Top Tips

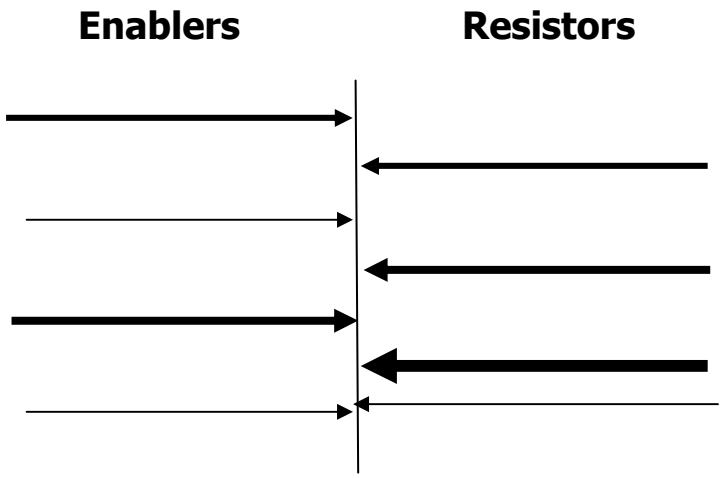
Problem Analysis

Some techniques to use

From time to time you will need to analyse and solve a problem, before you can make a decision as to the way forward. These tips will give you some techniques to use, either on their own or in conjunction with others.

Force Field Analysis

This is useful to represent the forces acting for and against a change. The vertical line represents the situation, the arrows on one side represent the 'enablers' or forces helping the change, and on the other side the 'resistors' forces resisting the change. Write in the description of the force on each arrow, eg 'no budget', 'to be completed by end Oct' or 'old equipment'. A refinement is to make the arrows wider or longer to represent a stronger force. When you have represented all the forces that apply, it may show for example that it would be easier for you to remove a resistor than to increase an enabler.



Brainstorming

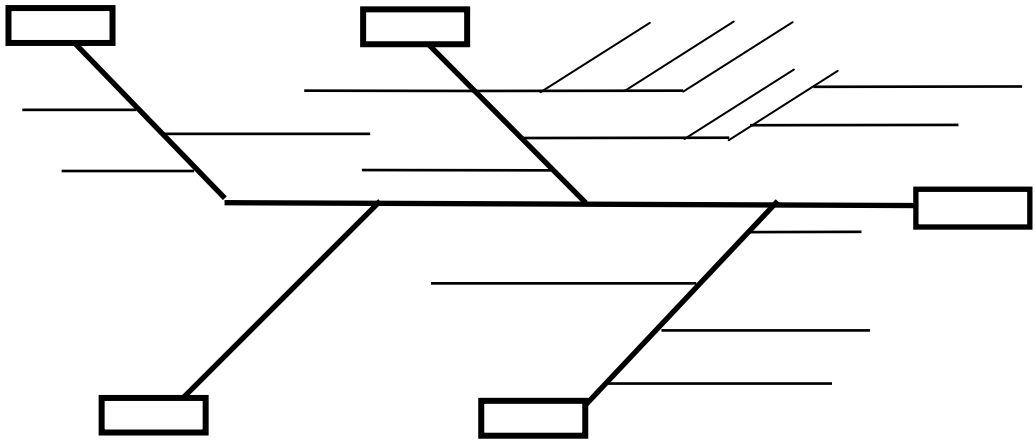
Get your team together and think broadly and creatively about the problem. Call out ideas as they occur: any ideas are welcome, even improbable or incomplete ones, and team members should be encouraged to build on each other's ideas. Nominate one person to write up the ideas on a flipchart, and at this stage record them all, the more the better. When you run out of ideas, then agree which ideas should be rejected or built on, and then group them by subject as appropriate. The important point is to encourage free thinking, and not to judge as this will restrict the flow of ideas.

A development of this is to record the ideas on Post-it notes stuck to a chart, as these are easier to group and re-group as you wish, and can be moved again when you want to put them in order.

Cause and effect analysis

This is often presented as a 'fishbone' diagram as shown below, with subsidiary 'bones' leading to the main ones. (You may see this referred to by its Japanese name, an "Ishikawa" diagramme.) Use headings that suit your particular problem for

the side 'bones', such as People, Procedures or Equipment, and state the problem in the box at the end. Ask yourself 'What causes this?' On each of the subsidiary bones write in your ideas of the causes of each problem. You may be able to take it a stage further and again ask 'What causes this?'; if so, create some more smaller bones. Continue this until you get back to what you believe to be the root cause of the problem on each of the major bones. The diagram shows the structure under construction.



PEST and PESTLE analysis

This was developed to assist in looking at forces outside the business that may affect it. PEST looks at these under four headings:

- **Political**, this is any local or national political policy or practice that affects our sales or operations
- **Economic**, such as public spending up- and down-turns
- **Social**, this is any trend or expectation emanating from people's changing habits that could inform how we conduct business
- **Technological**, such as new technology now available

PESTLE adds two more:

- **Legal**, such as new laws to combat discrimination on new grounds
- **Environmental**, such as obligations around waste recycling

Gather all the data together that you can find and ask yourself 'What effect will this have on my part of the business?' Your answers will form a list of Opportunities and Threats to add to your SWOT analysis.

Trend analysis

This is a simple way of turning data into information. Rather than looking at a figure such as sales or margin in isolation, look at the same figure for last month/quarter/year and identify whether the trend is for it to increase or decrease. For example, during a particular promotion margin may temporarily decrease although the trend is for it to increase.

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SWOT analysis

SWOT analysis was originally developed as a marketing tool to analyse situations, and may be used to assess the position of any team or item. Draw a grid as below, and ask yourself a few questions, writing the answer in the appropriate box,

Strengths	**Weaknesses**
Opportunities	**Threats**

Strengths – here and now, internal

What are they? Am I making best use of them? How can I develop them?

Weaknesses – here and now, internal

Why are they weaknesses? How important are they? How can I overcome them or turn them into strengths?

Opportunities – potential, internal or external

How can I make the most of them? What do I need to do with them? What are the implications long and short term?

Threats – potential, internal or external

What makes it a threat? How can I turn it into an opportunity? What can I do to remove or overcome the threat?

Application to the business

This is an excellent tool to use as a part of business planning, for example when analysing the effect that new competition might have on you, or that your activity might have on them.

Application to the team

You might want to carry out an analysis on your team, where you believe it is necessary to improve team performance. To do this:

- Gather the team to analyse the situation & create a plan of action.
- Agree the function of the team
- Ask the team to identify team strengths (not individuals'), weaknesses, opportunities, & threats, and record these
- Ask the team to identify how they can build on strengths to maximise opportunities & overcome threats, and how to overcome weaknesses
- Plan to take the identified action

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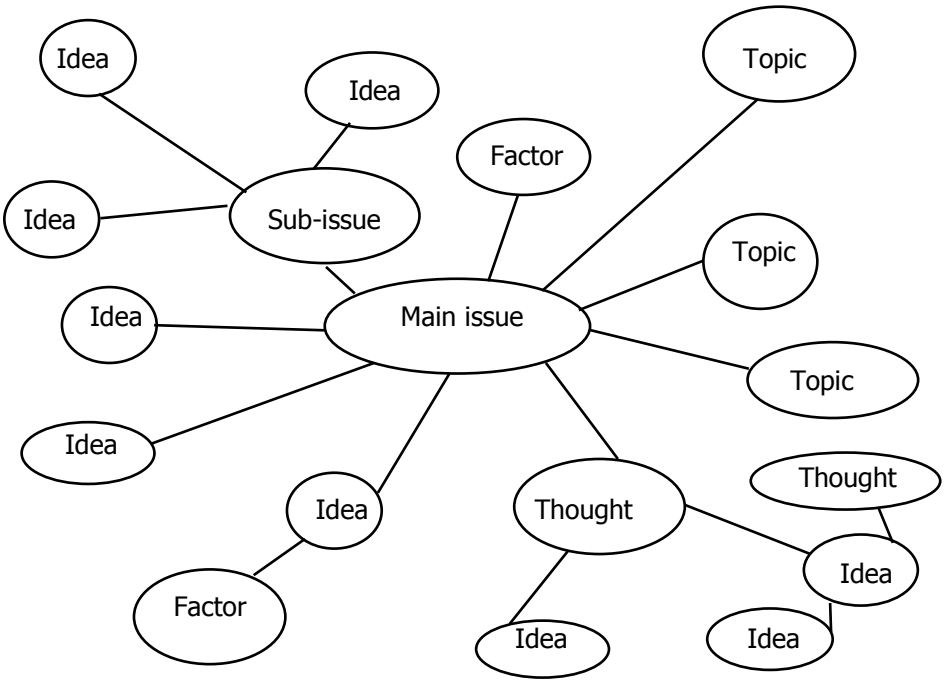
Application to the individual

This can also be applied to an individual (in confidence) as part of a coaching process, or simply as a tool to guide you when deciding who the best person is for a task.

Mind mapping

Some people find listing ideas or courses of action in a conventional list too restrictive; mind mapping aims to overcome this. In the middle of a large sheet of paper write the central issue. Around this write other thoughts, causes, effects, or related issues that come to mind, and connect these by arrows. In turn link these to each other and further thoughts with more arrows and so on. Use colours or shapes if it helps. A sample is shown below:



For related topics see Top Tips:

- ➔ **Analytical Thinking**
- ➔ **Creative Thinking**
- ➔ **Decision Making**
- ➔ **Strategic Thinking**