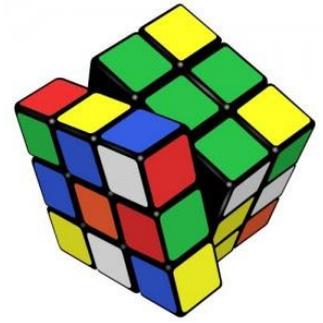# Problem Solving

Problem solving is a key skill, and it's one that can make a huge difference to your job and career as well as in your personal life. At work, problems are often at the centre of what many of you may do every day; you're either solving a problem yourself or supporting others who are solving problems.

The problems you face can be large or small, simple or complex, and easy or difficult to solve, and if you are also a manager, then finding ways to solve them is a fundamental part of your role.

What Skills Do You Need To Problem Solve?

Solving problems involves both analytical and creative skills. Which ones are needed will vary, depending on the problem.	
ANALYTICAL and CRITICAL THINKING SKILLS help you to evaluate the problem and to make decisions. A logical and methodical approach is best in some circumstances, drawing on your academic or specialist knowledge to identify solutions of a practical or technical nature.	**CREATIVITY** or lateral thinking will be necessary to come up with new ideas for resolving the problem and find fresh approaches.

Not everyone has these two types of skills in equal measure and for this reason:
TEAM WORKING is often a key component in problem-solving. Further skills, such as communication, persuasion and negotiation, are important in finding solutions to problems involving people**.**

Whatever issue you are faced with, follow the IDEAL model of problem solving:	
Identify the problem and cause	A surprising number of problems go unnoticed or are only recognised when the situation becomes serious.
Define the problem	**Closed** problems generally have one or a limited number of possible solutions, while **open-ended** problems usually can be solved in a large number of ways.
Examine the options & alternatives	*Evaluate possible solutions then* select the ones which will be most effective in solving the problem. It's a process of **decision making** based on comparing the potential outcome of alternative solutions.
Act on a plan to implement the solutions	**Careful planning** is essential & includes the actions required to achieve the solution, the timescale & the resources required.
Look at the outcomes & consequences	At any stage in solving a problem it may be necessary to **go back and adapt work** done at an earlier stage.

One of the essential skills needed to help solve problems is the ability to make decisions.

- How do you make a decision?
- How will you know, beyond a shadow of a doubt, that it is the right one?

To Help You Make a Decision and Solve a Problem - Fill In The Chart Below:

My Question / Problem That Needs A Decision Is:

To help you make that decision, score each of your pros & cons with a value of importance to you from 1 (low) – 10(high)

Pros (For - Advantages)	Score	Cons (Against - Disadvantages)	score
Total		**Total**	

Based on these scores my decision is:

Which of the pro's or con's will help solve my problem:

Some decisions in life are black or white so are easy to make.

Sometimes there are no 'right' decisions, only the best options available.

Another essential skill needed to help solve problems is the ability to think laterally:

Lateral thinking, is the ability to think creatively, or "outside the box" as it is sometimes referred to. It is about using your inspiration and imagination to solve problems by looking at them from unexpected perspectives.

It is a special kind of thinking that is distinct from ordinary logical thinking termed as 'vertical thinking' where you move forward in sequential steps. For some jobs or careers this ability to think laterally is really important such as advertising, marketing, media, art & design.

Lateral thinking involves:

- Discarding the obvious and challenge your assumptions.
- Leaving behind your traditional ways of thinking.
- Throwing away all your preconceptions.
- Generating alternative ideas even if you believe you already have a satisfactory solution.
- Suspending your judgement, being open & willing to try new and different ideas.
- Brainstorming, as this helps generate ideas, welcome unusual thoughts and consider the wild & wacky!

Lateral Thinking Exercise!

There are six eggs in the basket. Six people each take one of the eggs. How can it be that one egg is left in the basket?

Answer: The last person took the basket with the last egg still inside.

Top Tips to Help You Problem Solve:

A really good tip is to spend time reflecting on what kind of problem it is, ask yourself if it is like other problems you have encountered previously, and what different options might there be this time for approaching the task or problem.

A less successful approach is to jump in too quickly, without undertaking the initial thinking and preparation time required.

Select from the following tips the ones that will work best for <u>you</u>:

- **Define the task** clearly to find out what exactly is required.
- **Set priorities**, what must be done first and what can be left until later.
- **Develop an appropriate strategy:** what steps must you take to address the task?
- **Use any experience you may have from facing similar problems**, what do you already know or what have you already done that would offer a starting place on how to deal with the current problem?
- **Set targets:** what steps must you accomplish and by when? How will you know you have achieved each target and how will you measure your progress?
- **Develop an action plan.** List all the steps necessary to achieve each target, identify the best order for accomplishing each step and set a deadline for each.
- **Get started.** Don't wait until the last minute, start early on the tasks so that you can begin straight away, then make sure you stay focused and motivated.
- **Monitor your performance** and check regularly whether you are meeting your targets and revise your action plan accordingly.
- **Evaluate your performance.** How well did you achieve your targets and what did you learn that will be of use to you for future problems and tasks?
- **Work towards the best solution by**:
  - Knowing what would make a 'best possible solution' for you by understanding your own capacity to implement it given your circumstances?
  - Working to your deadline and avoid solutions that can't be met by this.
  - Discussing your ideas with others, find out how other people have approached similar problems.
  - Researching your options. Look for the hidden advantages as well as flaws. What has been tried and either worked or failed before?
  - Evaluating and costing all the options, ask yourself if you can you afford them and if you have the right resources for each?
  - Checking your expertise. Do you have the right expertise and skills, can you delegate to anyone, do others in your team have the relevant ability or knowledge or alternatively, can you learn or develop what you need in time?

> The "how" thinker gets problems solved effectively because he wastes no time
> with futile "ifs" but goes right to work on the creative "how".
> Norman Vincent Peale