

# The Power of Critical to Cost (CTC) in Six Sigma Projects

In this presentation, we'll explore what Critical to Cost (CTC) is and how it can be a game-changer in any Six Sigma project. We'll provide examples of successful CTC initiatives and show you how to identify, prioritize, and optimize CTC requirements to improve the bottom line.

Management and Strategy Institute



# Definition of Critical to Cost (CTC)

## What is CTC?

Critical to Cost (CTC) is a Six Sigma methodology used to identify and prioritize the most critical processes and components in terms of cost. By identifying CTC requirements, companies can focus their efforts on areas where they can achieve the greatest impact on their bottom line.

## What is the objective of CTC?

The objective of CTC is to help organizations reduce costs by optimizing key processes and components related to product or service quality. By reducing waste and inefficiencies, companies can create a more sustainable business model that is better able to compete in today's marketplace.

## Why is CTC important?

CTC can help companies achieve their cost reduction objectives by focusing their efforts on processes that will yield the greatest returns. It can also help them optimize their processes and components to improve product quality and customer satisfaction. Overall, CTC is an essential tool for any Six Sigma project that aims to improve efficiency and profitability.

# Identifying and Prioritizing CTC Requirements

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## Step 1: Identify Requirements

The first step in the CTC process is to identify the requirements that are critical to cost. This can be done through data analysis, process mapping, surveys, and customer feedback.

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## Step 2: Prioritize Requirements

The next step is to prioritize the requirements based on their impact on cost and quality. This can be done using tools like Pareto analysis, cause-and-effect diagrams, and multi-criteria decision analysis.

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## Step 3: Develop an Action Plan

The final step is to develop an action plan that outlines how resources will be allocated to address the CTC requirements. This may involve process redesign, technology implementation, training, or other interventions.

# Measuring and Analyzing CTC using Statistical Tools



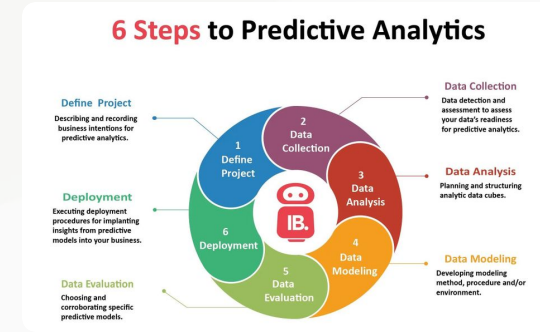
## Data Analysis

Statistical tools like regression analysis, hypothesis testing, and control charts can be used to measure and analyze CTC. They provide valuable insights into the underlying drivers of cost and quality, allowing companies to develop targeted solutions.



## Data Visualization

Visualization tools like heat maps, scatter plots, and histograms can be used to present CTC data in a meaningful way. They help stakeholders understand the results of data analysis and make informed decisions about process optimization.



## Predictive Modelling

Predictive modelling can be used to forecast the impact of process changes on CTC. By simulating different scenarios, companies can identify the best course of action and optimize their resources accordingly.



# Improving CTC through Process Optimization

## 1 Waste Reduction

Eliminating waste and inefficiencies in the production process can have a significant impact on CTC. Techniques like Lean Six Sigma and Value Stream Mapping can be used to identify areas where waste can be eliminated.

## 2 Quality Improvement

Improving product quality can also have a positive impact on CTC. Techniques like Design of Experiments and Failure Modes and Effects Analysis can be used to improve product quality while reducing costs.

## 3 Automation

Automating key processes and components can improve efficiency and reduce labor costs. Techniques like Robotic Process Automation and Artificial Intelligence can be used to automate repetitive tasks and improve accuracy.

# Examples of Successful CTC Initiatives

## Company A

Company A was able to reduce their production costs by 20% by implementing a CTC program that focused on waste reduction and quality improvement. By optimizing their processes and components, they were able to increase their competitive advantage and boost their market share.

## Company B

Company B was able to improve their customer satisfaction ratings by 30% by implementing a CTC program that focused on automation and quality improvement. By streamlining their processes and reducing errors, they were able to provide a better customer experience and retain more customers.

## Company C

Company C was able to increase their profitability by 25% by implementing a CTC program that focused on process optimization and automation. By identifying and addressing their CTC requirements, they were able to reduce costs and improve efficiency, leading to increased profitability.

# Conclusion and Key Takeaways

## CTC is Essential for Six Sigma Projects

CTC is a crucial tool for any Six Sigma project that aims to improve quality and reduce costs.

## Identifying CTC Requirements is Key

The first step in the CTC process is to identify the requirements that are critical to cost. This can be done using a variety of tools and techniques.

## Optimizing Processes is the Goal

The ultimate goal of CTC is to optimize processes and components to reduce costs and improve quality. This requires a systematic approach and a willingness to embrace change.

