

Deming's 14 Principles

Deming	SF
Create constancy of purpose towards improvement	Change is happening all the time Improvement in the direction of FP Agile reaction
Adopt the new philosophy	You can Start anywhere and engage the Organisation during the process
Cease dependence on inspection	Customer consciousness throughout Building Quality all the way through
Move towards a Single supplier for any one item	Partnership with customers & suppliers
Improve constantly & reduce Variation	Use Variation (positive differences) Variation can lead to innovation
Institute training on the Job	Provide an environment where people want to learn Learning & working are inextricably linked
Institute leadership (as opposed to supervision)	Modelling the way - leaders do it first and last
Drive out fear	Everyone participates and innovation is encouraged
Break down barriers between departments	Collaboration and contribution
Eliminate Slogans	Leader as host: given the tools, people will do the best they can
Eliminate Management by Objectives	Develop your own 'best practice' and target the process that delivers best for the customer
Remove barriers to pride of workmanship	Allow personal signatures, sensible flexibility and link results with people
Institute education & self-improvement	Institute education & self-improvement
Transformation is everyone's Job	Transformation is everyone's Job - you can't not be involved

Root Cause Analysis (Ishikawa Fishbone)

"By repeatedly asking the question 'Why?', you can peel away the layers of Symptoms which can lead to the root cause of a problem. Very often the ostensible reason for a problem will lead you to another question. Although this technique is called '5 Whys', you may find that you will need to ask the question fewer or more times than 5 before you find the issue related to a problem." (6 Sigma web site)

Example

Customers are unhappy because they are being shipped products that don't meet their specifications.

Fishbone (Why?)	SF: "Wish"bone
Because manufacturing built the products to a different specification to the one that the salesman and customer agreed.	What exactly do customers want?
Because the salesman tries to expedite delivery by calling the head of manufacturing directly. The spec is miscommunicated or written down wrongly.	What exactly does the salesman want?
The salesman calls head of manufacturing instead of following procedures in order to save time when Sales Director is out of the office.	Who has the best record in this area? What helps him to convey information accurately? How does he know that the information has been understood?
The Sales Director's approval is required by the procedure. <i>(This non-value added activity can be eliminated from procedure.)</i>	What procedures will facilitate accurate information transfer?

Force Field Analysis (Kurt Lewin)

Typically, the following Steps are taken:

1. Describe the current Situation
2. Describe the desired Situation
3. Identify where the current Situation will go if no action is taken
4. List all the forces driving change towards the desired direction
5. List all the forces resisting change towards the desired direction
6. Discuss & interrogate all of the forces: are they valid? Can they be changed? Which are the critical ones?
7. Allocate a strength score to each of the forces
8. Chart the forces by listing driving forces on the left and restraining forces on the right, in order of strength
9. Determine whether change is viable and progress can occur
10. Discuss ways of increasing strength of driving forces and decreasing strength of restraining forces
11. Bear in mind that doing item 10 may create new forces

Force Field Analysis with **SF** inside

1. Describe what is working well in the current Situation
2. Describe the desired Situation
- ~~3.—Identify where the current Situation will go if no action is taken~~
4. List all the forces driving change towards the desired direction
- ~~5.—List all the forces resisting change towards the desired direction~~
- ~~6.—Discuss & interrogate all of the forces: are they valid? Can they be changed? Which are the critical ones?~~
- ~~7.—Allocate a strength score to each of the forces~~
- ~~&—Chart the forces by listing driving forces on the left and restraining forces on the right, in order of strength~~
- ~~9.—Determine whether change is viable and progress can occur~~
- ~~10.—Discuss ways of increasing strength of driving forces and decreasing strength of restraining forces~~
- ~~11.—Bear in mind that doing item 10 may create new forces~~

Instead of 3 and 5 to 11: → List all the resources driving change towards the desired direction. Based on this, take small steps in the desired direction.