Jankech
QUALITY SERVICES LIMITED

Training and Development Division

Lean six Sigma Green Belt Training

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Course Contents

Class Presentation:
1006 slide PowerPoint Presentation including Instructor Notes, 20 Templates and
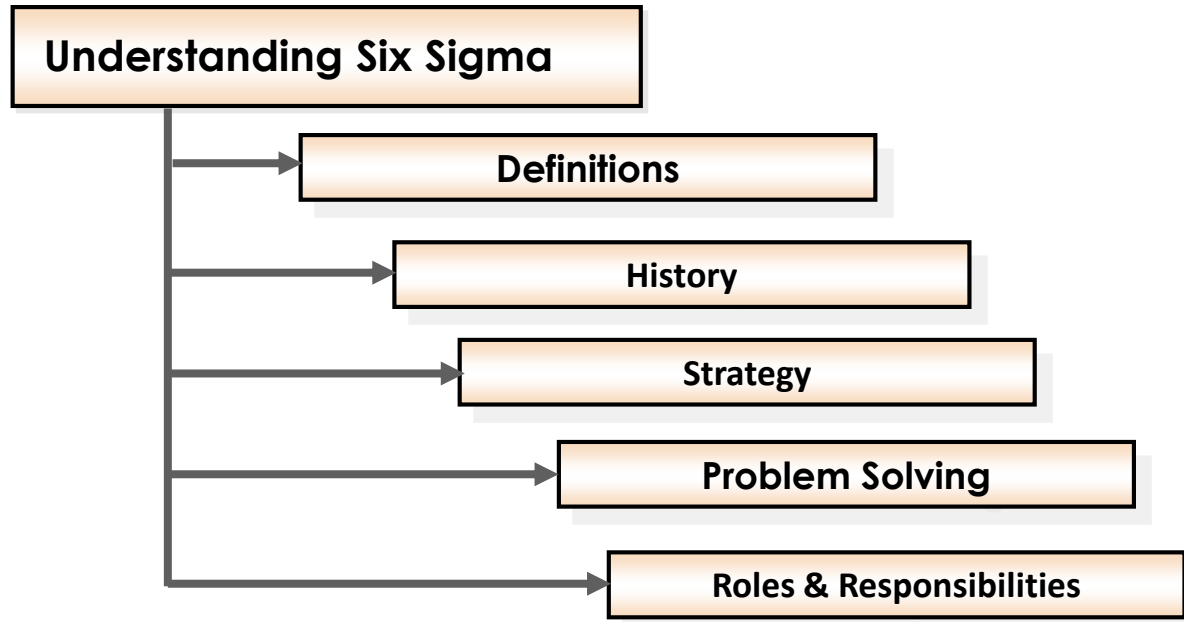Multiple Practical Scenarios

Define Phase
Understanding Six Sigma

Vocabulary

Sigma - a Greek letter assigned to represent the amount of variation or inconsistency exhibited by a measurable outcome.
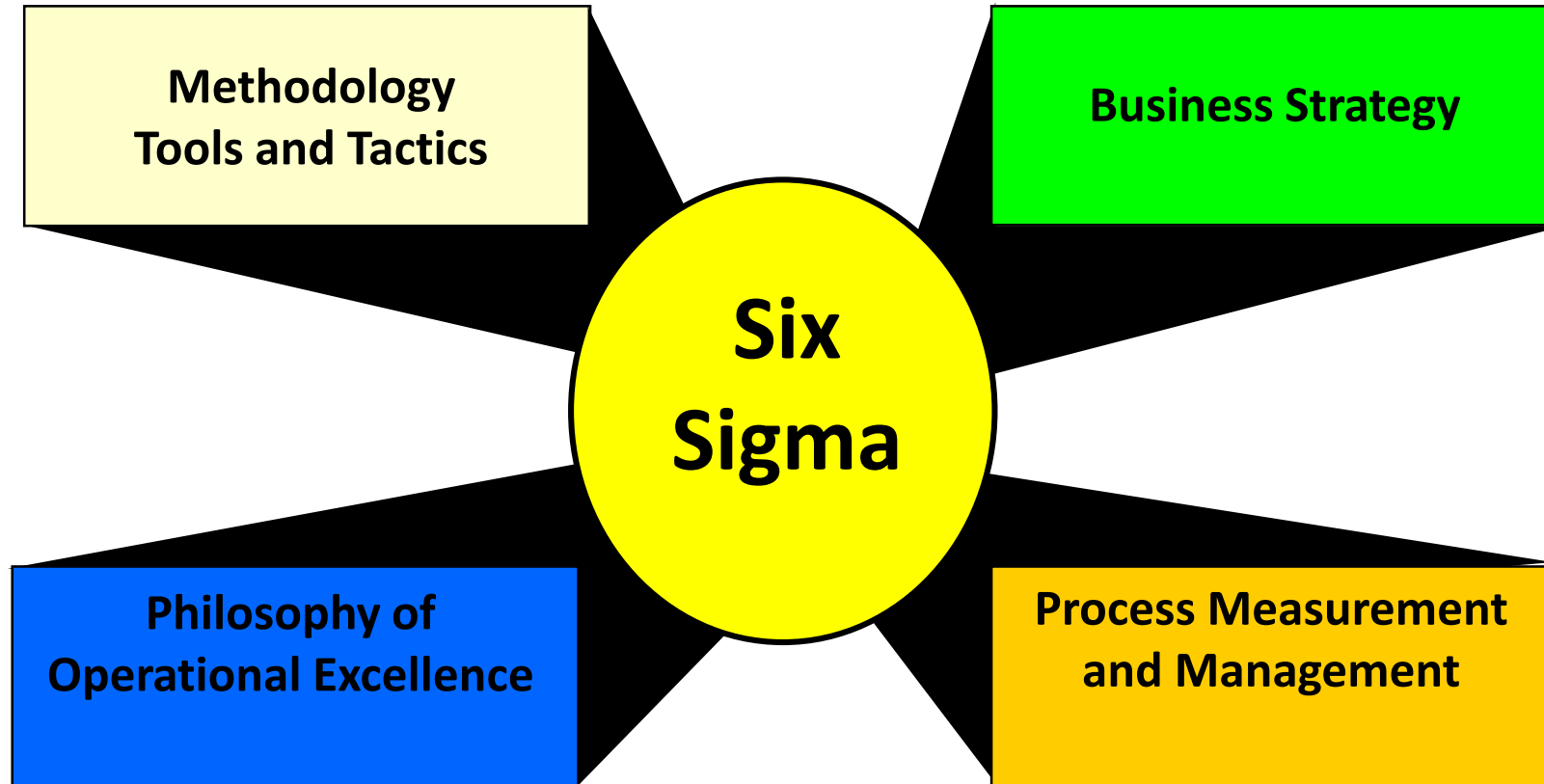
Six Sigma System - An enterprise-wide strategy that recognizes problematic areas of the business, defines improvement efforts and projects, determines and implements data-driven, breakthrough-level solutions---in a predictable and repeatable manner that improves business results.

Variable - A naming for a group of items that are used as part of an equation, system or situation. As the name implies, the value or amount can be varied for the item. For example, salt is a variable or ingredient in soup. It is also called an input, which is the terminology we will use in this course. Y=f(x)

Problem - When something does not work as well as expected, is insufficient or creates yet another problem. Something we would prefer to avoid.
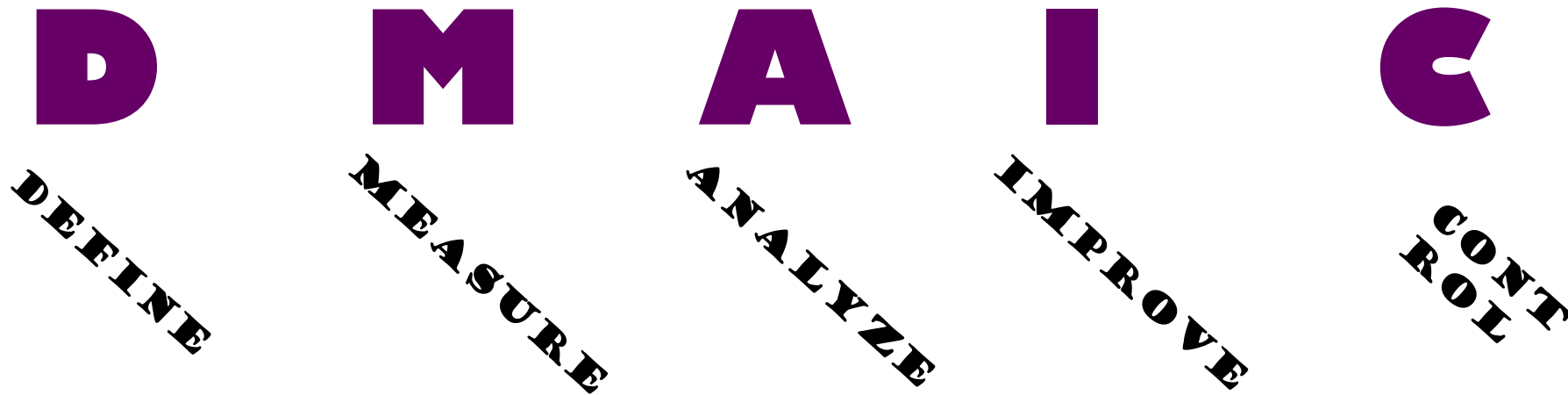
Data -Factual information used as a basis for analysis, reasoning, discussions and decisions. Data comes from some form of measurement and is most useful when it is numerically quantified.

Six Sigma is a lot of things…..

Methodology Tools and Tactics

Business Strategy

Six Sigma

Philosophy of Operational Excellence

Process Measurement and Management
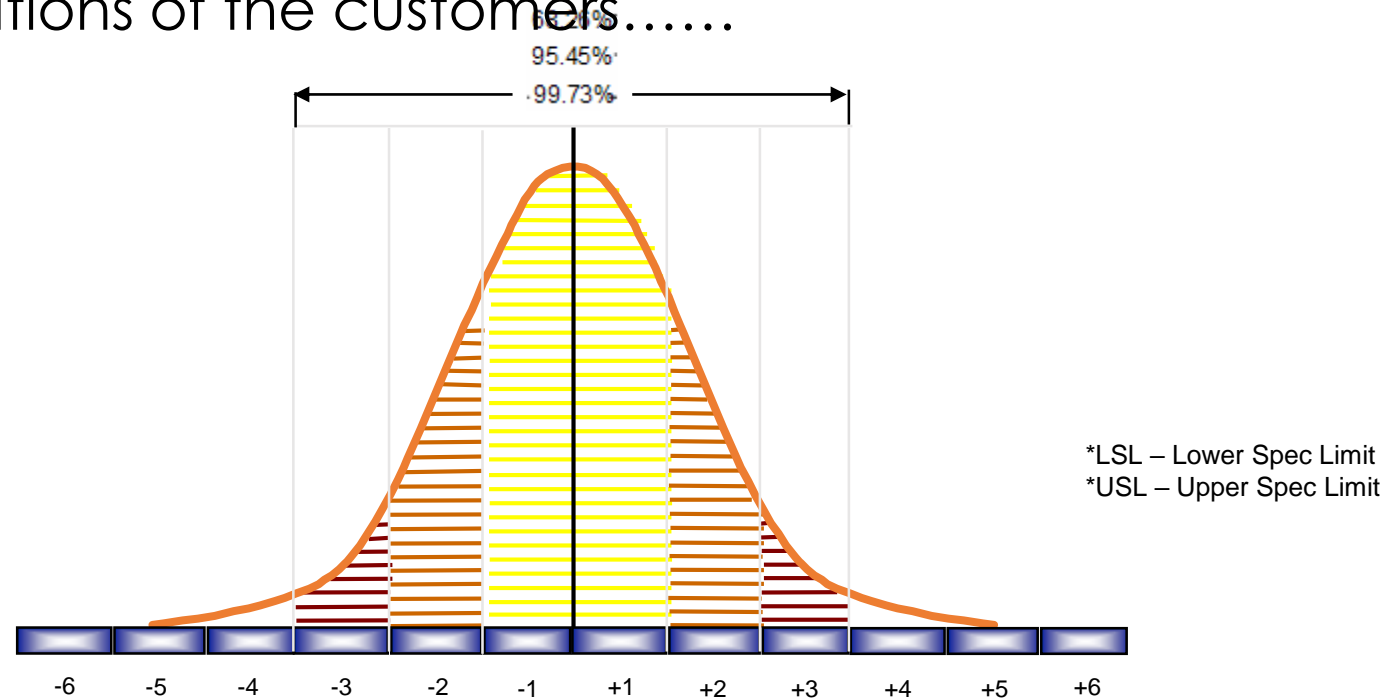
What is Six Sigma…as a <u>Methodology</u>?

Six Sigma as a ***Methodology*** provides an organized, specific, repeatable means of assessing and resolving challenges through a process titled….

D M A I C

DEFINE **MEASURE** **ANALYZE** **IMPROVE** **CONTROL**

This approach yields a focus on cause and effect with analytical problem solving tools within a management structure to assure results.

What is Six Sigma…as a <u>Business Strategy</u>?

Six Sigma as a **Business Strategy** links the outputs of the processes conducted within a company to the expectations of the customers……

95.45%

99.73%

*LSL – Lower Spec Limit
*USL – Upper Spec Limit

-6   -5   -4   -3   -2   -1   +1   +2   +3   +4   +5   +6

By reducing waste and variation expenses are reduced and customer satisfaction increases thus improving operating margins by as much as 50%.

What is Six Sigma…as a Goal?

Goal ⟶ **highest level of process performance possible.**

| 5+ Sigma |

| 3 - 5 Sigma |

| 3 Sigma |

| 1 - 2 Sigma |

Sweet Fruit
Design for Six Sigma

Bulk of Fruit
Process Characterization and Optimization

Low Hanging Fruit
Basic Tools of Problem Solving

Ground Fruit
Simplify and Standardize