ISM/UNEX 270, Winter 2008
Service Engineering

Homework 3

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Due: beginning of class, Thursday, February 10 (two weeks)

Goal--to think about and gain experience in several of our recent lecture topics, as follows:

Question 1: Service Strategy
1. Read and complete the analysis on the case ‘Alamo Drafthouse’ (see attached, p61 of text)

Question 2: Service Quality
Complaint letter case, p 146
How do you handle a complaint letter? See the blue pages at the end of the Service Quality chapter in the text Answer the four questions at the end of Gail Pearson’s reply letter to Dr. Loflin. Give at least two strengths and two weaknesses (more is fine too). For part 3, you don’t have to rewrite the whole letter, but just the parts that you consider problematic (rewrite at least two weak sentences or paragraphs).

Question 3: Service Enterprise Design
Exercise 7.1. page 174
Exercise 7.7, page 175

Question 4: Inventory Management
Exercise 18.1, page 502
Exercise 18.7, page 504
The Alamo Drafthouse is a different kind of business, whether you call it a bar, a restaurant, or a movie theater. Is it a movie theater that serves burgers or a bar that shows movies? The Alamo combines multiple services and makes compromises on several fronts to make the combination work. Alamo customers eat and drink while watching movies. Tim, who owns and operates the business with his wife Carrie, candidly admits that the service is bad at his establishment: "Our service is pretty bad, but intentionally so. It's a compromise, because we want our service to be as minimal as possible. It's different from a restaurant, where you want the waiter to ask you if you need anything. We depend on customers to tell us."

HISTORY
Tim and Carrie met at Rice University in Houston, Texas, where he was majoring in mechanical engineering and art, and she was studying biology and French. After graduation and marriage, the two started their first movie theater in Bakersfield, California. This first venture showed art films and featured live music. Although it was not originally the main focus, the live music made a lot more money than the films. The theater was a failure—Bakersfield did not have a large enough art film audience, and the theater's location "on the wrong side of the tracks" contributed to its failure as well. Eventually the business was sold to an Evangelical church.

With this lesson under their belts, the couple moved to Austin, Texas, and decided to try again with a new approach—a theater that served food and alcohol.

Movie theaters that serve beer are very common in Europe, but much less so in the United States, which in general has more restrictive drinking laws. Nevertheless, they have been cropping up in many cities including Dallas, Washington, D.C., and Portland, Oregon.

Before opening the Alamo, Tim and Carrie visited several of these theaters. The enterprising couple noticed several problems at these theaters. Some offered no in-theater service, forcing patrons who wanted drinks or food to go to the lobby. Other theaters offered too much service and waitstaff constantly asked customers if they needed anything. These interruptions bothered many customers. Tim and Carrie recognized that moviegoers wanted to see a movie first and foremost, and that good service meant that they would have to design a better system.

FACILITY LAYOUT AND DELIVERY SYSTEM
The Alamo Drafthouse opened in 1996 in downtown Austin's entertainment district. The Alamo Drafthouse is a single-screen movie theater that serves an assortment of beer and wine and offers a food menu of appetizers, hot sandwiches, individual pizzas, pasta, and dessert. Waiters take orders, serve the food, and collect the bill before and during a movie showing.
Traditional movie theater snacks are also available, and patrons can choose self-service in the lobby for all offerings. The Alamo Drafthouse, like most theaters, has rows of seats. Unlike most theaters, however, there are fewer rows so there is enough space between rows to accommodate long skinny tables where customers can place their food and drinks. Enough space also exists so that personnel can take orders and serve unobtrusively, and customers can slip out to the lobby if desired. Because of this layout, the Alamo offers about half the seating of most auditoriums of similar size and has a capacity of 215 customers.

Before each showing, waitstaff visit customers and explain to them how the Alamo’s service system works. Paper, pencil, and menu are provided along the tables so customers can write their orders on the paper and place the slip of paper in a metal stand where it can be seen by waitstaff who patrol the aisles. The waiter slips in, picks up the paper, and then goes out to the kitchen to fill the order for the customer. When the order is ready, the waitperson delivers it to the customer. All of this can be done without a single word being exchanged and minimizes disruption to film viewers.

Austin is a fast-growing high-tech town with an extremely young and educated workforce. The film industry-focused Austin Film Festival, which coincides with the live music festival, South-by-Southwest, takes place primarily in downtown Austin every March during the University of Texas at Austin’s spring break holiday.

The theater is located close to the center of downtown nightlife activity and requires only a short walk from one of the main club and restaurant areas. The theater does not have adjacent or free parking for customers, nor is there significant street parking in the vicinity. Most of the other movie theaters in town are located in huge megaplexes in suburbs or in shopping malls.

**PROGRAMMING**

The Alamo’s programming is divided into two categories, second-run features and special events. Second-runs account for the majority of the Alamo’s programming, about 20 of the 25 screenings per week. These movies are carefully picked to appeal to the Alamo’s customer demographic: smart 25-40-year-olds who have a sophisticated taste in film. Examples of films that fall into this category are *Bowling for Columbine*, *The Italian Connection*, and the original *Manchurian Candidate*. Unfortunately, the Alamo is somewhat at the mercy of Hollywood for this programming and is occasionally forced to play movies that don’t appeal to its demographic as much as Tim and Carrie would like. At the end of each week Tim and Carrie pick the films that will play for the following week.

Special events are programmed in three-month blocks. These fall into two categories: Austin Film Society events (generally classics or art films) and cult films. The Film Society events usually replace a second-run showing during the week, and cult films play Thursday, Friday, and Saturday at midnight. The cult films appeal to a different (but overlapping) demographic: 18-30-year-olds, predominantly male, who are regular alcohol consumers and are customers of less mainstream, specialty-independent video rental stores such as Vulcan Video and I Love Video. Special events account for about 5 of the Alamo’s average 25 weekly screenings. Tim sees the special events as a creative outlet, for example, Italian Westerns (commonly known as “spaghetti Westerns”), which feature all-you-can-eat spaghetti, and silent films with live accompaniment by local bands.

Austin’s thriving filmmaking community has been a major boon for special-events programming. Tim regularly gets filmmakers to speak at special engagements. Some guests to the theater include Robert Rodríguez, who hosted a special double feature of *El Mariachi* and *A Hong Kong Takeoff* of that film. Quentin Tarantino, director of *Pulp Fiction*, hosts an annual festival of cult movies at the Alamo.

**REVENUES AND COSTS**

Tim sees the Alamo’s ticket sales as a loss leader to get people into the establishment to consume food and drink, and he keeps ticket prices low, typically $4.00. This price point is below the cost of seeing a first-run film at most typical Austin theaters ($6.50-$7.00), but it is above the price of going to a bargain theater to see a second-run film ($1.00-$1.50). The average Alamo customer spends a total of $5 to $12 per showing. After the ticket is purchased, customers spend about 55 percent of this on food and 45 percent on alcohol. In order to increase spending, they have raised menu prices occasionally since opening and added more high-dollar items to the available selections. Special events account for one-third of revenues.

Although customers are spending more than they do when they go to a typical theater, the Alamo’s profits are limited by its smaller capacity and high labor costs. On a typical Friday night a staff of 15 to 17 people is required, many more than are required to operate a standard theater.

**ADVERTISING AND PROMOTION**

To promote the Alamo, Tim and Carrie use several low-cost methods. They take advertisements out in the three most read Austin papers including the *Daily Texan*, the University of Texas student newspaper. They also create three-month calendars that list special events. Upcoming showings are announced before every event. They have formed a close relationship with *Austin Chronicle*, an entertainment publication, and consequently get a lot of free public relations exposure in the form of articles previewing their special events.

Tim also engages in some inexpensive but effective loyalty building. He manages the Alamo’s Web site and answers every piece of e-mail personally. He also announces upcoming films and special events before every show and hangs around after shows to answer questions and talk to his customers. He is very open to suggestions and has used them to plan special events and to modify the menu. He notes that loyalty building has been a lot more effective with the Austin Film Society and cult film crowds.

**Questions**

1. Marketing analysts use market position maps to display visually the customers’ perceptions of a firm in relation to its competitors regarding two attributes. Prepare a market position map for Alamo Drafthouse using “food quality” and “movie selection” as axes.

2. Use the “Strategic Service Vision” framework to describe Alamo Drafthouse in terms of target market segments, service concept, operating strategy, and service delivery system.

3. Identify the service qualifiers, winners, and service losers for Alamo Drafthouse. Are the Alamo purchase decision criteria appropriate for the multiplex movie theater market? What do you conclude?

4. Use Porter’s Five Forces Model to assess the strategic position of Alamo Drafthouse in the “entertainment industry.”

5. Conduct a SWOT analysis to identify internal strengths and weaknesses as well as threats and opportunities in the external environment.
Most service problems are solved by direct communication between the server and the customer during the moment of service. Occasionally, however, a customer may be motivated to communicate some thoughtful and detailed feedback to a service provider after the encounter, as illustrated in the following letter:

**THE COMPLAINT LETTER**

Gail and Harvey Pearson  
The Retreat House on Follage Pond  
Vacationland, New Hampshire

Dear Mr. and Mrs. Pearson:
This is the first time that I have ever written a letter like this, but my wife and I are so upset by the treatment afforded by your staff that we felt compelled to let you know what happened to us. We had dinner reservations at the Retreat House for a party of four under my wife’s name, Dr. Elaine Loflin, for Saturday evening, October 11. We were hosting my wife’s brother and his wife, visiting from Atlanta, Georgia.

We were seated at 7:00 P.M. in the dining room to the left of the front desk. There were at least four empty tables in the room when we were seated. We were immediately given menus, a wine list, ice water, dinner rolls, and butter. Then we sat for 15 minutes until the cocktail waitress asked us for our drink orders. My sister-in-law said, after being asked what she would like, “I’ll have a vodka martini straight-up with an olive.” The cocktail waitress responded immediately, “I’m not a stenographer.” My sister-in-law repeated her drink order.

Soon after, our waiter arrived, informing us of the specials of the evening. I don’t remember his name, but he had dark hair, wore glasses, was a little stocky, and had his sleeves rolled up. He returned about 10 minutes later, our drinks still not having arrived. We had not decided upon our entrees, but requested appetizers, upon which he informed us that we could not order appetizers without ordering our entrees at the same time. We decided not to order appetizers.

Our drinks arrived and the waiter returned. We ordered our entrees at 7:30. When the waiter asked my wife for her order, he addressed her as “young lady.” When he served her the meal, he called her “dear.”

At 10 minutes of 8 we requested that our salads be brought to us as soon as possible. I then asked the waiter’s assistant to bring us more rolls (each of us had been served one when we were seated). Her response was, “Who wants a roll?” upon which, caught off guard, we went around the table saying no and our server knew exactly how many “extra” rolls to bring to our table.

Our salads were served at five minutes of eight. At 25 minutes past the hour we requested our entrees. They were served at 8:30, one and one-half hours after we were seated in a restaurant which was one-third empty. Let me also add that we had to make constant requests for water refills, butter replacement, and the like.

In fairness to the chef, the food was excellent, and as you already realize, the atmosphere was delightful. Despite this, the dinner was a disaster. We were extremely upset and very insulted by the experience. Your staff is not well trained. They were overtly rude, and displayed little etiquette or social grace. This was compounded by the atmosphere you are trying to present and the prices you charge in your dining room.

Perhaps we should have made our feelings known at the time, but our foremost desire was to leave as soon as possible. We had been looking forward to dining at the Retreat House for quite some time as part of our vacation weekend in New Hampshire.

We will be hard-pressed to return to your establishment. Please be sure to know that we will share our experience at the Retreat House with our family, friends, and business associates.

Sincerely,

Dr. William E. Loflin

Experience has shown that complaint letters receive "mixed reviews." Some letters bring immediate positive responses from the providers, whereas other letters bring no response or resolution. The restaurateur's response to the complaint letter in this case was:

THE RESTAURATEUR'S REPLY

Dr. William E. Loffin
123 Main Street
Boston, Massachusetts

Dear Dr. Loffin:

My husband and I are naturally distressed by such a negative reaction to our restaurant, but very much appreciate your taking the time and trouble to apprise us of your recent dinner here. I perfectly understand and sympathize with your feelings, and would like to tell you a little about the circumstances involved.

The Lakes Region for the past four or five years has been notorious for its extremely low unemployment rate and resulting deplorable labor pool. This year local businesses found that the situation had deteriorated to a really alarming nadir. It has been virtually impossible to get adequate help, competent or otherwise! We tried to overhire at the beginning of the season, anticipating the problems we knew would arise, but were unsuccessful. Employees in the area know the situation very well and use it to their advantage, knowing that they can get a job anywhere at any time without references, and knowing they won't be fired for incompetency because there is no one to replace them. You can imagine the prevailing attitude among workers and the frustration it causes employers, particularly those of us who try hard to maintain high standards. Unhappily, we cannot be as selective about employees as we would wish, and the turnover is high. Proper training is not only a luxury, but an impossibility at such times.

Unfortunately, the night you dined at the Retreat House, October 11, is traditionally one of the busiest nights of the year, and though there may have been empty tables at the time you sat down, I can assure you that we served 150 people that night, despite the fact that no fewer than four members of the restaurant staff did not show up for work at the last minute, and did not notify us. Had they had the courtesy to call, we could have limited reservations, thereby mitigating the damage at least to a degree, but as it was, we, our guests, and the employees who were trying to make up the slack all had to suffer delays in service far beyond the norm!

As to the treatment you received from the waiters and waitresses who attended you, neither of them is any longer in our employ, and never would have been had the labor situation not been so desperate! It would have indeed been helpful to us had you spoken up at the time—it makes a more lasting impression on the employees involved than does our discussing it with them after the fact. Now that we are in a relatively quiet period we have the time to properly train a new and, we hope, better waitstaff.

Please know that we feel as strongly as you do that the service you received that night was unacceptable, and certainly not up to our normal standards.

We hope to be able to prevent such problems from arising in the future, but realistically must acknowledge that bad nights do happen, even in the finest restaurants. Believe me, it is not because we do not care or are not paying attention!

You mentioned our prices. Let me just say that were you to make a comparative survey, you would find that our prices are about one half of what you would expect to pay in most cities and resort areas for commensurate cuisine and ambience. We set our prices in order to be competitive with other restaurants in this particular local area, in spite of the fact that most of them do not offer the same quality of food and atmosphere and certainly do not have our overhead.

I hope that this explanation (which should not be misconstrued as an excuse) has shed some light, and that you will accept our deep regrets and apologies for any unpleasantness you and your party suffered. We should be very glad if someday you would pay us a return visit so that we may provide you with the happy and enjoyable dining experience that many others have come to appreciate at the Retreat House.

Sincerely,

Gail Pearson


Questions
1. Briefly summarize the complaints and compliments in Dr. Loffin’s letter.
2. Critique the letter of Gail Pearson in reply to Dr. Loffin. What are the strengths and weaknesses of the letter?
4. What further action should Gail Pearson take in view of this incident?
Exercises

7.1. Passengers arriving at an airport departure gate must first wait for their row to be called before proceeding to the gate to have their boarding pass authenticated. If the boarding pass does not match the departing flight, the passenger is directed to the appropriate gate. A passenger attempting to carry on an excessively large bag is directed to check the luggage piece and return. Passengers with the proper boarding pass and appropriate sized carry-on are allowed to enter the jet way and board the plane. Draw a process flow diagram of the departure gate process. How might this process be improved to avoid delays?

7.7. Every fall, volunteers administer flu vaccine shots at a local supermarket. The process involves the following four steps:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Average Time, Sec.</th>
</tr>
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<tbody>
<tr>
<td>1. Reception</td>
<td>30</td>
</tr>
<tr>
<td>2. Drug allergy consultation</td>
<td>60</td>
</tr>
<tr>
<td>3. Fill out form and sign waiver</td>
<td>45</td>
</tr>
<tr>
<td>4. Administer vaccination</td>
<td>90</td>
</tr>
</tbody>
</table>

a. What are the bottleneck activity and maximum number of people who can be processed per hour?
b. If a fifth volunteer is assigned to help administer vaccinations, what activity now becomes the bottleneck? How has this arrangement influenced the capacity of the system?
c. Using five volunteers, suggest a reallocation of activities that would result in increased service capacity, and draw a product flow diagram. What is the capacity of your improved system?

Exercises

18.1. Annual demand for the notebook binders that Ted's Stationery Shop sells is 10,000 units. Ted operates his business on a 200-workday year. The unit cost of a binder is $2, and the cost of placing an order with his supplier is $0.40. The cost of carrying a binder in stock for one year is 10 percent of its value.

a. What should the EOQ be?
b. How many orders are placed per year?
c. How many working days elapse between reorders?

18.7. Monthly demand for an inventory item is a normally distributed random variable with a mean of 20 units and a variance of 4. Demand follows this distribution every month, 12 months a year. When inventory reaches a predetermined level, an order for replenishment is placed. The fixed ordering cost is $60 per order. The items cost $4 per unit, and the annual inventory holding cost is 25 percent of the average value of the inventory. The replenishment lead time is exactly 4 months.

a. Determine the EOQ.
b. Assume that a 10 percent "all units" discount will be given if the order quantity is greater than or equal to 100 units. What order quantity would you recommend with this offer?
c. Determine the necessary reorder point and safety stock to achieve a 90 percent service level.