

# [The learning curve theory](https://assignbuster.com/the-learning-curve-theory/)

The Learning Curve TheoryUniversity of PhoenixOPS/571 ??“ Operations ManagementApril 25, 2011Timothy AndersonThe Learning Curve TheoryMario??™s Pizzeria is a popular pizza restaurant in Palm Springs, California. Opened in 1950, this pizzeria became very popular for its authentic taste and fresh ingredients (University of Phoenix, 2011).

The owner, Mario, has taken a very conservative approach to running this business. Although this approach has worked for Mario, the company may need to make radical adjustments to help streamline company processes as the pizzeria grows in popularity. Long wait times seem to becoming an issue at the restaurant; it was observed that some people leave without having been served (University of Phoenix, 2011). To improve customer satisfaction and overall wait times, this process must be evaluated and adjusted for the purpose of improving the service system. Performance Metrics and DataTo decide effectively on a plan of action to improve restaurant operations, performance measurements, or metrics must first be identified. These metrics help to determine the strengths and weaknesses of the current processes.

It has been established that Mario??™s goal in the restaurant is to reduce customer wait times. Provided this information, a good process measurement would be the amount of time it takes to complete the process. Process evaluation reveals several data points that can contribute to an increase or decrease in performance, which include the following: 1) Customer enters restaurant and waits in line2) Customer waits for server at table3) Customer waits for order to be taken4) Customer??™s order is processed5) Order is sent kitchen6) Customer is served7) Customer waits for bill and paysProcess ImprovementsThe current process at Mario??™s Pizzeria yielded extended wait times for customers upon entering the restaurant. The restaurant layout consisted of 14 tables for four, zero tables for two, four waiters, and two employees for the kitchen; this current layout resulted in wait times of up to 11-12 minutes (University of Phoenix, 2011). After evaluation of this process, it has been decided that 10 tables for four, eight tables for two, four waiters, and two kitchen staff would be the optimum solution for the seating of customers.

However, to increase flow and movement of customers in and out of the restaurant during peak hours, others process improvements must be made. For example, decreasing the time it takes to take a customer??™s order can be done through the use of an automated system, or Menupoint, rather than the current process by data entry. Also, according to the oven specifications, pizzas may be cooked nearly twice as fast using the Plax ovens over the current manual ovens.

Finally, Mario had the option of renting the bakery shop that had closed down next door. In doing so, Mario increased the seating space of the restaurant, integrated and combined the kitchen spaces, and absorbed a couple of the staff members to handle the increased customer base. These improvements helped Mario reach his goal and decreased customer wait times to approximately three to four minutes. essay online banking Applying the Learning Curve??? A learning curve is a line displaying the relationship between unit production time and the cumulative number of units produced??? (Chase, Jacobs, & Aquilano, 2005, p. 135). The Mario??™s Pizzeria staff should expect to see a learning curve as each member becomes used to the newly incorporated processes.

As time goes on the staff should see a decrease in the amount of time it takes to perform a process activity. To determine the learning curve in this scenario, one could compare total customer throughput of the new process with that data and metrics over time. The new process could initially yield the same as the old because of natural individual and organizational learning. However, over time the new process will show a drop in wait times. For example, say it took 11-12 minutes in week one of the new process, and took 9-10 minutes for week two, seven to eight minutes for week three, and so forth.

Because the reduction meant that, say, week four took about 50% of the production time required for week two, it would be determined that Mario??™s Pizzeria has a 50% learning curve (Chase, Jacobs, & Aquilano, 2005). ConclusionIn this scenario, one could determine the learning curve of the new process because metrics may be taken over time. This scenario did not provide enough measurement of the learning curve for the initial process. The only measurements that determine improvements made by the new process are the wait times measured once the learning curve period is completed. From that point, the comparison of the two numbers will show what process is better for reducing customer wait times. The numbers in this scenario reveal that the newly incorporated process made significant improvements.

ReferencesChase, R. B., Jacobs, F. R., & Aquilano, N. J. (2006). Operations management for competitive advantage (11th ed.

). New York, NY: McGraw Hill/Irwin. University of Phoenix. (2011). Pizza store layout [Computer Software].

Retrieved from University of Phoenix, Simulation, OPS571 – Operations Management website.