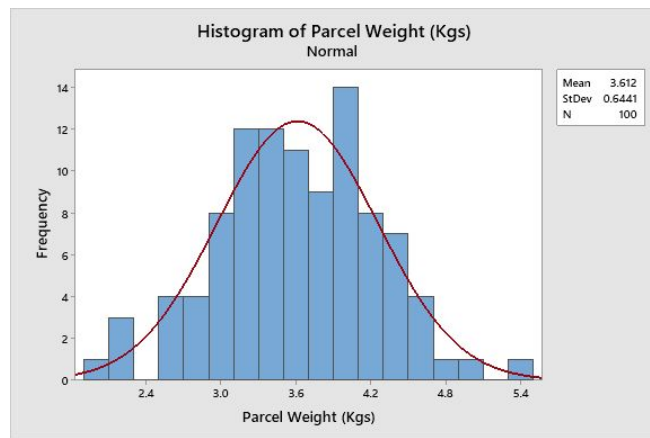


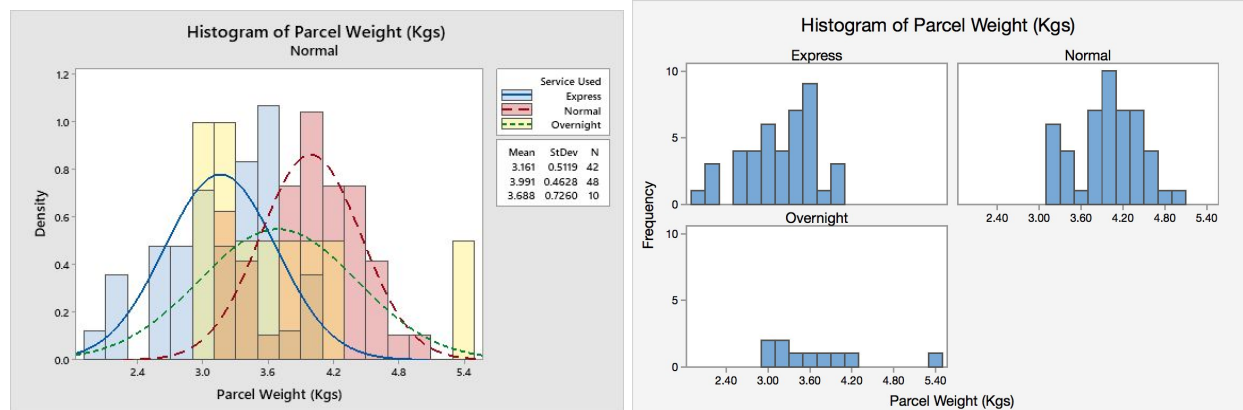
Gus Lipkin

Courier Process Analysis

1. Graphically illustrate the parcel weight data overall. Is the data normal?



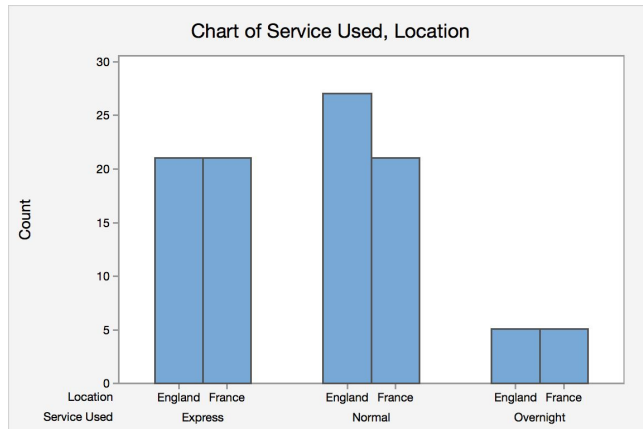
- The distribution of the parcel weight data overall is normal because the line of best fit for the histogram resembles a bell curve. This suggests that the weights of packages shipped are generally predictable and can be expected to be within a set range with a mean package weight of 3.612Kgs.
2. Graphically illustrate the parcel weight data by *Service Used*. Is the data normal?



- I chose to graph this two different ways. The first shows overlapping histograms with normal distribution curves overlaid on top. The second shows individual histograms for each service used. The first graphs show that the data is normal for each of the three services. The average package shipped with Express service is about half a kilogram lighter than the overall average weight at 3.161Kgs while Normal service is higher by a third of a kilogram at 3.991Kgs. Overnight service is the closest to the overall mean weight at 3.688Kgs. The

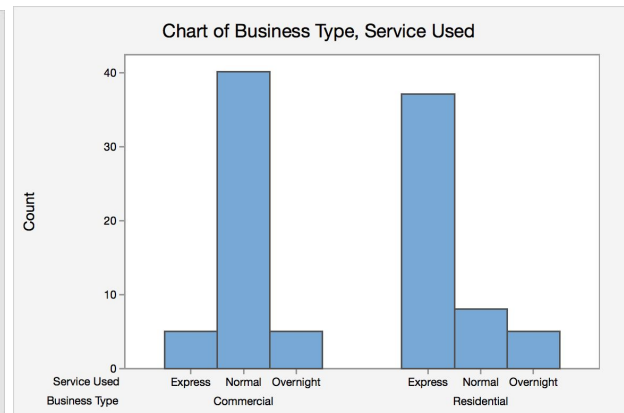
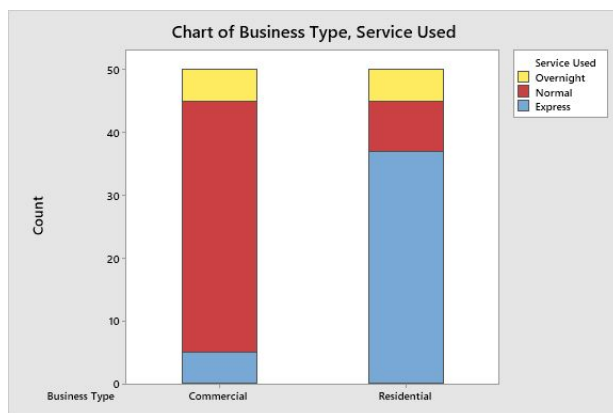
charts also show that Express and Normal have more packages shipped with 90% of the total packages shipped between them. However, Overnight packages are more evenly distributed by weight.

3. Graphically illustrate the *Service Used* options by *Location*.



- England and France both ship the same number of Express and Overnight packages while England ships more Normal packages than France. This indicates that England ships more packages total than France by the difference in Normal packages shipped.

4. Graphically illustrate which *Service Used* option represents the majority for each *Business Type*.



- I have once again chosen to make two charts. The first shows the proportion of each kind of service used for Commercial and Residential shipping and the second shows the raw numbers. From here you can see that the vast majority of Commercial shipping is Normal service while Residential primarily uses Express service. The second chart shows that Commercial uses an equal amount of

Express and Overnight service and Residential uses more Normal than Overnight.