



Define **6**

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Voice Of Customer	12-15
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Analyse cont...	
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Selecting Ideas	86-89
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Capturing Customer Requirements



Customer Journey

- Take the journey of a customer through your process(es)
- Rate each step 1-5
- Note:



- attraction points



- decision points – leave or stay

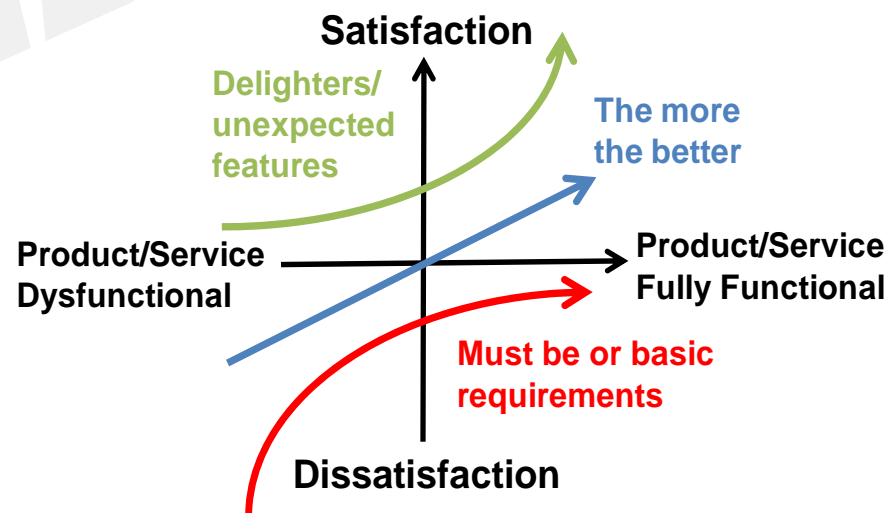


- delighter points

Voice of Customer




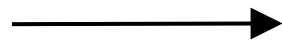
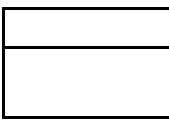

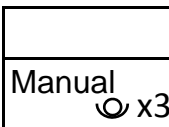




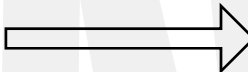




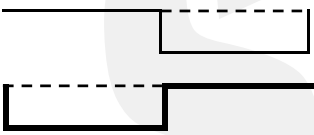

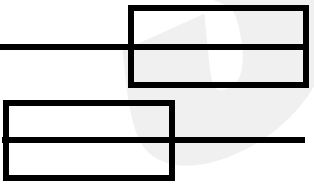


- Specifications
- Customer feedback
 - surveys
 - feedback forms
 - focus groups

Kano Model



Value Stream Mapping Symbols



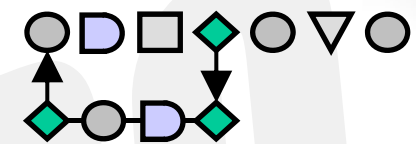
	External Entity		Electronic flow arrow
	Data box		Manual flow arrow
	Process boxes		Push arrow
			First In First Out stock system
	Operator (multiples)		Information box
	In-box (Information queues)		Shipment arrow
	Inventory & WIP		Shipment truck
			Kanban signal
	Time line segments		Supermarket store
	Time line ends		Load levelling system
			Sequenced pull ball system Improvement activity

Tools for Data Collection



Map the process

Process Mapping



List the process variables

Cause and Effect Diagram



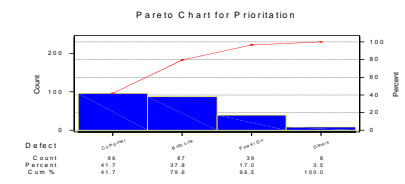
Eliminate process variables of no interest

Simple Pen Dot Voting



Prioritise remaining process variables

Cause & Effect Matrix, Pareto Chart

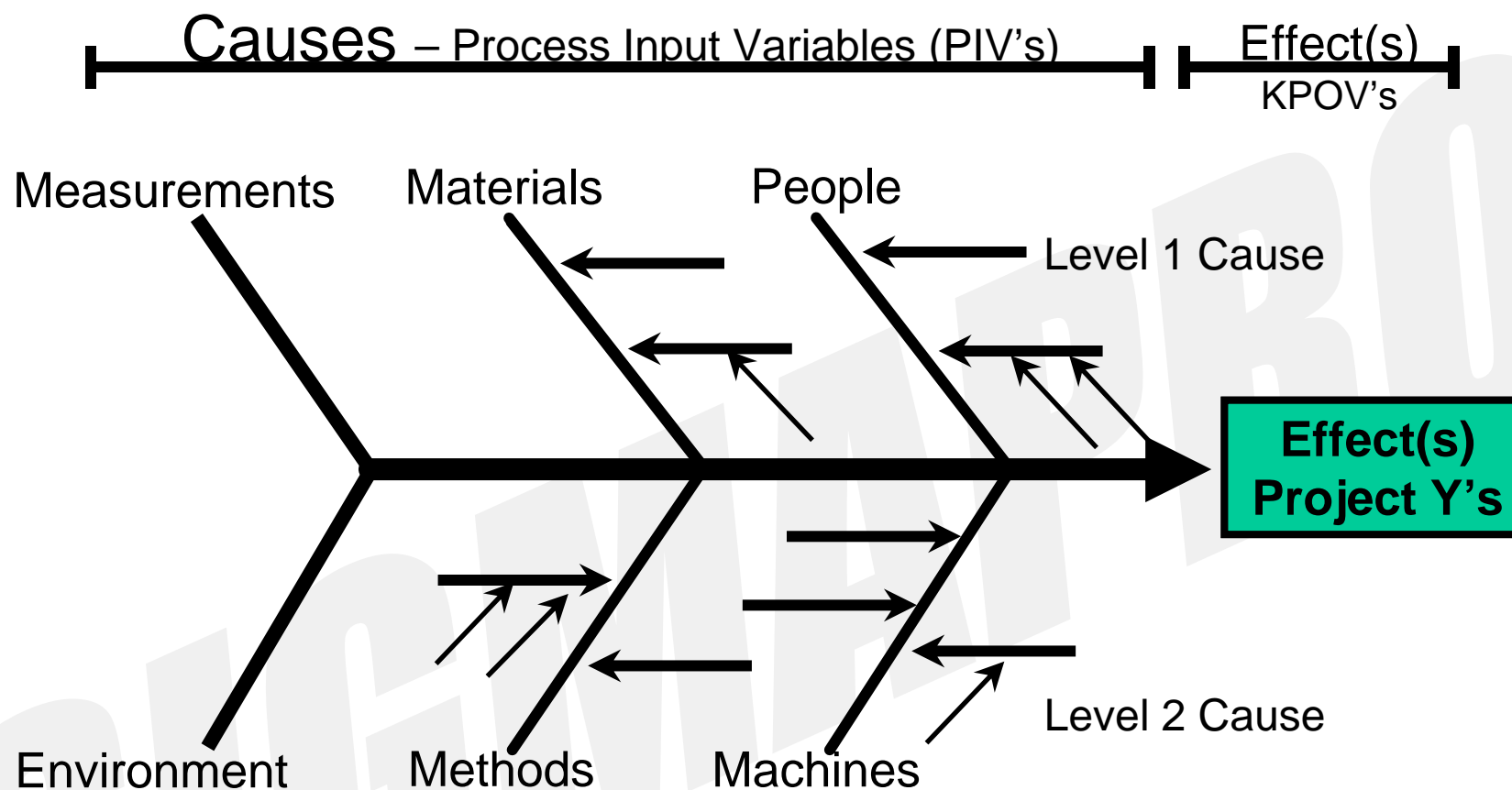


Prepare data collection plan

Data Collection Plan

What	Where	Who	When	How	Duration
Computer Interface	Test Laboratory	Technician	Each Use	Record type of interface used on tally chart	One month

Cause & Effect Diagram



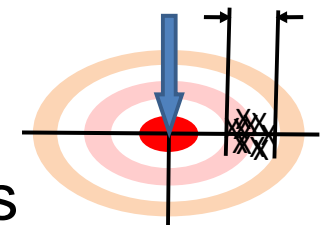
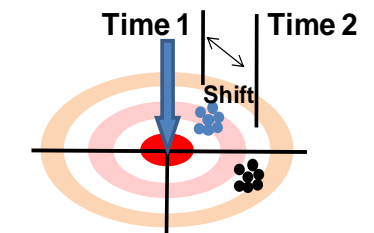
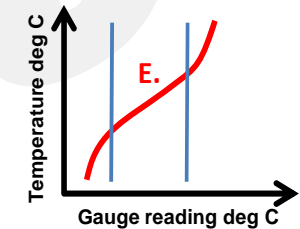
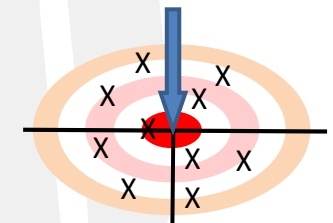
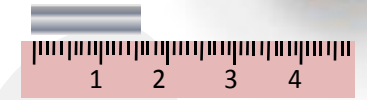
For transactional processes use: Measurements, Supplies, People, Environment, Places, Policies & Procedures

Also known as Ishikawa or Fishbone Diagram

Components of Measurement Error



1. Resolution/Discrimination
 - capability to detect the smallest acceptable change
 - “10 bucket” guideline resolution to be 1/10th
2. Accuracy (bias)
 - ability to hit a target or master value on average
3. Linearity
 - measurement is true or consistent across range
4. Stability (consistency)
 - measurements remain constant and predictable over time i.e. accuracy remains constant
5. Precision – Repeatability & Reproducibility
 - Repeatability – variation that occurs when repeated measurements are made under identical conditions
 - Reproducibility – variation that results when different conditions are used to make the same measurements



Attribute Acceptability Summary



- Between Appraisers

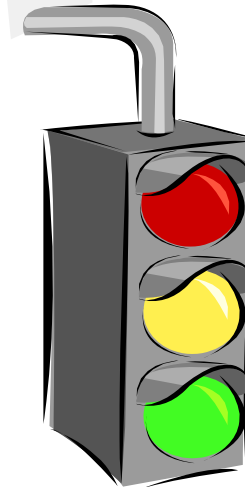
- > 80% Needs improvement
- 80% - 95% Probably adequate
- 95% > Good for most purposes
- Approaching 100% may be necessary where there is a risk to safety or of litigation

- All Appraisers vs Standard

- > 80% Needs improvement
- 80% - 90% Probably adequate
- 90% > Green
- Approaching 100% may be necessary where there is a risk to Safety or of Litigation

- Kappa

- > 0.7 Needs improvement
- 0.7 - 0.9 Probably adequate
- 0.9 > Good for most purposes



Preferred:- Both Indicators are “Green”