

The Seattle Space Needle's Ticket Price



In this article, the author uses recent real-world experiences with pricing to demonstrate the effects of several important pricing concepts: Psychology of Pricing, Pricing as Tool to Manage Capacity, Credence Goods, Product Bundling, Prospect Theory and Total Expenditure Effect. Mark Melcher is the author of *Your Pricing Guy* blog, a pricing blog dedicated to providing insights and information to help people better understand the art of creating and optimizing pricing strategy. He can be reached at yourpricingguy@gmail.com.

Recently, I had the good fortune to spend a week on vacation in Seattle with my lovely wife. On a quest to see all of Seattle's sites, we visited the Space Needle.

The Space Needle is an observation tower in Seattle that tops out at 605 feet. It was completed in time for the 1962 World's Fair and can withstand earthquakes up to a 9.1 magnitude (how they know this is a mystery to me). The Observation Deck is located at the 520-foot mark of the Needle and can be reached by elevator in about 41 seconds. The view from the observation deck is spectacular, and I strongly recommend visiting this site if you ever have the opportunity.

What does this have to do with Pricing?

To reach the Observation Deck, you must first purchase a ticket. One Adult Ticket is priced at \$29.00 and sold individually. When we purchased the tickets, the price did not particularly grab my attention. And after spending time at the top, I thought the experience was well worth the price. However, when we were riding the elevator back down from the Observation Deck, the Elevator Operator asked if anyone had any final questions. There was one. There is always one, right?

A person standing next to me asked the following question: "Why does it cost \$30 to go to the top of the tower?"

Being disguised as a tourist, I did not answer the question, lest I give up my Pricing Guy secret identity. Instead, the Elevator Operator answered. She said, "Well, everything in Seattle is expensive." Before anyone could reply, the elevator stopped, the doors opened, and we exited, not surprisingly, into the Gift Shop.

End of story, right? Not if you are a pricing person. I could not stop thinking about the question, the answer given, and the price of the ticket.

The fascinating thing about the question and the ticket price is that it hits on many different components of pricing theory. I have listed some of these aspects below. The remainder of this article, divided into three sections, I use to explain how these ideas relate to the pricing of the Seattle Space Needle ticket:

- Psychology of Pricing
- Pricing as Tool to Manage Capacity

- Credence Goods
- Product Bundling
- Prospect Theory
- Total Expenditure Effect

First, recall the price for one Adult Ticket is \$29.00. However, when the person asked her question, she referenced a \$30.00 price. **Why was she confused about the price?**

Pricing Aspects: Psychology of Pricing and Capacity Management

A \$29.00 List Price. I love this price because it's just about perfect. Think about it like this. By setting the price at \$29.00, most customers likely think something like the following: "For less than \$30.00, I can go to the top of the Space Needle." That is how you want the customer to frame up the price. Imagine the price was \$30.00. Doesn't \$30.00 feel quite a bit higher than \$29.00? In fact, to me, \$30.00 almost feels like \$35.00, and that is far outside the 'less than \$30' price range. Alternatively, \$29.00 doesn't seem very different than \$25.00, and that is almost beginning to feel like a price that is within the \$20 price range.

\$30.00 seems higher than it is, whereas \$29.00 seems lower than it is. Without knowing anything about the price elasticity for Space Needle tickets, I would bet that anyone that is willing to pay \$25.00 would be willing to pay \$29.00. But not all people willing to pay \$29.00 would be willing to pay \$30.00.

As for setting the price lower, say \$19.00 or even \$20.00, I think the lower price would drive too much demand, and the Space Needle would be overwhelmed with customers. I am willing to bet that if the price were set closer to \$20, the demand would likely exceed the supply. Supply, in this case, is equal to the elevator capacity times total possible elevator trips in one day, not to exceed maximum Observation Deck occupancy. The line for tickets would grow impossibly long and would create many unhappy tourists. So, the price must be high enough to balance demand with supply.

Second, since the person who asked the question had voluntarily paid the \$29.00 price to go to the top, I assume the price did not exceed her willingness to pay at the time she made her

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purchase. I am presuming of course that nobody forced her to purchase a ticket. So why is she even asking the question and what does this imply about what type of 'good' a trip to the Observation Deck is?

Pricing Aspect: Credence Good

A Credence Good is not CCR's (Creedence Clearwater Revival) version of "The Midnight Special," although that is good. But rather a Credence Good is a one whose value is difficult or impossible for a consumer to ascertain until after they consume the product. And even then, a Credence Good's value may be difficult to gauge.

My favorite example of a Credence Good is an Airplane Flight. If you are aboard an airplane that is flying smoothly at 35,000 feet, the takeoff was uneventful, you have plenty of legroom, and the Flight Attendants are excellent, you are probably feeling happy about your flight. But, you cannot state that the flight is excellent, good, or horrible until you land and are safely at your destination airport. Why?

Well, for one thing, you might find that your flight ends up rerouted to another city due to weather, in which case you are unhappy with the outcome.

When the person asking the question purchased her ticket, she expected the experience to be worth at least \$29.00. But only after going to the top, walking around the observation deck and heading back down could she determine the value of the experience. My assumption is that because she asked her question about the price, the Space Needle experience fell short of her expectations and subsequently was not worth the price she had paid.

Third, why are tickets only sold individually? If one ticket carries a price of \$29.00, wouldn't it make sense for them to offer four tickets for, say, \$100? Providing discounts based on volume is a common pricing tactic. (*I have verified this on the Space Needle Website. Volume discounts are only available for a large group, 15 plus people.*)

Note, however, the ticket office does offer the option to purchase a Bundled Ticket that includes admission to four sites, including the Space Needle. And, as you would expect, the Bundled Ticket Price is set at a lower price than what you would otherwise pay to see each of the four sites had you purchased the tickets separately. Again though, the Bundled Tickets are only offered individually. **If the Space Needle is willing to offer a discounted bundle that includes entrance to multiple sites, why do they not**

offer a discounted bundle for multiple ticket purchases?

Pricing Aspect: Value-Added Product Bundling and Prospect Theory

To answer this, I will first discuss the theory of Product Bundling.

Product Bundling is a widely used tactic for segmenting customers. A typical value-added "offers additional value to price-sensitive buyers that less price-sensitive buyers do not want. As such, a company can attract price sensitive customers without reducing prices to those who are relatively price-insensitive."¹

But it is impossible to discuss Product Bundling without introducing Prospect Theory. I do want to note here that Prospect Theory is substantial; countless books, academic papers, and



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essays, written by people far more knowledgeable than I, have been published on this topic. With that said, I will do my best to summarize the theory such that it is easily understandable.

The easiest way to begin understanding Prospect Theory is to recognize that the theory models real-life choices rather than optimal decisions.

Before Prospect Theory, general economic theory typically modeled human behavior in the following manner. First, assume that each person is entirely rational, that they are aware of the entire universe of options available to them and that they will rigorously

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evaluate and analyze these options. After going through this exercise, the person will choose the one option that maximizes his total utility. Who among us goes through life making decisions in this fashion?

Prospect Theory blew this Rational, Evaluating, and Maximizing Decision-Making Person (REMP) to pieces. **Prospect Theory** rather, posits that people make decisions based on the potential value of losses and gains rather than making their decisions based on the total value of the expected outcome.

Incremental gains and losses versus total gain or loss. More importantly, the theory states that people evaluate these losses and gains using certain heuristics, or rules of thumb, rather than by conducting a multi-dimensional analysis. Makes sense, right?

Prospect Theory, which is the foundation of modern Behavioral Economics, was developed by two friends, Amos Tversky and Daniel Kahneman. After years of discussion, real-life experiments and debates with colleagues, they introduced Prospect Theory in 1979 with the publication of their seminal paper "*Prospect Theory: An Analysis of Decision Under Risk*."² Though neither of the two authors was an economist by training, the Royal Swedish Academy of Science awarded the Nobel Prize in Economics to them for their breakthrough work in Behavioral Economics.

Applying Prospect Theory to Product Bundling, the theory suggests that 'buyers view the separate products in a bundle as distinct benefits (many positive values) for one price (a single loss). Thus buyers will be more inclined to buy the bundled products than they would if the products were offered only separately.¹³ An example might be "All-Inclusive Cruise Ship Tickets" where the ticket entitles the purchaser to a Cruise Ship Journey, all the food they can eat, multiple entertainment options and so forth.

Getting back to the Space Needle, the Bundled Ticket option that provides the benefit of entry to multiple attractions makes sense. Price-sensitive tourists who know ahead of time that they intend to visit all four attractions will find positive benefits from purchasing the bundled ticket. Whereas tourists, perhaps without firm plans and possibly without large families, may be less price sensitive and would prefer to keep their options open. In their case, the non-bundled ticket likely provides the highest benefit.

But why not offer discounts for the person purchasing multiple single attraction tickets? My opinion is that it is due to the mental

framing of prices, which again leans on Prospect Theory. Customers purchasing a ticket to go to the Space Needle's Observation Deck frame their purchase as 'one trip (benefit) and one price (loss).' In this framework, they balance their purchase decision on a one for one basis, even when they purchase multiple tickets. It is only after purchasing, say four tickets for their family and handing their credit card over to pay the \$116 total do they experience the shock that they held an erroneous framework. In reality, taking the family to the top of the Space Needle, carried a much higher price than their original notion suggested.

In other words, if the Space Needle ticket office offered a volume based Bundle for four tickets, they would have to price it accordingly. Let us assume they offered a Four-Ticket Bundle that carried a 14% discount from the price of four individual tickets. The price for the bundle would be \$100. Now the customer sees a different framing of the price. He now sees 'one family trip' to the Observation Deck (benefit) for one price \$100 (loss). This new framework seems relatively unbalanced. The loss is \$100, not \$29.00 and that is quite a bit of money to give up just so his family can get a better view of Seattle.

I will end here with one more thought. Relative to the cost of the entire vacation, plane tickets, hotels, meals, etc., \$29.00 seems pretty insignificant. So even if you were to break out your laptop and build a cost-benefit model before purchasing the ticket, I am betting that you make the purchase anyway because, 'what the hell,' in for a penny, in for a pound. Academically stated, this is known as the **Total Expenditure Effect**.

To me, this example illustrates why Pricing is so much fun to practice. Price setting is akin to solving a multidimensional puzzle with the exception being that the pieces are constantly moving, changing and mutating as the world around them shifts.

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