

# Why Do We Use Metrics?

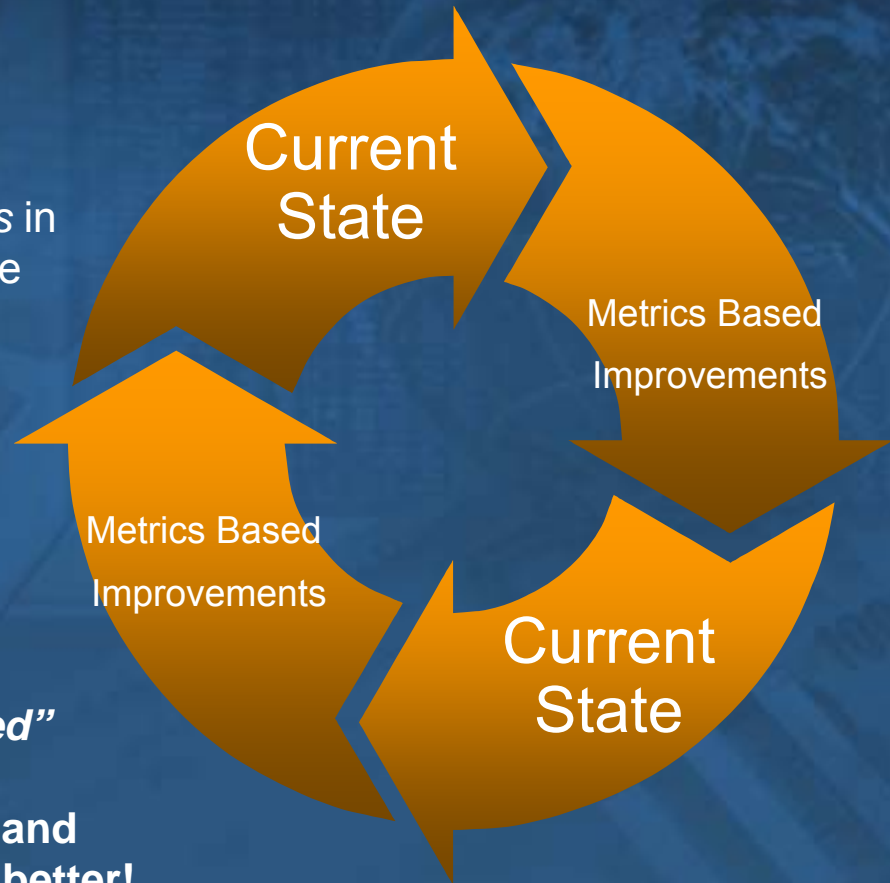
## Metric – According to the Webster Dictionary

- Pronunciation: 'me-trik
- Function: *noun*
- Etymology: Greek *metrikE*, from *metrikos* in meter, by measure, from *metron* measure
- Definition: A standard of measurement
- Sigma:  $\sigma$  symbol

## Famous Quote:

*“If it can be measured, it can be improved”*

By selecting the **RIGHT, MEASURABLE, and ACTIONABLE** metric, it will get done... better!



Metrics provide new information about processes that enable continuous improvements to be made



# Why Do We Use Sigma Levels?

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**Sigma** is a measure of variability. It indicates how much of the data falls within the customer's requirements. The higher the process sigma, the more of the process outputs, products and services, meet customers' requirements – or, the fewer the defects

- To allow process performance to be compared throughout an entire organization
- To measure how much a process varies from perfection, based on the number of defects per million units

This is a sigma:  $\sigma$



# What Is A Defect?

**Defects** are characteristics that reduce quality and utilization potential

- Accuracy – defects that if uncorrected, could directly impact a customer financially
- Timeliness – defects that impact the availability of data for customer use

Examples:

- Average phone hold time
- First call resolution rate
- Billing statement accuracy

1 Sigma	2 Sigma	3 Sigma	4 Sigma	5 Sigma	6 Sigma
690 defects/1000	310 defects/1000	67 defects/1000 Apparel industry	6 defects/1000 Considered an “expected” Sigma level for Financial Services	0.23 defects/1000 Car tire manufacturers	0.034 defects/1000 Airline safety Drug quality assurance

