

How can
we make
change
work?

How do
I decide which
job I should
apply for?

The Smart Solution Book

How can we
get other
people to buy
into our ideas?

How can
my peers and
I learn from
each other?

68 tools for
brainstorming,
problem solving
and decision making

How can
we design
better
products?

How can we
attract more
customers/clients
to our business?

David Cotton

**'The essential guide for
any problem-solving
situation. Effective,
practical and very
accessible. Highly
recommended.'**

CHRIS GARTHWAITE, CEO,
CGA CONSULTING

How can
I get more
done in
less time?

How can
I motivate
my team?

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PUBLISHING
FINANCIAL TIMES

THE SMART SOLUTION BOOK

- 4 The presenter must present the work in a dispassionate, egoless way.
- 5 The presenter will benefit from the walkthrough in direct proportion to the selflessness of the presentation.
- 6 The presenter is there to learn and improve the design, idea or solution.
- 7 The reviewers are there to assist the presenter by asking questions designed to help the presenter consider other aspects of the problem, explore alternative ways of thinking about the problem, etc.
- 8 The reviewers must never attack the presenter.
- 9 The reviewers are there to help, to learn but never to be critical.
- 10 Alert reviewers will look for loopholes, potential problems and unworkable methods.
- 11 The reviewers must raise objections as questions to the presenter.
- 12 The leader must ensure that the reviewers do not attack the presenter and vice versa.
- 13 The leader must smooth out the presenter's (almost inevitable) feeling of persecution, regardless of the constructive attitudes of the reviewers.
- 14 The leader must present in a way that concentrates simply on the presenter's areas of comfort or areas in which the presenter has avoided following through.
- 15 The leader must ensure that the unresolved issues are noted by the recorder in the sequence in which they are raised during the presentation.
- 16 The leader asks the recorder to record each unresolved point as it arises and read it back immediately so it can be amended, if necessary.
- 17 At the end of the session, the leader asks the recorder to read out all the recorded points.
- 18 The recorder's report is given to the presenter not as a definitive plan but as a list of points that the presenter may wish to consider.
- 19 The structured walkthrough is not designed for decision making. Points raised by reviewers are not considered binding on the presenter.

POINTS TO WATCH OUT FOR

The leader must be fair and firm, allowing the reviewers space to comment and question, ensuring that the points raised are pertinent and helpful. The leader must be sensitive to the effects of the reviewers' points on the presenter.

REFERENCE

Yourdon, E. (1978) *Structured Walkthroughs*. New York: Yourdon Press.

TOOL 11 LIFE THROUGH A LENS

WHAT THE TOOL IS

Each of us sees life from our own perspective. This simple technique asks you to consider how someone from a different profession would view your problem and how they would begin to resolve it. Seeing a problem through a different lens can give us insights that we would not gain easily from our own perspective.

WHEN TO USE IT

- When no obvious solution presents itself.
- When your possible solution seems too obvious and you want to see it from new perspectives.

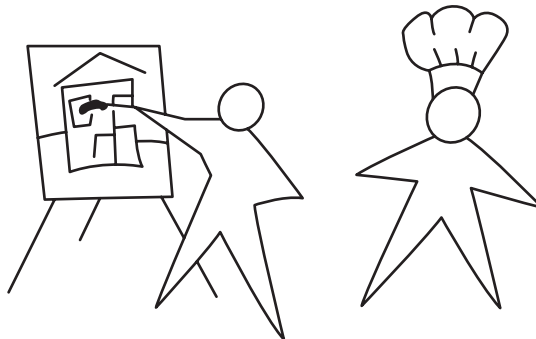
WHAT YOU WILL NEED

- Paper and pens.
- A large room, if you plan to work with smaller, breakout groups.

HOW TO USE IT

State your problem. Ask yourself or others, if working collaboratively, how would a(n) X begin to solve it? X may be, for example, an/a:

- doctor;
- lawyer;
- engineer;
- artist;
- statistician;
- politician;
- office cleaner;
- IT technician;
- chef.



Add as many professions as you like to this list, selecting those professions that are sufficiently unlike your own to give you a broader perspective. Stress that you do not expect anyone to understand the detailed work of the chosen professions, instead consider how that person would think about a problem.

For example:

A doctor might diagnose the root causes of a problem before suggesting a cure; a lawyer might explore opposing sides of an argument before presenting a case; an engineer might explore the detailed workings of an issue; an artist might make preliminary sketches before starting the real picture; a chef might ensure that all ingredients are in place before beginning to create something.

Discuss which combination of these approaches will guide you towards a better solution and implement the most appropriate.

If you are working with a large group, delegate the appropriate approaches to sub-groups and have them work in parallel on them, presenting to all in a plenary session. For example, one group may compile the balanced arguments for and against an approach, one may sketch a number of approaches and one may analyse the current situation and its likely effects in more depth.

POINTS TO WATCH OUT FOR

Help participants to understand that the method is not about a literal application of the work of each profession to the problem, but about free association of the characteristics or methods of each profession with the problem. What do they bring to the party that does not naturally fall out from your own way of thinking?

TOOL 12

NOMINAL GROUP TECHNIQUE

WHAT THE TOOL IS

A useful technique, developed by Delbecq and VandeVen, to ensure that everyone involved in solution finding has an equal voice. Some believe that nominal group technique (NGT) produces a higher quality list of solutions than brainstorming.

WHEN TO USE IT

- When a group includes very vocal or highly dominant individuals.
- When you believe that quieter members of the group are reluctant to speak in front of the more dominant ones.
- When the group has, traditionally, not generated a large volume of creative ideas.
- When the issue is controversial.

WHAT YOU WILL NEED

- Pen and paper for each participant.
- Flipchart and marker pens.

HOW TO USE IT

- 1 State the problem and check that everyone understands it. The problem is best voiced as an open question, for example: *'What are some of the ways in which we could encourage employees to come to work on time?'*
- 2 Individuals silently generate ideas, writing as many possible solutions as they can in a fixed time period (5 to 10 minutes is usually adequate). The facilitator may also write down ideas.
- 3 In plenary, each participant declares one idea in turn and the facilitator records them on a flipchart:
 - a) No discussion of the ideas is allowed.
 - b) In some versions of NGT, clarification may be sought at this stage. In others, clarification is sought after all ideas are recorded.
 - c) A participant may call out an idea that is not on his or her list, but is inspired by other ideas.
 - d) A participant may decide to pass in a given round and then offer an idea in a subsequent round.
- 4 Discuss each idea in the sequence in which they are written on the flipchart:
 - a) Members may ask questions and state whether they agree or disagree.
 - b) The facilitator must ensure that each contributor has equal space to talk about their ideas and is not subject to verbal attack.

- c) The group may combine ideas into categories and offer new ideas stimulated by what they have heard. The group ranks ideas in relation to the original problem and votes on them. **(See ranking and voting.)**

VARIANTS

After ideas have been generated and recorded, the facilitator questions whether the ideas are relevant to the stated problem. If they are not, the problem is declared 'ill-structured' because it allowed for responses that were not strictly related to it. The ideas that participants have generated are then clustered into groups – for example, one group would relate directly to the stated problem, another to a different interpretation of that problem. The ill-structured ideas are then regarded as problems in their own right and another round of NGT may be applied to them.

POINTS TO WATCH OUT FOR

- Ensure that the group really understands the issue being discussed, to avoid ill-structured ideas.
- Ensure that discussion is always calm and constructive and based around the development of ideas and not personal attacks.
- Be careful with the language of NGT. The owner of a problem may feel passionate about it, only to be told that the problem was 'ill-structured'. In their mind, it was probably perfectly structured. You do not have to use the original NGT language.

REFERENCES

- Delbecq, A.L. and VandeVen, A.H. 'A Group Process Model for Problem Identification and Program Planning', *Journal Of Applied Behavioral Science VII* (July/August 1971), 466–91.
- Delbecq, A.L., VandeVen, A.H. and Gustafson, D.H. (1975) *Group Techniques for Program Planners*. Glenview, Illinois: Scott Foresman and Company.

TOOL 13

GROW FOR PROBLEM SOLVING

WHAT THE TOOL IS

Whilst the GROW model is associated traditionally with one-to-one coaching, it provides a clear framework for problem solving, either individually or collectively.



WHEN TO USE IT

- When you need a range of possible solutions to a problem.
- When you need to explore a problem in depth and bring something concrete to a partly formed idea.

WHAT YOU WILL NEED

- Paper and pens.

HOW TO USE IT

Perhaps the world's most popular coaching tool is GROW, which provides a sequence for questioning the coachee. GROW stands for goal, reality, options, will/way forward. Typically, the coach asks the coachee a number of questions to help the coachee explore a goal, further questions to establish the reality of the coachee's current situation and the possible options available to the coachee based on that goal and reality. Finally, the coach tests the coachee's willingness to continue to work towards the goal and asks which option or options the coachee will undertake first.

The same tool offers a useful framework for problem-solving. You can use it on your own or with others.

Goal: Explore in as much depth as you can the problem you are attempting to solve. For example:

- What would happen if you did solve it?
- What would happen if you did not?
- What would it look like, feel like (even sound like) if you had solved the problem? Engage as many senses as possible to make the end goal seem as realistic as possible.
- How would you know that you had solved it?