

Contents

1 A sample of possible causes for defects

- Incomplete or erroneous specification
- Missinterpretation of customer communication
- Intentional deviation from specifications
- Violation of programming standards
- Errors in data representation
- Inconsistent component interface
- Errors in design logic
- Incomplete or erroneous testing
- Inaccurate or incomplete documentation
- Errors in programming language design
- Ambiguous or inconsistent human/computer interface.

1.1 Six sigma

- The most widely used strategy for statistical quality assurance
- Uses data and statistical analysis to measure and improve a company's operational performance
- Identifies and eliminates defects in manufacturing and service related process
- The "Six sigma" refers to six standard deviations.

1.2 About

The core steps:

- Define customer requirements, deliverables, and project goals via well-defined methods of customer communication
- Measure the existing process and its output to determine current quality performance (collect defect metrics)
- Analyze defect metrics and determine the vital few causes (the 20%)

Additional steps:

- Improve the process by eliminating the root causes of defects
- Control the process to ensure that future work does not reintroduce the causes of defects.

Reference section

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