Quality Management

A03. Basic Tools for Quality

ING. EVA ŠÍROVÁ, PH.D.

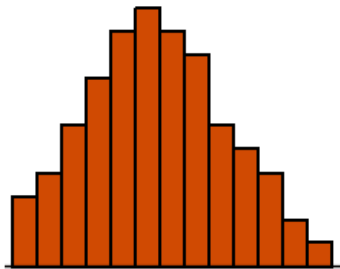ING. MÁRCIO RODRIGUES, INDUSTRIAL ENGINEER

SS – AY 2020/2021

Practical Activity

Histogram Interpretations

The shape has a bell shape – it is symmetric
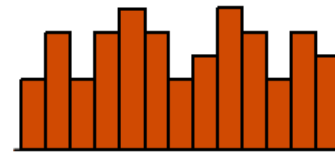
Symmetric – If the time plot shows no special causes, data may come from a stable, predictable process.
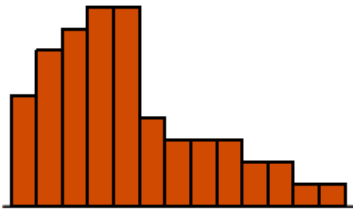

The shape is flat

Flat – A flat distribution occurs when a process drifts over time.

It can also appear when what we think of as one process is really a mixture of many processes. For example, it can occur when many people use different procedures for the same job.
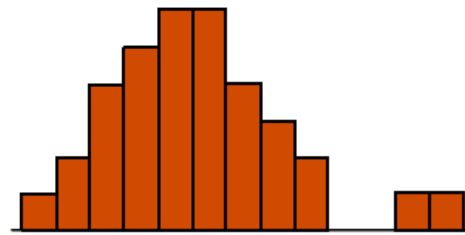
The shape has a long tail – it is not symmetric

Not symmetric – A long tail on one side of the distribution is common when the property being measured is time to complete a job, wait time, or a count of problems. It can also occur when there is an unstable process.

There are one or more – outliers

Outliers – When you see one or more data points far away from the rest of the data, first check to make sure they are not the result of clerical error.

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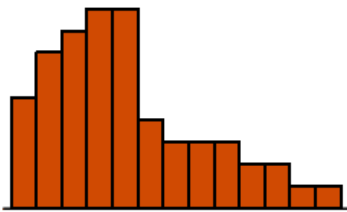
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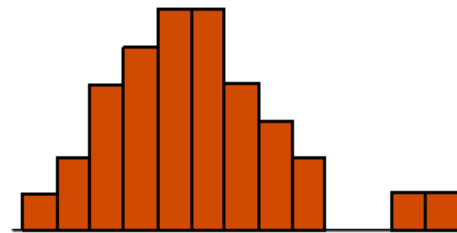
How good is a
Quality Level of 99.9999%?