GLOSSARY

Term	Description	First Page Appeared
Newsvendor Model	a mathematical model in operations management and applied economics used to determine optimal inventory levels. It is (typically) characterized by fixed prices and uncertain demand for a perishable product.	1
Logistics	the management of inventory, whether it is in the form of hard goods (materials, people) or soft goods (information). If there is no inventory to move around, there is no need for logistics.	1
EOQ	the ideal quantity of units a company should purchase to meet demand while minimizing inventory costs such as holding costs, shortage costs, and order costs. developed in 1913 by Ford W. Harris and has been refined over time. The economic order quantity formula assumes that demand, ordering, and holding costs all remain constant.	10
Critical Ratio	The optimal probability of not stocking out is the ratio of the unit underage cost to the sum of the unit underage and overage costs.	11
Q	The needed quantity calculated.	13
Cu	The underage cost, the opportunity cost of not ordering a unit that could have been sold. In other words, the per-unit opportunity cost of underordering.	16
Co	The overage cost, the loss incurred when a unit is ordered but not sold. In other words, the per-	16

	unit cost of overordering.	
Standard Deviation (σ)	A measure of the amount of variation or dispersion of a set of values. a statistic that measures the dispersion of a dataset relative to its mean and is calculated as the square root of the variance. The further the data points are from the mean, there is a higher deviation within the data set; thus, the more spread out the data, the higher the standard deviation.	17
A/F Ratio	The forecasting error ratio, represents the margin of error of the forecast from the actual demand.	17
z	The z statistics, a number representing how many standard deviations above or below the mean population the score derived from a z-test is. In this case, the probability the demand is less than or equal to Q, same as the probability the outcome of a standard normal is z or lower.	17
F(Q)	The probability the outcome of the random variable is Q or lower.	17
θ(z)	The distribution function of the standard normal. Obtained by referring to the standard normal distribution function table.	17