



Idea Generation and Problem Solving

SUPPORTING YOUR FUTURE

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Do you solve a problem only to have it occur again (and again and again)?
Is your business good at generating ideas but not building on them?
Or are the ideas just not flowing?

Everybody thinks that their problem is unique. We agree. Although problems sometimes look similar, there are differences in each case that can affect the most efficient way to tackle the situation. We have 20 years' experience of problem-solving in an industrial context and have shown over the years that some simple techniques can give dramatic results.

These techniques can be applied equally well to any type of problem or decision, covering technical problems, organisational problems, idea generation and idea management.

We pull these together into a "toolbox" we call *FaST* (Focused and Systematic Thinking). *FaST* gives us a systematic framework in approaching problems and decision-making. This allows us to plan the best route from problem to solved problem, or from options to implemented decision, and select the most appropriate tools and technique for each step of the way.

We are offering a two-day seminar in which participants will experience these tools and learn how they can be used to go from the initial identification of a problem or need, to a potential solution ready for development and implementation.

We recognise that it can be difficult for many people to free up a two-day block of time, so we have scheduled this seminar as two days separated by a week (Consecutive Mondays). This has the added advantage that participants can work with some of the tools for a week and report on their experience on Day 2

Participants will also be given the opportunity to discuss their own issues, either with the group or, if preferred, privately with the facilitator.

Seminar Location:	King James VI Business Centre Friarton Road Perth UK PH2 6PE
Seminar Dates and Times:	Day 1: 4th April 2016 – 8:30 – 17:00 Day 2: 11th April 2016 – 8:30 – 17:00
Cost:	£400 plus VAT (includes coffee/tea in morning and afternoon and lunch)
Booking	Through Eventbrite

For more information, see our [web page](#) or contact Billy Grierson (billy@perthinnovation.com)

Focused and Systematic Thinking (*FaST*) Tools

The table below gives the planned list of the tools covered, but this can change depending upon the needs of the specific participants.

Tool	Description
PMI	What is good about the situation? What is bad? What else should we bear in mind? This last question is not often asked, but it can raise important, neutral information that might otherwise be missed.
Objective Tree	What is your objective? If there are 8 people, we will probably get 12 different answers to this question. The Objective Tree tool looks at how these different objectives relate to each other and allows us to decide which are in the scope of the current exercise.
Problem Space	What do you know about the situation? This is not always simple to answer. The Problem Space tool leads us through a series of questions designed to tease out what we know and what we need to find out.
Selection Criteria	How do we decide which ideas are worth working on and which should be discarded?
Brainwriting	This is a well-known but often abused idea generation technique. We will look at when it is useful and how to get the best results.
SCAMPER	How can we get more "off the wall" ideas? SCAMPER is a tool that leads to more off-the-wall ideas than brainstorming.
Simple Matrix	How do we decide which ideas put further effort into? Simple Matrix gives us a way to quickly classify a large number of ideas so that a smaller group can be selected for further study.
Pairwise Comparison	How do we prioritise the key ideas to decide which to work on first?
3 Hats	How do we turn an idea into a potential solution to our problem? The 3 Hats technique allows us to work on an idea and modify it to remove any negatives without losing the benefits.
Virtual Implementation	What will happen if we implement this idea? By asking this question, and looking at different time scales, Virtual Implementation can help us to spot, and deal with, weaknesses in the final concept.
Concept Memo	How do we convince other people that our final concept is worth implementing? RWW is a simple technique for recording the final concept in such a way that the most important questions are answered.

Innovation and Problems

We talk a lot about creativity and the need for innovation but very often we really do not think through what we mean by this. Before you read the next paragraph do something innovative.

What did you do? Did you find difficulty in thinking of something? Most people do. To ask someone to innovate in isolation simply leads to confusion. What do you want them to innovate about? What result should they try to achieve? How should they evaluate the usefulness of their innovation? Innovation needs to have a focus, or as Esther Dyson put it in the Harvard Business Review:

“Don’t innovate, solve problems.”

Most people associate the word “problem” with something undesirable and negative, but in reality,

“A problem is simply the difference between what one has and what one wants.”

(Edward de Bono)

Under this definition, a “problem” could come from a desire to improve an already outstanding performance.

So, having decided that innovation and problem solving go together how do we solve problems?

Problem Solving

In deciding the best way to tackle a particular problem we use a framework which we call *SPEED*.

- ✚ Study: Why do we want to solve the problem? What objective do we have? What benefits will we gain from solving the problem? Do we fully understand the background and details of the problem?
- ✚ Possibilities: How could we solve the problem?
- ✚ Extract: Which ideas can we use? Can we group the ideas? Which ideas should we try first?
- ✚ Enhance: What benefits does the idea deliver? What difficulties? Can we modify the idea to remove the difficulties but still deliver the benefits?
- ✚ Do: What actions must be put in place to ensure that something happens?

In the seminar we share with the participants our experiences of these methods. The group will have the chance to get to know the methods and to try them out in a risk free environment. There will also be opportunities for participants to discuss specific problems that they are facing and how the tools can be used to tackle them.