

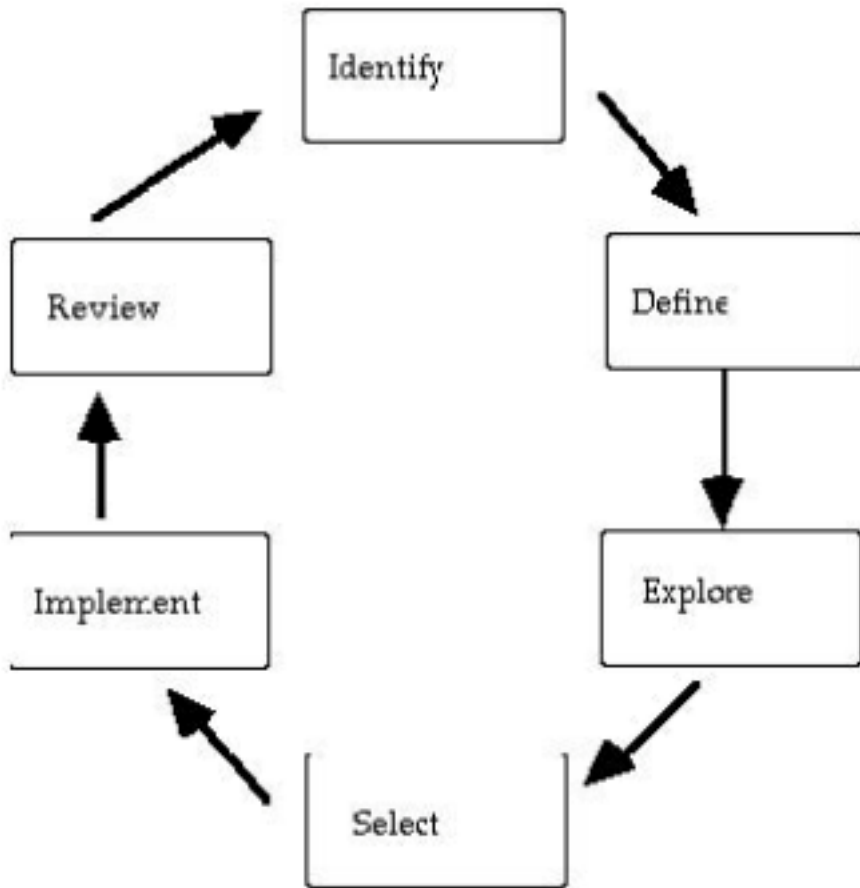


Problem-solving cycle

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Problem-solving cycle

At its simplest, we can see continuous improvement as involving a cycle of problem-finding and solving, like this:



In the first stage — identify — the organisation recognises that there is a problem to solve. This may be an emergency or it may be a minor difficulty which has been nagging away for some time; it may not even be a 'problem' but an experiment, an attempt to find out a new way of doing something.

Whatever the initial stimulus, finding a problem then triggers the next stage which is to define it more clearly. Here the issue is often to separate out the apparent problem (which may only be a symptom) from the underlying problem to be solved.

Defining it also puts some boundaries around the problem; it may be necessary to break a big problem down into smaller sub-problems which can be tackled — 'eating the elephant a spoonful at a time'. It

can also clarify who 'owns' the problem — and thus who ought to be involved in its solution, if the solution is to stick for the longer-term.

Having analysed the nature of the problem, the next stage is to explore ways of solving it. There may be a single correct answer, as in crossword puzzles or simple arithmetic — but it is much more likely to be an open-ended problem for which there may be a number of possible solutions. The challenge at this stage is to explore as widely as possible — perhaps through the use of brainstorming or other group tools — to generate as many potential solutions as possible.

Next comes the selection of the most promising solutions to try out — essentially the reverse of the previous stage since this involves trying to close down and focus from a wide range of options. The selected option is then put into practice — and the results, successful or otherwise, reviewed. On the basis of this evaluation, the problem may be solved, or it may need another trip around the loop. It may even be the case that solving one problem brings another to light.

In terms of learning, this is essentially a model for experimenting and evaluating. We gain knowledge at various steps in the process — for example, about the boundaries of the problem in defining it, or about potential solutions, in exploring it or about what works and what doesn't work in implementing it. The point is that if we capture this learning it puts us in a much better position to meet the next problem; if it is a repeat, we already know how to solve it. If it is similar, we have a set of possible solutions which would be worth trying. And if it is completely new, we still have the experience of a structured approach to problem-solving.