

Aim of the programme

TRIZ is a proven capability for defining and solving management, engineering and IT problems, generating new ideas and evolving technical systems more quickly, cheaply and inventively. Its principal tools enable users to uncover the most effective routes to practical solutions, as well as the development of next generation products.

This one day workshop is built around the main TRIZ tools and a programme of supporting research that distils the findings from over 4 million case study analyses. The huge TRIZ toolkit helps the user to define better problems by bringing clarity to complex situations, and then enables the generation of solutions to such problems in a reliable and repeatable manner. Participants will learn how to apply these tools to systematically generate innovative solutions.

The key themes covered in this workshop are:

- The counter-intuitive nature of innovative problem solving
- How to define better problems and bring clarity to fuzzy, ill-defined, complex situations
- How to solve problems faster using TRIZ
- The process of solving difficult problems by uncovering and resolving contradictions
- How to accurately anticipate future problems and solutions using the TRIZ Trends of Technical Evolution

Who is the course for?

This course is for anyone who wishes to develop an understanding of TRIZ and how it can be applied within their organisational context.

Content – 1 day

The course includes the following core themes:

- Introduction to TRIZ and the Fundamentals of Effective Problem Solving
 - Why 98% of all innovation attempts end in failure
 - An overview of TRIZ – origins, applications, tools, methods, philosophy
 - Gallery of TRIZ case studies and examples
- Better Problem Definition
 - The TRIZ Compass - everything evolves towards a more 'ideal' solution
 - The TRIZ Problem Map – analysing relationships between components
- Better Use of Resources
 - The TRIZ Resource Map - making better use of what you already have
- Contradictions
 - The most successful solutions challenge trade-offs and compromises
 - The TRIZ Conflict Template – mapping dilemmas and iron triangles
 - The 40 Inventive Principles of TRIZ
 - The Contradiction Matrix – tapping into the world's best solutions
 - Contradiction finding and solving exercises
- Trends of Evolution
 - Universal patterns of technical system evolution
 - The TRIZ Telescope - seeing new markets and next generation products
- An Overall Process
 - The TRIZ Process for defining and solving any problem

Structure

This one-day course involves several hands-on exercises and gives participants the experience and confidence to apply their learning back in the workplace.