

Texas gladiators case

[Business](#), [Management](#)



The Texas Gladiators won the Super Bowl last year. As a result, sportswear such as hats, sweatshirts, sweatpants, and jackets with the Gladiator's logo are popular. The Gladiators operate an apparel store outside the football stadium. It is near a busy highway, so the store has heavy customer traffic throughout the year, not just on game days. In addition, the stadium has high school or college football and soccer games almost every week in the fall, and baseball games in the spring and summer.

The most popular single item the stadium store sells is a red and silver baseball style cap with the Gladiators' logo on it. The cap has an elastic headband inside it, which conforms to different head sizes. However, the store has had a difficult time keeping the cap in stock, especially during the time between the placement and receipt of an order. Often customers come to the store just for the hat; when it is not in stock, customers are upset, and the store management believes they tend to go to other competing stores to purchase their Gladiators' clothing.

To rectify this problem, the store manager, Jessica James, would like to develop an inventory control policy that would ensure that customers would be able to purchase the cap 99% of the time they asked for it. Jessica has accumulated some demand data for the cap for a 30-week period. The data is shown below. (Demand includes actual sales plus a record of the times a cap has been requested but not available and an estimate of the number of times a customer wanted a cap when it was not available but did not ask for it.) The store purchases the hats from a small manufacturing company in Jamaica. The shipments from Jamaica are erratic, with a lead time of 20 days.