

National University

DEN 423 Team Project

Overview 11/30/17

John owns and operates a small pizza parlor in Kearney Mesa, CA. The location is within a walking distance of one of the National University campuses and a nearby Navy rehabilitation center.

John's Pizza Parlor is currently open from 10:00am to 10:00pm every day of the week.

His business model is "less for less". That means, that he serves just one size pizza that includes a mixture of four cheeses and his secret sauce. The sauce is a big hit and customers are always coming back for lunch and a quick dinner. Some customers purchase just one pizza, but some order up to four pizzas.

He has two employees who work behind the counter. One employee takes orders and interfaces with customers and the other works in the kitchen.

On a typical day, 20 customers arrive during the lunch hour and 40 customers arrive between 5:00pm and 7:00pm.

The service rate of the counter person is 40 customers per hour. The service rate of the kitchen person is 30 orders per hour.

The process works as follows:

Customers arrive, wait in line (if there is a line), place an order, wait for the order to be prepared, pick-up their orders and leave. The waiting area has four chairs, some magazines, and a small TV set.

If needed, he can call in two additional workers—one to work at the counter and the other to help in the kitchen.

John pays \$10 per the hour for the counter and the kitchen work. His employees appreciate good working conditions and friendly atmosphere of the pizza parlor. Each employee earns additional income from tips, that are then shared with the kitchen employees.

John's customers have told him that they have a good experience at his pizza parlor and are very satisfied with his service.

Most recently, a new local law was enacted. The law requires that all restaurants have proper accommodations for customers in wheelchairs. His current location does not comply with this new regulation and would need to spend \$60,000 to bring his parlor to full compliance. In addition, there is also a new minimum wage bill working its way through the legislature. If the bill becomes law, the minimum wage will be set at \$20 per hour. It is called the "living wage" law.

John must decide what to do going forward. He is hearing more and more about automation and self-service economy. On a regular basis, he is using ATMs, orders his tickets on line, and uses his smartphone to pay for his purchases.

So, when John came across the concept of a pizza vending kiosk, he was intrigued. These kiosks are very popular in Europe and in Asia (especially in Japan). John wonders whether he should buy some of these machines to replace his current operations.

Each vending machine costs \$30,000. The total waiting and serving time is 3 minutes, and all machines are configured to accommodate customers in wheelchairs.

Jim does not know how to evaluate this opportunity and how to compare it to his current operation. He knows that the quality of the product from the vending machine can be as good as his product. In addition, he would be able to stay open 24x7. He is not certain what kind of experience his customers would have when using this type of kiosk. He knows that the design of the user interface would make the world of difference.

John has hired you to help him with this decision. Your assignment is to select and recommend the best course of action based on your analysis.