The Cost of Poor Quality

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Overview

- COPQ background
- Problem statement
- Methods
- Results



Cost of Poor Quality

- Allows an organization to determine the extent to which they are efficiently and effectively using their resources
- Knowing such information can allow an organization to prevent monetary loss as a result of poor quality





• <u>Nonconformity</u>: A departure of a quality characteristic from its intended level or state that occurs with severity sufficient to cause an associated product or service not to meet a specification requirement

• <u>Process</u>: A set of common tasks that creates a product, service, process, or plan that will satisfy a customer or group of customers

• <u>Lost opportunity</u>: The cost due to the loss of resources used in fixing the defect, including all the labor cost, rework cost, disposition costs and material costs that have been added to the unit up to the point of rejection

Definitions from: <u>http://www.isixsigma.com/dictionary/glossary.asp</u>

Problem Statement

- Identify all activities that exist only because of poor quality
- Determine the cost of poor quality
 - Internal/external failure costs
- Reduce revenue loss
 - Appraisal and prevention costs



Methods

- Quality audits
 - Review conducted to compare some aspect of quality performance with a standard for that performance (ISO 9000)
- Quality assessment
 - Use overall framework to assess all quality activities including cost of poor quality, standing in the marketplace, and quality culture
 - Assess the system against published and organization defined criteria that emphasize quality results and elements of the system
- Product audits
 - Evaluation of a product's quality to determine its fitness for use and conformance to specification

Results

N Mean StDev SE Mean

Group 1	10 88.10	7.03	2.22
Group 2	10 100.00	12.44	3.93
Difference	10 -11.90	13.67	4.32





Summary

- The **cost of poor quality** is the monetary loss of products and processes that are not achieving their quality objectives
- To reduce costs organizations must undergo quality audits and quality assessments periodically
- Increasing prevention costs will reduce the income lost as a result of quality failures