Subway Sandwich Ordering and Pickup

Location: BSA (Bronco Student Association)

Activity: Subway meal ordering

Time: U Hours (12:00pm-1:00pm)

I choose this location as it is the most crowded place during U hour and Subway as my main focus and concentration. Most of the students have had the same experience going to this Subway as the line is consistently long during this time frame there. From my observation, students are not happy standing in a line that takes up a majority of their lunch break time to get to the ordering counter and through the selection of their sandwich. While in line, they discuss about their upcoming assignments or the next class they have to attend and rushing to order and eat.

As one arrive at the beginning of the line to order a sandwich, first Subway employee behind the counter ask 2 -5 questions about size, kind of bread, kind of sandwich, kind of cheese, toasted or not, and sometimes there are cross questions from the students as they do not know what choices are available. As the students proceed to the second employee in the assembly line, the whole inquire process continues again as there are so many additional ingredients, sauces and spices to choose from which makes it even more difficult, stressful and time-consuming for both the student and employee. At our university, we have a significant number of International students, with that comes language barriers and comprehension such as different accents, so it is hard for the Subway employee to understand what are they saying, secondly, sometimes students even don't know what are all those ingredients so they ask cross questions. Lastly, when they reach to cashier to pay and get their sandwich, the conversation starts a third time in describing what they had just order, from needing to know what kind of sandwich they had selected to options of making it a meal or just purchasing the sandwich, the addition of wanting a cookie, and then about payment options. Sometimes students stop and ask questions about the price as they are baffled as to why the sandwich is not the same price listed on the ordering menu. They ultimately pay the price but leave unhappy and still hungry.

Then I imagine putting myself behind the counter as a Subway employee. Sometimes two different students come and order the same sandwich. It makes the Subway employee work 2-2.5 times more, which is not efficient and less productive. For example, Student A orders one six-inch honey oat bread, oven roasted chicken, American cheese and toasted. Student B comes in and order the same sandwich (one six-inch honey oat bread, oven roasted chicken, American cheese and toasted) with different veggies, sauce and condiments. This is how the employee will process an order.

- 1. Listen to the customer.
- 2. Take out the bread of choice (honey oat) from the bread warmer (cabinet that keeps bread warm)
- 3. Cut it in half (cut the foot-long bread into half to make it six inches).
- 4. Keep the half loaf out and put the rest back in cabinet.
- 5. Put the flavor (oven roasted chicken) onto the bread.
- 6. Place the kind of cheese (American cheese) and put it on the meat selection previously stated.
- 7. Put the sandwich in oven/toaster to toast for 15 seconds.

Then the process moves onto the second employee in the assembly line. As Student B order, the first employee will do all the steps exactly the same besides steps 3 and 4.

Now if we automated all this ordering process, we can shorten the long line to a shorter or even no line. Confusion and misunderstanding at the time of ordering and price total will decrease or even obsolete. Not only that, we can also make it more efficient and more productive for the employees by being strategic about the production of the order. For example, if the employees know in advance which type of sandwiches are ordered and that they are the same, such as our previous example of 2 six-inch honey oat bread, oven roasted chicken, American cheese and toasted, they can do steps 1-3 in anticipation of the order and then steps 5-7 only once and run oven toaster only for 25 seconds (for a standard foot-long sandwich) instead 30 seconds (15 seconds per six-inch sandwich * 2 sandwiches = process saves 5 seconds of overall productivity).

As I converse with the students in line about making the ordering process automated, they all want to make this process quicker but they have several major concerns such as wanting their sandwiches fresh and warm differentiating from a cold sandwich purchased easily from a vending machine. I spoke to about 15 random students and after their input and my observations, I have culminated this solution.

1. We need to install Kiosk like this in each building and main places around campus.



2. Kiosk will have following options (text and graphics) to order sandwich





3. Student will go to subway, and subway will look like this.



- 4. There will be a pick up locker same as amazon pick up locker. In the same main time subway employee will make the sandwich and place it in the lock from the back.
 - 5. Student will scan the code on receipt in front of the locker, Locker will open the door of the section where the sandwich is placed by the employees associated to the receipt code.

This method will completely eliminate the line in front of subway.