



Continuous Improvement Toolkit

World-Class Performance Tools for Business and

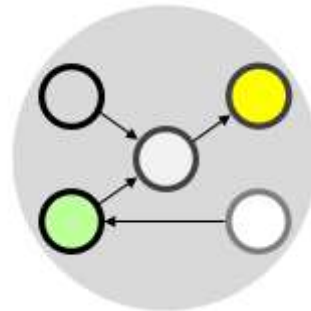
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Relationship Mapping

A **Relationship Map** is a visual display that shows the relationships between individual items. It allows to see and analyze the logical links between the different elements of any situation. A simple example of a relationship map is your network of personal and social relations. Another example is what is called the **Interrelationship Digraph** which is a visual display of the cause and effect relationships involved in a process or problem.

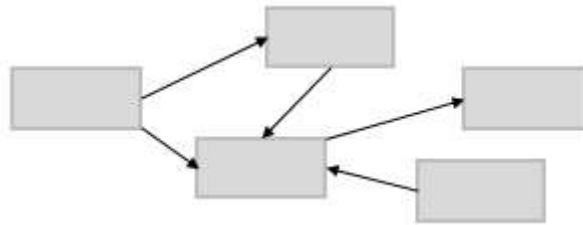


Relations in a complex situation don't necessarily fit into familiar structures such as hierarchies. Links can be in any direction and between any pair of items. This diagram is used to understand and organize any type of logical relationships between ideas, factors or issues. It is mainly used when analyzing complex situations to show the relations between one or more problems and their causes. It helps bring the most important and expensive causes into attention so that you focus your efforts on what really matters. This diagram

can also be used when solving a problem to identify the ideas of greatest impact for improvement.

A relationship map can be used to show relationships and interactions of individuals and teams working together. It helps identify communication patterns, indirect influence patterns and the frequency and importance of interactions. This is especially useful if you are planning to improve relationships among team members to increase morale and productivity. A relationship map can also be used to organize social networks to meet your personal and business goals.

A relationship map usually comes after a data collection or an idea-



generation exercise. It is basically a network that consists of nodes and lines. Lines are used to connect related nodes and each node is connected with one or more nodes to denote a direct relationship. Influence relationships can be represented by using arrows instead of lines which should be drawn from the element that influences to the one being influenced. If two elements influence each other, the arrow should be drawn to reflect the stronger influence. You may want to change the line thickness to indicate the strength of the relationship.

Connections can be counted once they have been identified to analyze the situation (which might be a cause and effect situation). The nodes with the most connections will usually be the key elements, while the ones that have primarily outgoing arrows indicate potential causes. Arrows flowing only away from a node indicate a root cause that should be addressed to resolve the problem.

How to Construct a Relationship Map:

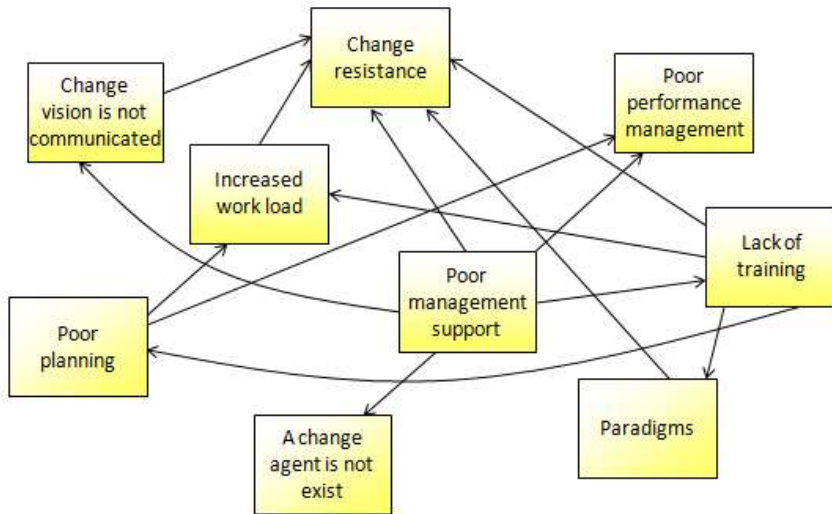
The following steps explain how to construct a relationship map for a cause and effect situation:

- Clearly explain to the team the purpose for constructing the relationship map.
- Brainstorm or collect the problem elements to be related on the diagram.
- Write them on note cards, then place them on a flipchart or a whiteboard.
- Look for causal relationships between each and every element.
- Draw an arrow from each element to the ones it causes or influences.
- Repeat this until all elements have been reviewed. Place elements that are related near to each other.
- Count the number of incoming and outgoing arrows then write the totals beside each element.
- Analyze the diagram by identifying and marking those elements that are likely to be the real causes of the problem. You may need to collect more data and perform further analyses to support your findings.
- Plan and implement actions to solve the problem.

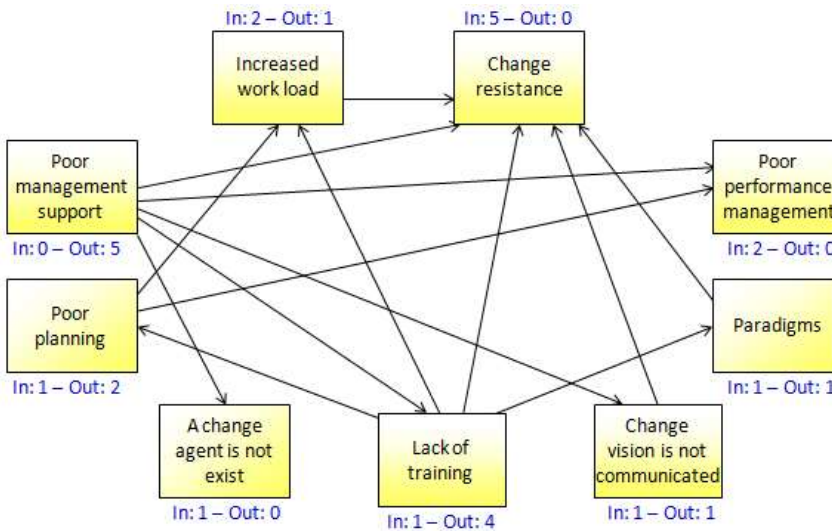
Example:

The following is an example of a relationship map that was created to help a team identify why a change initiative within an organization has failed to bring the

anticipated benefits.



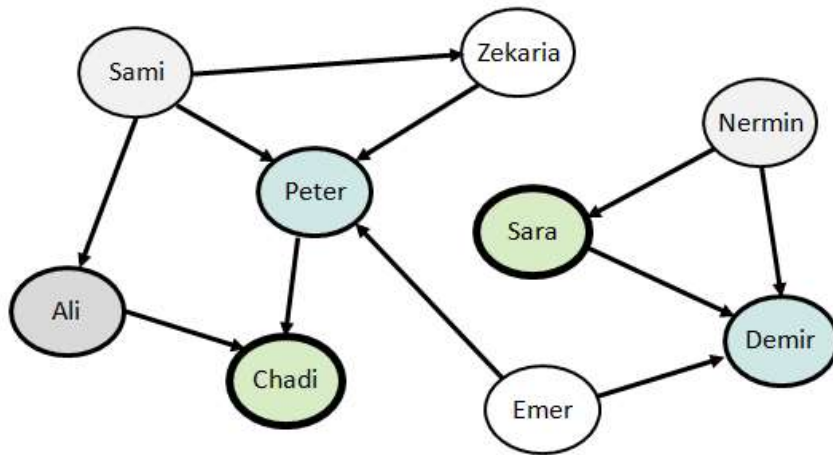
The following is an organized version of the above diagram where the totals of the incoming and outgoing arrows are written beside each item.



Example:

A team is examining the indirect influence patterns between its members in order to improve the interactions and mutual acceptance. You can see the

result of this exercise in the following diagram.



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