Continuous Improvement Toolkit
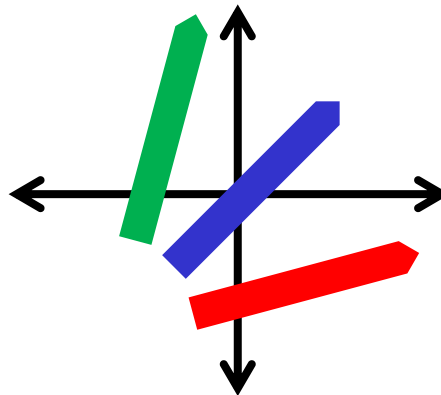
Kano Analysis

The Continuous Improvement Map

Managing Risk

PDPC

FMEA RAID Log*

Risk Assessment*

Fault Tree Analysis

Traffic Light Assessment

Lean Measures

Bottleneck Analysis**

Process Yield

Capability Indices

Gap Analysis*

Reliability Analysis

Understanding Performance

Benchmarking**

Data collection planner*

Check Sheets Interviews

Questionnaires

Focus Groups

Data Collection

Observations

Deciding & Selecting

Decision Balance Sheet Importance-Urgency Mapping

Force Field Analysis Cost Benefit Analysis

Break-even Analysis Voting TPN Analysis

Decision Tree Pick Chart Four Field Matrix

Critical-to Tree QFD Portfolio Matrix

Kano Analysis Matrix Diagram Paired Comparison

Cost of Quality* Pugh Matrix Prioritization Matrix

C&E Matrix

OEE KPIs Pareto Analysis

Descriptive Statistics ANOVA Chi-Square

Probability Distributions Hypothesis Testing

Histograms & Boxplots Multi vari Studies Confidence Intervals

Graphical Analysis Scatter Plots Correlation Regression

MSA Run Charts 5 Whys Root Cause Analysis Data Snooping

Control Charts Fishbone Diagram Tree Diagram* SIPOC*

Sampling Morphological Analysis How-How Diagram**

Brainstorming SCAMPER** Attribute Analysis

Affinity Diagram Relationship Mapping*

Mind Mapping* Lateral Thinking

Suggestion systems ## Creating Ideas

Understanding Cause & Effect

Design of Experiment

Planning & Project Management*

Daily Planning PERT/CPM

MOST RACI Matrix Activity Networks

SWOT Analysis Stakeholder Analysis

Project Charter Improvement Roadmaps

PDCA Policy Deployment Gantt Charts

DMAIC Kaizen Events Control Planning

A3 Thinking Standard work Document control

Cross Training ## Implementing Solutions**

Value Analysis

Mistake Proofing Ergonomics

Simulation TPM Automation

Pull Flow Just in Time

Visual Management 5S

Waste Analysis Quick Changeover

Process Redesign Time Value Map

Spaghetti Diagram Value Stream Mapping

Flow Process Charts Service Blueprints

Flowcharting IDEF0 Process Mapping

Designing & Analyzing Processes

- Kano Analysis

❑ A framework to analyze **customer needs**.

❑ Helps understanding how a product or service fits customer needs.

❑ Helps categorizing and prioritizing the different features of a product or service:

  • Based on their impact to customer satisfaction.

❑ Those categories are then considered when analyzing potential opportunities for improvement.
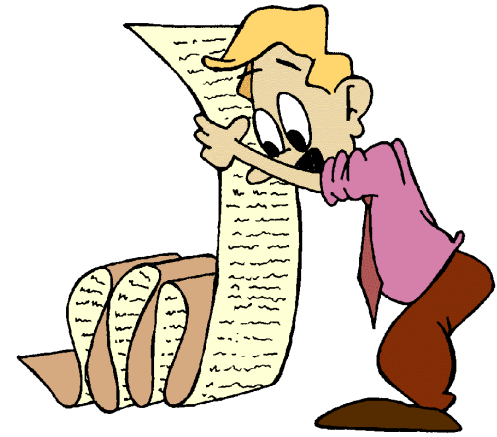
- Kano Analysis

❑ **The types of features that influence customer satisfaction:**

- The must be features.
- The performance features.
- The excitement features.
- The indifferent features.
- The reverse features.
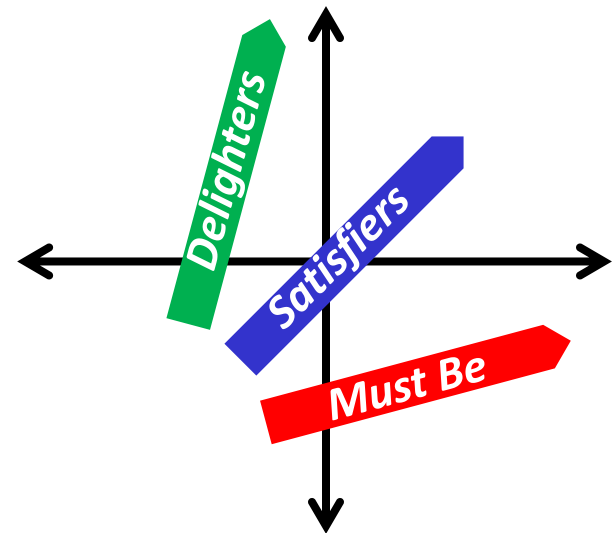
- Kano Analysis

Must Be Attributes:

❑ The basic criteria and the reasonable level of quality.

❑ Customers take them for granted.

❑ If these requirements are not present or are insufficient:

  • Customers will be extremely dissatisfied.

❑ If they are present or are sufficient:

  • They will not bring satisfaction.

❑ **Examples:**

  • The timely & responsive customer service.

  • The defect-free product.

  • The brakes and the windshield of the car.

Must Be
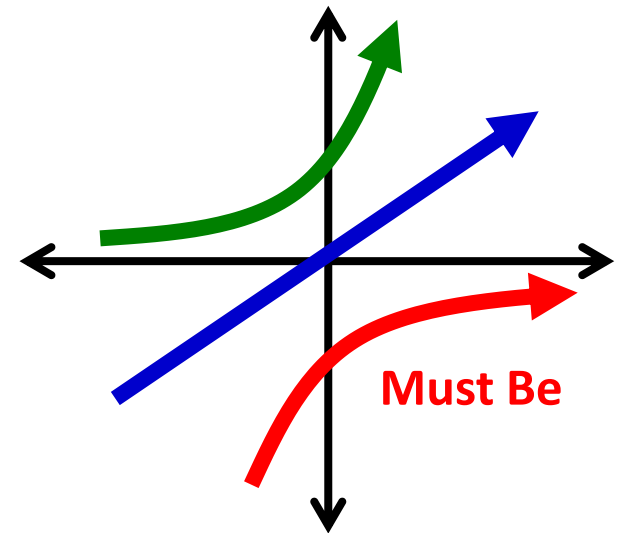
- Kano Analysis

Performance Attributes:

❑ They are not absolutely necessary.

❑ They result in satisfaction when fulfilled and dissatisfaction when not fulfilled.

❑ The more you provide, the more the customer is satisfied.

❑ Organizations use them to prioritize their efforts.

❑ **Examples:**

   • The speed of answering a phone in a call center.

   • The reduced amount of spoilage in a production line.

   • The warranty period and the fuel consumption of the car.

Satisfiers
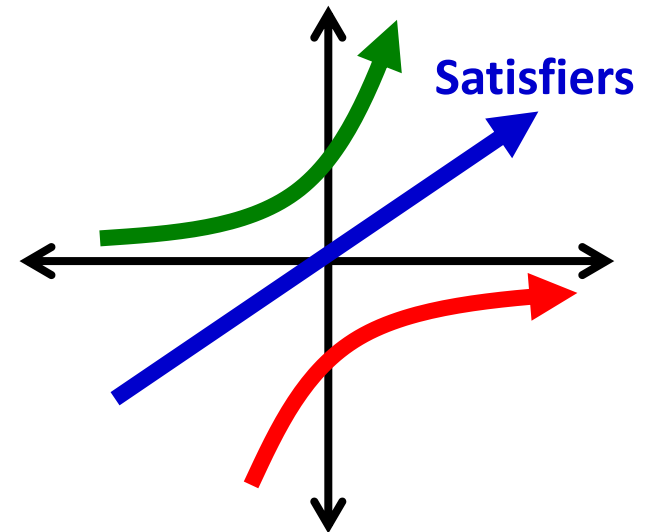
- Kano Analysis

Delighters:

- ❑ Organizations should aim for giving customers more than what they expect.
- ❑ The fulfillment of them will lead to high customer satisfaction.
- ❑ They distinguish your product or service.
- ❑ **They are often:**
  - Unexpected and Unspoken.
  - Provided to the customers for no extra money.
- ❑ **An example:**
 - A basket of fruit after having booked a room in a hotel.

Delighters
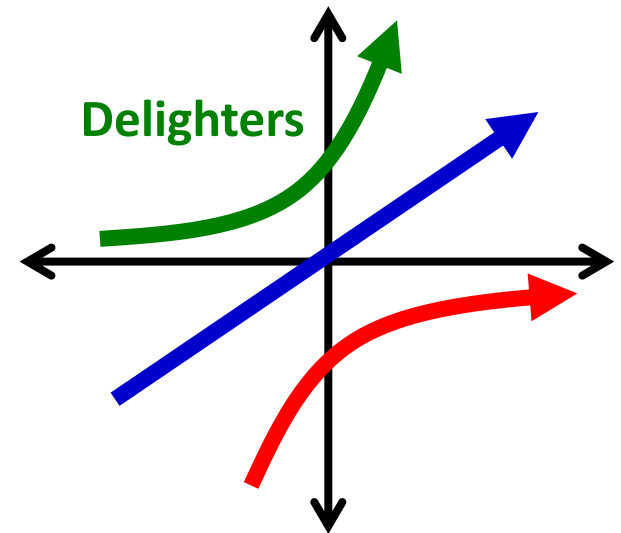
- Kano Analysis

❏ The **indifferent attributes** are those whose presence and absence do not bring satisfaction.

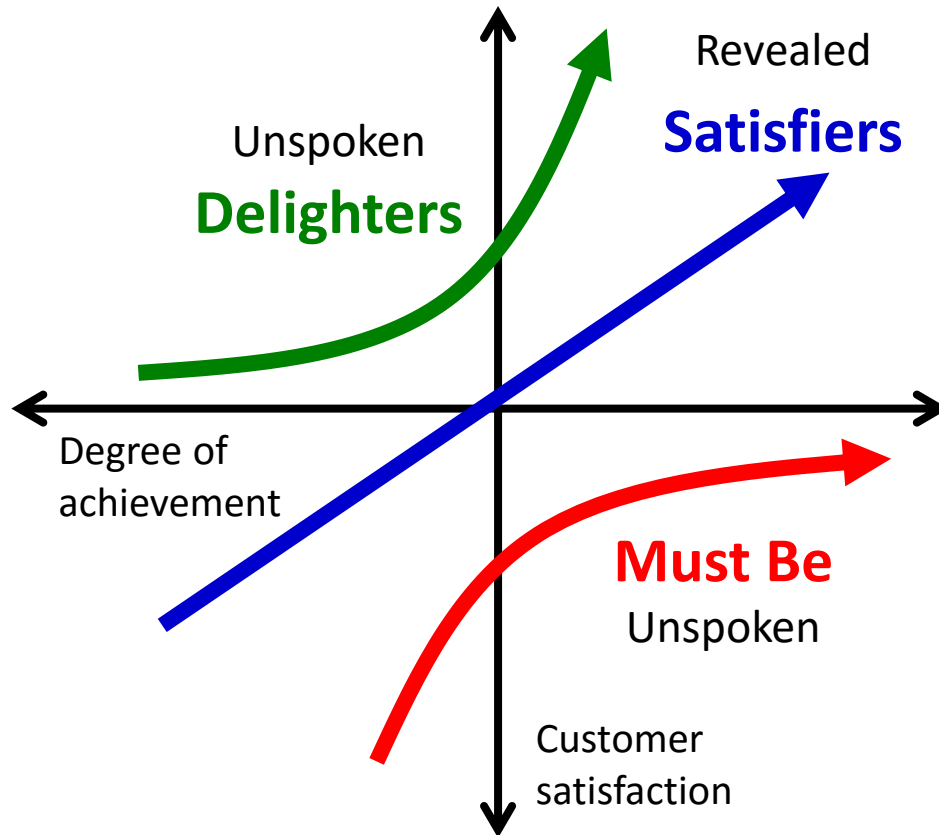❏ Examples are those product features that are never or rarely used by the customer.

Indifferent
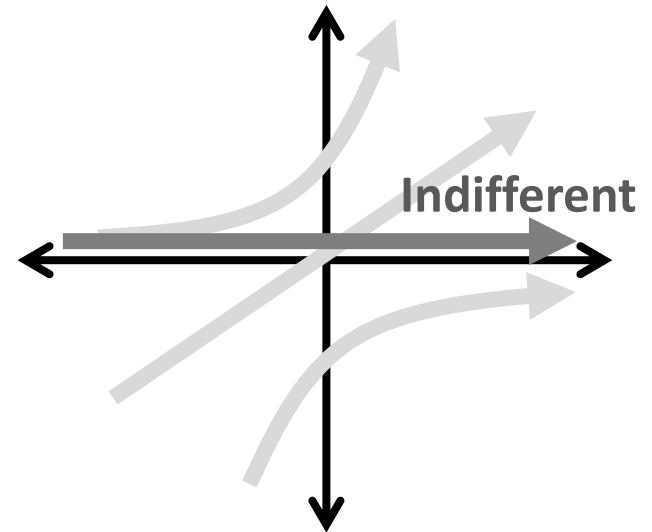
- Kano Analysis

❑ The **reverse attributes** are those whose presence brings dissatisfaction.

❑ Some customers prefer high-tech products, while others prefer the basic model of a product and will be dissatisfied if a product has too many extra features.
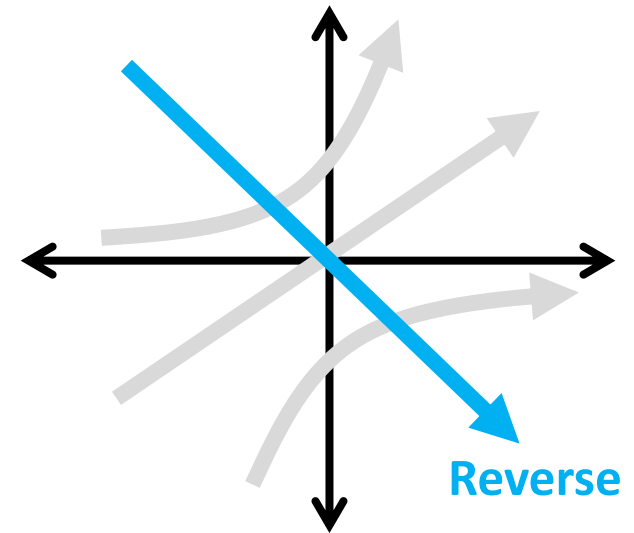
Reverse

- Kano Analysis

- Kano Analysis

Using the Kano Model:

❑ With your team, brainstorm all of the possible features.

❑ Brainstorm everything you can do to excite your customers.

❑ Classify all features as basic, satisfier, delighter, indifferent, reverse, or not relevant.

❑ Cut out all the indifferent and the non-relevant attributes.

❑ Make sure your product has all appropriate basic features.

❑ Select the right performance features so that the product can be delivered at a price which the customer is ready to pay.

❑ Think how you can build some delighters into your product.
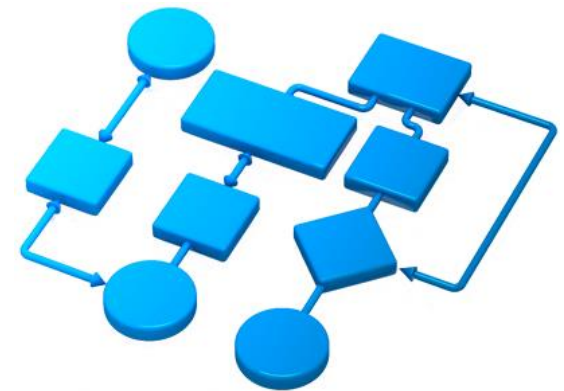
- Kano Analysis

Tips:

❑ The Kano Model highlights how the customer requirements are constantly changing.

❑ Today's delighters becomes tomorrow's must be's, requiring us to constantly come up with new delighters.

❑ It does not present methods to be applied to carry out improvement activities.

❑ Results of applying the Kano Model can be used in the Quality Function Deployment (QFD) matrix to clarify relationship between customer needs and technical requirements.