city, close to the main touristic centers, it has had 212.669 visits in 2017 (DGPC, 2017). The full-price entrance ticket at the MNAA costs 6 euros. Students and seniors (over 65 years old) pay only 50% of the full price, and several groups can enjoy free entries. Furthermore, on Sunday morning and on Holiday mornings, entrance is free.

Lisbon is currently having a tourism boom, and the recent statistics from the tourism entity (Turismo de Lisboa, 2017) have shown that in 2017 approximately 92% of tourists have visited museums during their stay in Lisbon. Furthermore, when inquired about what museums/monuments they have visited, 44.1% of the tourists that had visited museums, had

visited the MNAA. The majority of the people inquired were from the UK and Ireland, Spain, Brazil, France, Germany and Scandinavia (Turismo de Portugal, 2017). From a study on the visitors of museums, it has been found that approximately 56% of the MNAA’s visitors are tourists (DGPC, 2018). Knowing that the large majority of MNAA visitors are tourists, and knowing that, as we have seen above, people will look for their own cues as to what a correct price would be in a PAYW transaction, we have researched on the prices of some of the main museums in these countries. We have looked for museums in the capital city, and with similar collections, when possible. The results can be seen in table 1, below.

Table 1 - Prices of museums across the main origin countries of Lisbon visitors

Country	Museum	Full-price ticket
Ireland	National Gallery of Ireland	Free
United Kingdom	The National Gallery	Free
Spain	Museo Nacional del Prado	15 €
Brazil	Museu de Arte de São Paulo	7.87 € (35 R\$)
France	Louvre	15 €
Berlin	Alte Nationalgalerie	10 €
Denmark	National Museum of Denmark	12.72 € (95 DKK)
Norway	National Gallery	12.41 € (120 KR)
Sweden	Thielska Gallery	12.63 € (130 SEK)

As we can observe, with the exception of the UK and Ireland, which famously practice free entrance in their museums, all of the entry prices are higher than that of MNAA. As we have seen from previous research, this might mean that these visitors have higher reference prices, which in turn might translate into higher payments (when compared to the usual 6 euros practiced by the MNAA).

Groups that see museums as a form of entertainment, foreign or Portuguese, are likely to compare the prices of it with the average prices of other entertainment forms, such as concerts. A study from 2016 (Jornal de Negócios, 2016), states that the average price of a pop/rock concert in Lisbon is 17.4 €. With yet another high comparison, we can, once again, expect people to have higher reference prices when visiting the MNAA.

Hypothesis testing

In order to test the hypothesis, I conducted a between-subject two-cell experiment (regular price vs. pay as you wish). The experiment was conducted online, as an attempt to reach both museum-goers and non-museum-goers.

Participants read the same information about the MNAA in both experimental conditions. Specifically, they read that “The National Museum of Ancient Art (MNAA) is one of the National Museums in Portugal, located in Lisbon. It holds over 40.000 items and is the museum with more "National Treasures" within. It also has, in several art forms, known artworks from foreign masters.”. Next, all participants answered demographic questions, as well as questions about their museum habits. The goal was to better understand if there are patterns in the responses, as well as to understand the influence that demographic factors would have on the responses. Specifically, participants indicated how often they visited museums when traveling (1 = Never, 4 = Always), how often they visited museums in their hometown (1 = Never, 4 = Over 10 times a year), as well as country of origin, age, gender, current employment status, and educational level. Even though we are aware that income level is a crucial factor in the perception of whether price is a barrier to visit, I did not ask for income information because participants might have been uncomfortable to report it and it might have deterred them from answering the survey.

After museum habits and demographics, participants answered some questions related to the experimental condition. In the regular price condition, participants were informed that the price to visit the MNAA was six euros, and they reported how they felt about the price (higher than expected, lower than expected, or around the value expected). Next, they reported their willingness to visit the museum, given that price.

In the pay as you wish condition, participants were informed that “Next weekend, the MNAA is holding a Pay-What-You-Want day, where you can choose to pay whatever value you want, even zero. How much would you pay to visit this museum?”. The purpose of this survey was to understand if people would pay for a museum visit, despite not having to, and understand how the museum’s revenue would change with this pricing mechanism.

Analysis of the results

179 participants completed this study (Regular price condition: 127, $M_{age} = 42$, $|SD|=14$, 53.5% = female. Pay as you wish condition: 52, $M_{age} = 48$, $|SD| = 11$, 76.9% = female).

Regular price condition

25.2% of participants felt that the price was above their expectations, 26.8% felt that it was below their expectations, and the remaining 48% felt that the price was according to their expectations.

79.5% of participants reported that they would visit the museum for six Euros. A chi-square “goodness of fit” test (one-sided Chi-square) as shown that the model is statistically significantly different from theoretical random chance, which we considered to be 50% (chi-square = 0.17 and p-value < 0.0001). There were no significant differences in terms

of age, as the average age of people who responded “No” was 40, and the average age of people who responded “Yes” was 42.

I also checked if the perception of the price as being cheaper, more expensive or as expected would affect the willingness to visit the museum for 6 euros. Through a logistic regression with a confidence level of 95%, we can see that the perception of the price as being higher, lower or as expected is a factor in the decision of whether one is willing to visit the museum or not (Chi-square = 41.3599 and p-value < 0.001).

As we have seen above, one of the factors that influences the perceptions people have about prices is the ambiguity and unfamiliarity they feel in a certain situation. Therefore, it was then important to understand how the answer of visiting the MNAA might be dependent on the frequency of museum visits both in home and in travel environments. The results for both “Yes” and “No” answers were gathered, and are presented in images 1 and 2, below.

Image 1 - Frequency of museum visits in the home city (left) and while traveling (right), by people that have mentioned that they would not visit the MNAA for 6 euros (Regular price condition)

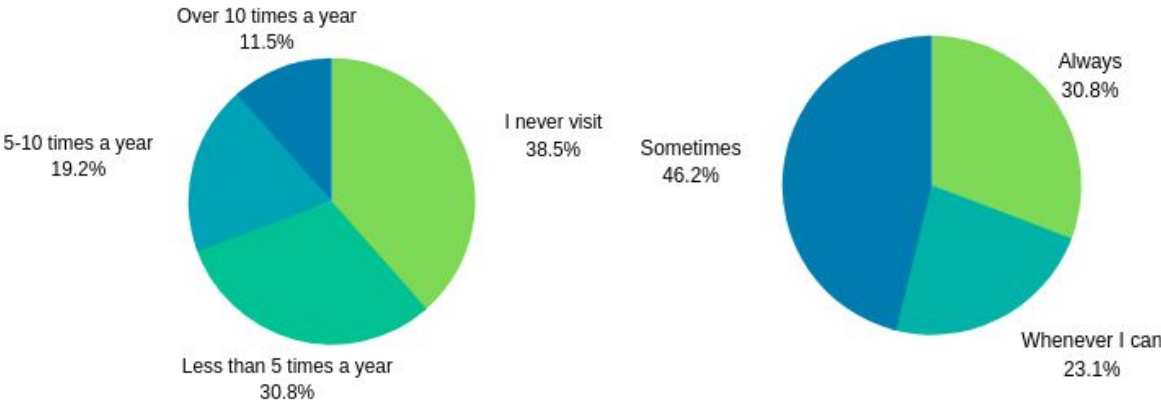
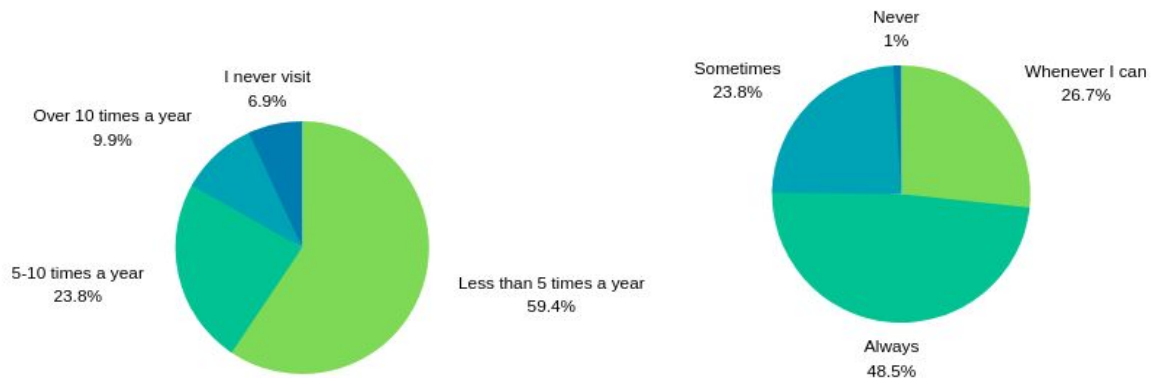


Image 2 - Frequency of museum visits in the home city (left) and while traveling (right), by people that have mentioned that they would visit the MNAA for 6 euros (Regular price condition)



Participants who declared they would visit the MNAA for six euros had higher rates of “museum-going” frequency. This is an expected effect, as visiting more museums shows that people are more willing to go to museums. There seems to be a correlation between the frequency of museum visits (both while traveling and in the home city) and the willingness to visit the MNAA for 6 euros. The results of a logistic regression with a 95% confidence level confirm that the frequency of museum visits when traveling has a statistically significant effect on the willingness to visit the MNAA for six euros (Chi-square = 4.0021 and p-value = 0.0454) and that the frequency of museum visits in the hometown has a marginally significant effect on the willingness to visit the MNAA for six euros (Chi-square = 3.4427 and p-value = 0.0635). Both correlations show a moderate strength (B), with correlation coefficients of 0.5 on both cases.

It was not possible to observe the effect of tourist visitors, and their perceptions, as there were only 7 people from countries other than Portugal, which was not considered a sufficient sample for conclusions to be drawn. However, all 7 said they would visit the

museum, and not one described the price to be more than expected. Further studies should be done to understand the tourists' behavior, especially since over 50% of the MNAA visitors are tourists.

Regarding current employment status, no large differences were observed between the people who would visit the MNAA and the ones who wouldn't. In both cases, the majority of people were employed (63% for the answer "Yes" and 73% for the answer "No"), and there was about the same dominance of students within the groups (21% for the answer "Yes" and 23% for the answer "No"). One last factor that was determinant to be evaluated was the education. That the educational level of the sample was high: 33% of the people had High School as their educational level (since 22% of the total were students, only the remaining 11% - about 13 people - could be accounted for as people with a lower degree of education), and the remainder 67% had at least college degree. This does not reflect the Portuguese reality since only about 18% of the Portuguese population over 15 years old has a college degree (PORDATA, 2017).

These results were further analyzed to see if there would be differences in the level of education according to the answers of "Yes" or "No" to visiting the MNAA for six euros. The results were surprising, as there were no significant differences. From the people who said they would not visit the museum, 77% had a college degree, and from the people who said they would visit the museum, 65% had a college degree. From these results, the educational level of the respondents doesn't seem to have a big influence on the decision to visit the museum. A logistic regression with a 95% confidence level has shown that this is indeed true and that the educational level has no statistically significant influence on the willingness to visit the MNAA for 6 euros (Chi-square = 0.5734 and p-value = 0.4489).

Pay as You Wish condition

The results were gathered, and the average price participants would pay was 7.5€, 1.5€ above the current full ticket price. The results were further decomposed, as to understand how the answers divided between the people who would pay more than the 6 euros and the people who would pay up to 6 euros. As a reminder, people in this condition were not informed that the full ticket price was 6 euros. The results were once again surprising, as only 36% of people would pay above the 6 euros, with a large majority of people (48%) paying 5 euros, yet the average price was above the current ticket value, and not a single person said they would pay zero.

The total revenue from the PAYW model would have been 360€, whereas the revenue from each person paying 6 euros would have been 312€, representing a rise of 15% in revenue. However, we must have in mind that there are concessions available, so considering that all the retired and students would have paid the ticket at 50% off, and all the unemployed would have had free entry, the revenue would have been 258€. In this case, the rise from the current model to the PAYW model would bring about an increase of almost 40% in the museum's revenue.

Again, there was a small number of tourist visitor answers, only 12. However, from the results retrieved from these 12 answers, the average value was 5.9€. In order to better understand if this would be the average answer of Lisbon's tourist mass, further studies should be done, with a bigger sample.

As we have done in the Regular Price Condition, it was important to understand in the frequency of visits were somehow related to the differences in perceptions, and thus in differences in the prices people showed a willingness to pay. There seems to be no relation between the frequency of museum visits (both in the hometown and when traveling) and the

willingness to pay, as the average price people were willing to pay did not increase with the frequency of visits.

Regarding educational level, once again, only 28.8% of respondents answered high school. However, for this survey, only 2% of people declared to be students, leaving us with a total of 26.8% (14 people) of people who had an educational level lower than a college degree. Though this is a significant percentage, the number of respondents was small, and it is still far from the Portuguese reality. Further investigation should be done with people with a high school or lower educational level.

Conclusions

The results from regular price condition demonstrate that a price of 6 euros is not, for the most case, an entry barrier to visiting the MNAA. This doesn't seem to be related to age, gender, educational level or even current employment status. As mentioned, it would be interesting to further study how income has influenced these answers.

The pay as you wish condition shows the most promising results. With an increase of 25% in the average price ticket, the results were already pleasant. However, the most surprising was to understand that even with a large majority of people paying less than the usual six euros of the full-price ticket, the final average was still above the six euros, and the overall increase in revenue was of almost 40%.

The results from the pay as you wish condition were especially surprising due to the fact that, in his research in a San Francisco museum, Jung (2014) found that under pay as you wish conditions, people paid values below the regular priced ticket (an average of 2.64\$ in pay as you wish conditions vs the regular ticket of approximately 7\$). It might be that because in the museum studied by Jung, the policy of having a pay as you wish day had been done for

over 10 years. As mentioned previously, one of the factors of this pricing mechanism that contribute to its high returns is the novelty. While in the studied museum, there was no novelty in this pricing, it is possible that the high prices participants were willing to pay in the MNAA were partly due to the novelty of the mechanism. Further studies should be done to evaluate the long-term feasibility of the pay as you wish pricing mechanism.

Study limitations

The results obtained are promising. However, further research has to be done to understand how accurate they are. There are several things that need to be investigated and further understood in order for these results to have actual real-life implications. The first detail is that, as mentioned above, the study was conducted online, and thus these values may not reflect the actual value people would pay in a real-life situation. In order for that to happen, actual field tests should happen, in the museum environment.

A second important detail is the fact that participants had a high educational level, being high school the lower level registered. This is not reflective of the population, both Portuguese, and global. Though educational levels of the population are growing, there are still people with lower educational levels, and these segments of the population need to be further investigated, to understand their response to a PAYW pricing mechanism. This factor might be related to a third, just as important factor, which is the fact that only a small percentage of respondents declared they never visited museums. As written above, previous research has found that the evaluation of the entrance price as a barrier to entry is significantly related to the educational level of the visitors. It might be the case that, because the studied sample has a high educational level, it not only visits museums more often, but it is also willing to pay higher prices when under a PAYW mechanism. Further studies need to be able

to reach people with lower educational levels, as well as people who don't usually visit museums.

In relation to this, it is also important to understand if the situation that is observed, where the higher paying visitors can more than compensate for the lower paying ones, would be retained with more "lower education, lower willingness to visit" people, and in the actual real-life museum setting.

There is a lack of tourist respondents to both conditions, and though it was expected that tourists would be willing to pay higher prices, due to higher references, this was not the case. However, as mentioned, the sample was too small, and conclusions should not be drawn from it. In the future, it is crucial that studies also analyze the response to Pay as You Wish from tourist masses since they represent over half of the MNAA visitors.

Another limitation of this study is that for the Pay as You Wish condition, respondents were not asked if they were willing to visit. We thus have no information on the difference in willingness to visit between both conditions. Future studies should have this in mind and include this important factor in their research.

Lastly, it is important to note that a Pay As You Wish pricing policy on its own does not guarantee a more open museum. In order for this to happen, the museum would have to actively look for the people that are not visitors and communicate to them that this policy is at work. Furthermore, Pay As You Wish also doesn't guarantee a larger adhesion by the visitors that don't visit for reasons other than the entrance price. These cases, in which people see things other than price as barriers to visiting museum should be studied in further research. However, for the groups that don't visit the museum because of price, this pricing mechanism may lower this barrier, thus increasing their willingness to visit.

Further studies

In the future, studies should be done to understand the actual implications that this research might have in the real world. The main study considered important is to, as mentioned above, conduct the research in a real museum environment. However, it is not the only one, as there are several different important factors that would benefit from further analysis. One such factor is the difference in demand between a free entrance museum, and a paid museum with very low prices. It was seen that this difference in demand has not been studied, and it is believed that it should. Should there be a significant difference in demand, PAYW could fill in the gap between both, by being advertised differently to different groups. The museum could be advertised as a free entry museum for the people who would only visit it if it had a free entrance. It would also be important to understand if the groups that are not currently visiting the museum are doing so because of price, or if there are other barriers, as well as how they can be mitigated.

Future studies should also analyze whether the non-payment by certain groups can be compensated for by the payment of other groups. A thorough analysis of the costs of the museum should be undertaken, in order to understand what the breakeven value would be, and how many non paying visitors could be compensated for by how many paying visitors, and what would the value of those visits need to be.

Pay as you wish was studied by Jung (2014) alongside a second, also innovative, pricing mechanism, called Pay It Forward, in which people are told that their ticket had already been paid for by someone that came earlier and that they could pay for a customer (or visitors, in the case of a museum) that was coming after them. Jung's study found that the average price paid in the Pay It Forward scenarios was higher than that in the Pay as You

Wish scenarios. Further studies should be done in this sense, to understand how a Pay It Forward mechanism would work in the case of the MNAA.

All in all, PAYW seems to be a promising pricing mechanism in the museum environment, that needs further studies in order for its application and implications to be fully understood.

It is important to note that, though it seems that the MNAA would benefit from an increase in revenue, this is not the only goal of the application of a PAYW pricing mechanism. Using a PAYW mechanism could potentially increase the diversity of the museum, thus making it a more inclusive one. This, however, it is a pricing difference that, in order to have repercussions, would need to be correctly publicized, thus being dependant on other marketing tools.

References:

Bailey, Stephen J. Falconer, Peter. 1998. "Charging for Admission to Museums and Galleries: A Framework for Analysing Impact on Access". *Journal of Cultural Economics*, volume 22: pages 171-177

Canelas, Lucinda. 2018. "Governo quer dar autonomia de gestão aos museus, mas sem número fiscal". Accessed November 11. <https://www.publico.pt/2018/07/29/culturaipsilon/noticia/os-museus-e-monumentos-vaio-ser-mais-autonomos-ou-nem-por-isso-1839439>

Chen, Yuxin. Koenigsberg, Oded. Zhang, Z. John. 2017. "Pay-as-You-Wish Pricing". *Marketing Science*, volume 32, no. 5: pages 780-791

Direção Geral do Património Cultural. 2017. "Estatísticas. Ano 2017. Monumentos e Museus DGPC". Accessed November 11. http://www.patrimoniocultural.gov.pt/static/data/museus_e_monumentos/estatisticas1/ev2017.pdf

Direção Geral do Património Cultural. 2018. "Estudos de Públicos". Accessed December 22. <http://patrimoniocultural.gov.pt/pt/museus-e-monumentos/dgpc/estudos-de-publicos/>

Direção Geral do Património Cultural. N.d. "Bilheteira". Accessed November 11. <http://www.patrimoniocultural.gov.pt/pt/museus-e-monumentos/dgpc/bilheteira/>

International Council of Museums. 2018. "Museum Definition". Accessed November 11. <https://icom.museum/en/activities/standards-guidelines/museum-definition/>

Jornal de Negócio. 2016. "Portugueses gastaram mais 20 milhões de euros em concertos em 2016". Accessed November 11. <https://www.jornaldenegocios.pt/economia/cultura/detalhe/portugueses-gastaram-mais-20-milhoes-de-euros-em-concertos-em-2016>

Jung, Minah H. Nelson, Leif D. Gneezy, Ayelet. Gneezy, Uri. 2014. "Paying More When Paying for Others". *Journal of Personality and Social Psychology*, volume 107, no.3: pages 414-431

Kim, Ju-Young. Natter, Martin. Spann, Martin. 2009. "Pay What You Want: A New Participative Pricing Mechanism". *Journal of Marketing*, volume 73: pages 44-58

Kirchberg, Volker. 1998. "Entrance Fees as a Subjective Barrier to Visiting Museums". *Journal of Cultural Economics*, volume 22: pages 1-13

MoMA. N.d. "Plan your visit". Accessed December 20. <https://www.moma.org/visit/>

Pimentel, António Filipe. 2018. "A tentação autoritária do poder e a chamada "autonomia" dos museus". Accessed November 11. <https://www.publico.pt/2018/09/25/culturaipsilon/opiniao/a-tentacao-autoritaria-do-poder-e-a-chamada-autonomia-dos-museus-1845071>

PORDATA. 2017. “População residente com 15 e mais anos: total e por nível de escolaridade completo mais elevado” Accessed December 22.
<https://www.pordata.pt/Portugal/Popula%C3%A7%C3%A3o+residente+com+15+e+mais+anos+total+e+por+n%C3%ADvel+de+escolaridade+completo+mais+elevado-2101>

Rentschler, Ruth. Hede, Anne-Marie. White, Tabitha R. 2007. “Museum pricing: challenges to theory development and practice”. *International Journal of Nonprofit and Voluntary Sector Marketing*, volume 12: pages 163-173

Turismo de Lisboa. 2017. “Visitor activities and information survey”. Accessed November 11.
<https://www.visitlisboa.com/sites/default/files/2018-07/VISITOR%20ACTIVITIES%20AND%20INFORMATION%20SURVEY%202017.pdf>

Xavier, Jorge Barreto. 2018. “O Orçamento do Estado para 2019 e a autonomia dos museus”. Accessed November 11.
<https://www.publico.pt/2018/09/09/culturaipsilon/opiniao/o-orcamento-do-estado-para-2019-e-a-autonomia-dos-museus-1843347>