

Pre-Module 4

VERTIGO @ STADE DE FRANCE - STUDY QUESTIONS

1. What are the levels of differential pricing for Vertigo at Stade de France?

There are two levels of differential pricing. The first level entails **channel pricing** in which different prices are charged to the 4 channels noted in the case (loyalty schemes, company programs, intermediaries and direct to consumers. The second level entail **product versioning** in which seating categories are created and priced differently in effort to take full advantage of differences in price sensitivities among customer segments. So price differentiation is occurring across these two levels.

What are the relevant market segments?

The relevant market segments can be outlined through the 4 channels as noted above as well as through the seating categories. For instance, Logia and VIP seats are higher priced and targeting corporations. And at the other end of the spectrum are general admission tickets on the lawn that is targeting a more price sensitive consumer segment. The price differentiation between these seating categories is substantial as noted in the exhibits:

- CarréOr 116.50€
- Catégorie 1: 92.30 €
- Catégorie 2: 69.20 €
- Catégorie 3: 58.20 €
- Catégorie 4: 47.20 €

What other segmentation strategies can you propose?

Group pricing strategies such as student discount, family specials, U2 Club members, etc, may be offered through the “direct to consumers” channel.

Additional examples of segmentation include:

- Credit card members
- Early bird discount: These could be sold directly to consumers through various channels, percentage of total tickets can be allocated to this category and these will be offered for a limited period, when the tickets were released for sale.
- Backstage Passes

What threats do you identify to these?

- Cannibalization: General public who are not affiliated to the France Billet retail loyalty programs or does not work for the companies that participate in the ticket sales may find a cheaper way to buy the tickets.
- Arbitrage: This will have the worst impact. Intermediaries may be able to buy

tickets that are in the top tier category such as logia and Gold and sell it for slightly higher prices to the general public, thus making a profit.

General public may see value in buying these tickets, as these may be cheaper than that offered through direct to consumers channel, or even some of the top tiers tickets may not even be available to them through these channels

2. U2 - Pricing for Fans: these always go for the GA tickets ("the best seats, also the cheapest"). U2 is trying to decide whether or not to offer discounts to U2.com members for GA tickets. There are 10,000 U2.com members in France and U2 believes that all would show up if entrance was free. Members are mostly low-budget teenagers and students, so the most that any would afford to pay for a GA ticket is €100. Hence, demand for members can be estimated by the linear model $D_M = 10,000 - 100P$. For the general public, demand is estimated as $D_G = 40,000 - 200P$. For security reasons, no more than 20,000 standing tickets may be sold at the SdF.

- a. Is it a good idea to give discounts to members, and if so what discount is most profitable? In general, when is it a good idea to discount member tickets?

Charging a discounted price of \$66.67 to U2.com members and charging \$116.67 to the general public results in the highest profits. Not discounting the GA tickets and selling only to the general public results in an optimal price of \$100, at which the total revenue would be \$2M, which is \$1.66M less than the total revenue achieved through selling both discounted tickets to members at \$66.77 and charging the general public \$116.67. (See tab Question 2a)

In general, if you can achieve higher profits through market segmentation and price differentiation, than it is a good idea to discount member tickets. Additional factors to consider are that the risk of cannibalization and arbitrage; they should be low to consider discounting.

- b. If U2 were to charge a single price for GA tickets, what would it be?

It would be \$100. This is solved by adding a constraint to make the optimal price decision variables for the two demand functions equal. (See tab Question 2b) Intuitively, this price makes sense given that the most that the members would pay is \$100. And we already knew that the optimal price for the general public demand function was \$100. Hence, a consistent optimal price for both demand classes had to be \$100.

Which customer segments benefit from differential pricing?

It seems the more price sensitive customer segments benefit from differential pricing. The U2.com members were certainly more price sensitive than the general public, and the response to their price sensitivity was a lowered price (i.e. 66.67) than the optimal non-discounted price that would have been charged (i.e. 100).

- c. The band feels it would not be fair to give more than a €40 discount to members (so

as not to incentivise people to buy membership just for the discount). What prices should be charged then?

\$73.33 for members and \$113.33 for Gen Admission

3. Market research identifies that some of the U2 fans who buy GA tickets are willing to pay extra for a seated option in the lawn (GA) area. Fortunately, SdF can provide flexible configurations that combine a standing zone at the front with a sea ted zone at the back. The rule of thumb is that on average two seats displace 3 standing people. Demand for seated arrangements is estimated as $D_s=9,000-100P$, and for non-seated $D_N=40,000-200P$. How many seats should be added and at what prices? State your assumptions, if any.

2 Formulations:

- Multiple Demand Class
 - 4,500 seats at \$45
 - 8000 non-seats at \$160
 - Total Revenue: \$1,482,500
 - Please see worksheet `Question 3` in attached workbook
- Under a general assumption that the lawn area can be freely allocated between seating and standing in all possible ways, we can look for the optimal allocation between seating and standing through solver. This optimal allocation results in a supply constraints for the seating and standing area demand functions. Solving for the total contribution using solver returns the following optimality results:
 - 2,118 seats at \$68.82
 - 16,824 seats at \$115.88
 - Total Revenue: \$2,095,294
 - Please see worksheet `Question 3 (2)` in attached workbook

4. Discuss the Pros and Cons of using a Differentiated Pricing strategy.

a. Pros:

1. A customer can find arbitrage in the pricing algorithms set by companies and receive lower prices on goods or services. If for example the customer is using a PC, according to the Economist article on "Online prices Caveat emptor.com," they may receive a lower price of an online purchase compared to a Mac user.
2. Companies are finding opportunities with differential pricing to increase revenue and identify their customer base. Again in the article from the Economist, companies are identify their customer base from their cookies as they browse online. Tracking cookies allows the company to identify where their customers live, based off IP address and where the customer was previously surfing on the web, based on the referral address. By tracking the IP address and referral page, the company can then price a product based on the geographic location that the IP address belongs to

and for the referral page they can identify if the customer was previously on a competitors web page to search for a better price.

3. In the case of Rental Fees for landlords, differentiated pricing takes the “emotion” out of lease renewals and focuses on the analytics

b. Cons:

1. A customer in one location that receives a higher cost for the same product than that of another person in a different location. As in the article "FreshDirect charges more in richer areas," customers in the upper west side are paying more for grocery products than that of customers in New Jersey.
2. In the case of Uber, customers are receiving higher prices during the "surge pricing" periods and the price of a taxi ride increases. In this case, the customer is suffering from high demand and higher prices.
3. In the case of online firms and to those who have money, using cookies to associate their browsing habits to gauge their income level which allows them to price their products differently.