Smallpeice Enterprises
a division of GP Strategies Limited

~ **8D Problem Solving**
~ **Root Cause Analysis**
~ **Human Factors**

2024 training

- Manager & Practitioner Modules
- Open Enrolment & In-Company
- Coaching & Accreditation Options

Awareness & Practitioner Training:
linked to activity & competency checks

Embedding a structured and shared approach to problem solving will reap dividends for team morale (empowered to remove process issues that cause frustration and delays); deliver quantifiable benefits to the business bottom line; and impress your customers with a demonstrable culture of root cause analysis and continuous improvement.

The Smallpeice curriculum offers a range of training and workshop solutions to support:

- **Managers** responsible for deployment;
- **Practitioners** responsible for delivery;
- **Experts** who champion and coach problem solving activities.

Selected classes featured in this brochure are available as open enrolment – ideal for individual training needs. And all options can also be delivered as group training (either onsite or virtually) to develop a culture of problem solving excellence.

> *"I went from having never been exposed to 8D (a 'I' on the knowledge scale), to becoming very familiar with how to use a new tool. Having 8D in my toolbox will be a great help in the future."*

> *"The commentary to support the example problem was very beneficial to understanding the entire 8D process. Each step was broken down and explained in detail."*

Open Enrolment Class Dates
Please see
date schedule
on page 9

Attendance Fee
395 GBP per delegate

How to Book
Please see booking
details on page 9

Accreditation
Please see details
on page 8

Coaching
Please see details
on page 8

8D Problem Solving
12 hours virtual training

8D is the global problem solving method of choice for business and industry, and a mandatory quality deliverable in many sectors such as aerospace and automotive. The 8D approach focuses on analysing and improving the control systems that allow problems to escape. By implementing a robust and structured problem solving approach it is possible to correctly identify the root causes to prevent future occurrence. Applying the 8D toolkit also requires many skills in analytical thinking and decision making, and develops best practice behavioural and leadership skills which can then transfer to any business or team challenge.

The training sessions are based around a step-by-step case study to practice using the tools and techniques during team activities.

Preparatory e-Learning (to be completed in advance of the training)
• Overview of 8D methodology key steps

Introduction to 8D
• The process from customer complaint to lessons learnt
• How the enabling quality tools are essential throughout
• Cost of poor quality & improving quality
• Building in quality rather than inspecting it out
• Different CI / problem solving methods
• Importance of SME's and E = Q x A
• D0 Emergency Response & Prepare for 8D
• Simple process flow
• How do we become aware of the problem?
• What is the symptom ? Have we seen it before?
• Identifying stakeholders
• Emergency response, the need for containment

D1 Form the Team
• Process flow diagram
• Team roles & stakeholder management
• RACI &GRIP - Importance of communication

D2 Define the Problem
• Process flow diagram & analysing the data
• Fact based, importance of going to Gemba
• Developing a problem statement
• Understanding value stream & who could be affected
• Setting SMART goals
• Introduction to Is / Is not analysis

D3 Develop Containment Actions
• Is the ERA good enough or do we know more now
• Have we truly mitigated the risk (FMEA)
• Do we have good data (MSA)

D4 Identify & Verify Root Cause
• Need to establish true root cause: 3 stage analysis
• Importance of data collection planning
• Verifying the root cause

D5 Identifying Corrective Actions
• Lots of possible, benefits of incremental changes
• Mistake proofing
• Types of creative solution tools
• Picking the right solution (payoff matrix & criteria)

D6 Implement Corrective Actions
• Importance of stakeholder buy in
• The need for trials
• Control mechanisms, ensuring a good handover

D7 Define & Plan Preventative Actions
• What failed to allow the problem to occur
• How can we benefit from lessons learned
• What documents need to be reviewed or revised

D8 Recognise the Team
• Reflection on how the team & process worked
• Importance of recognising our successes

Human Factors Awareness (aligned with RM13010)
4 hour virtual training module

The concept of 'Human Factors' represents the way that People, Programmes & Processes, the Work Environment, Organisation and Equipment - all work together as a system. With the individual at the centre of that system: any flaws in the system impact the performance of the individual, and any flaws in the individual impact the system. Evidencing that Human Factors have been considered is now a mandatory requirement embedded into the SAE AS13100 standard and as such a reference manual RM13010 has been written to provide supplemental information and guidance on this key topic. This half-day workshop provides a concise introduction to the range of human factors that can affect performance and which should considered in relation to any improvement or problem solving campaign. Once the concept of human factors is understood, the workshop will move on to considering tactics that can be used to improve the management of these issues which can otherwise create errors and which should be considered within any design, change management, or root cause investigation. Training is delivered live via MS Teams. A mix of theory and interactive group activities / discussions will help delegates to understand what Human Factors will mean back in the workplace and what course of actions are required to meet the RM 13010 standard.

Training Objectives & Content
- To provide a practical introduction to RM 13010 Human Factors – within the surrounding context of AS13100
- To recognise and understand the key principles of Human Factors
- To consider the limitations represented by Human Factors and how they can affect people performance in day-to-day working
- To discuss ways to improve the understanding of Human Factors at all levels in the organisation

Introduction to Human Factors
- What are Human Factors?
- What are Human Errors?

Human Performance and Limitations
- Exploring vision & hearing
- Information processing; attention and perception; memory
- Phobias / restrictions in the workplace that impact issues

Teamwork / Safety Culture / Organisational factors / Professionalism & Integrity
- Social psychology; responsibility: individual and group
- Motivation & de-motivation; peer pressure; 'culture' issues
- Management, supervision and leadership

Physiological Factors Affecting Performance
- Fitness/health; Stress: domestic and work related
- Workload: overload and underload
- Sleep and fatigue, shift work; alcohol, medication, drug abuse
- Time pressures that contribute to the creation of problems

Environment & Hazards in the Workplace
- Noise & fumes: illumination; climate & temperature
- Motion & vibration
- Is our working environment conducive to working well

Misunderstanding Processes & Procedures
- Badly written SOPs, ambiguous Instructions,
- Shift handovers, Silo mentality between depts
- How clear are our current instructions ?

Summary & next actions
- Group discussion: 'where are we now / how do we move forward'
- Application within your workplace
- How do we create a 'Just Culture'?
- What do we need to do next?

Available for In-company group training

This programme is available for cost effective 'in-company' group training. This provides the opportunity to customise the content and to include practical activities that are linked to your own processes and products.

For more information on the options, please email train@smallpeice.com

Root Cause Analysis
1-day problem analysis workshop

This workshop provides a detailed understanding of problem solving through Root Cause Analysis. By working on real life problems, participants will benefit from hands-on practise using the techniques to not only establish root cause but also to identify permanent solutions to prevent the problem reoccurring. Application of this learning will help drive and embed a culture of team based root cause problem solving where problems are systematically solved.

The training follows the RCA approach applied to a current live issue. This enables the delegates to not only learn about the different tools and techniques but will give them a meaningful set of information to take back to the workplace to complete the investigation.

Introduction
- Context and strategy for problem resolution
- Introduction to problem solving though root cause analysis (RCA)
- The need for a RCA, what it achieves and when to apply it

A Team Approach to Problem Solving
- Establishing effective team and responsibilities
- Reviewing available data and producing the initial plan
- *Exercise – forming the problem solving team*

Creating an Accurate Problem Description
- Problem description analysis, scoping the problem and identifying key characteristics
- The importance and benefits of constructing a good accurate problem statement
- *Exercise – producing a problem statement*

Root Cause Analysis of the issue (RCA)
- Identify and assess potential root causes using methodologies such as: Is / Is Not, Process Mapping, Cause & Effect Diagram and 5 Why
- Generating potential and alternate types of solutions
- *Exercise – Using current known data to identify root cause, generate, review and select best identified potential permanent corrective action*

Preventing Recurrence
- Techniques for creating and delivering a successful implementation plan
- Validating the effectiveness of the permanent solution
- Monitoring ongoing performance
- Identifying any further weak practices and opportunities for further error proofing
- *Exercise – produce a top-level plan for implementation of the identified potential permanent corrective action. Analyse any further risks and consider where opportunities exist for error proofing*

Continuous Improvement through Lessons Learnt
- Capturing & communicating lessons learnt across the team
- Closing problem solving projects
- *Exercise – reflect on how the team worked together, the lessons to be carried forward for future problem solving activities and how the team will apply this back at your own workplace to help create a Root Cause Problem Solving culture where reoccurring problems no longer exist*

Strategy & Tactics for Deploying 8D
4 hour virtual training module

This course is designed to give Managers / Sponsors and those with responsibility for Problem Solving an overview of the 8D Principles, tools and techniques. It will enable participants to understand how to improve the use of 8D within their business and begin to plan the best approach in supporting Problem Resolution.

Preparatory e-Learning (to be completed in advance of the training)
• Overview of 8D methodology key steps

Problem Solving Strategy
• When & where is 8D the right problem solving approach to deploy ?
   – using sentencing matrices or level zero checks
   – go look see in practice
• Resource allocation & typical timeline for 8D activity
• The role of Sponsors & Leaders within the 8D process - checklist of questions & inputs required
• Case study examples: 8D in action

Problem Solving in Action: watch out for the hotspots
• Defining the Emergency Response Action (ERA): being clear on the purpose & parameters of this key step
• Forming the team: ensuring the optimum balance to suit the required team roles
• Defining the problem, creating a good problem definition: Managers/Leaders/Sponsors MUST be competent in this !
• Using Is/Is Not analysis: this powerful tool can cause uncertainty and confusion if not clearly understood
• Getting to the root cause and developing permanent corrective actions
• Prevent reoccurrence actions and lessons learnt: locking in the benefits for the long term not short term

Optimising Skills Development in your Teams
• How to develop the levels of competency needed in effective problem solving teams
• Training linked to Competency Matrix & Certification

Available for In-company group training

This programme is available for cost effective 'in-company' group training. This provides the opportunity to customise the content and to include practical activities that are linked to your own processes and products.

For more information on the options, please email train@smallpeice.com

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Facilitating 8D Problem Solving
1-day workshop

This workshop is designed to provide participants with an insight into the problem solving methodology and also give them the skills required to better facilitate any investigation – from team selection through to the closure of the investigation and handover to the business. Attendees should already be experienced in the 8D approach and toolkit – as the focus for this training is on the facilitation of live problem solving teams.

Introduction to Facilitating Problem Solving
- Discuss what has gone well & not so well in applying 8D structured problem solving

The Role of the Problem Solving Facilitator
- What attributes does a facilitator need to have?
- What is expected of a facilitator and how do they interact with the problem solving team?
- Being prepared for problem solving activities: planning; preparation and practice – hints and tips

Securing sponsorship & preparing for 8D
- Tools to identify and engage the key stakeholders affected by the problem
- Effective communication – choosing the right approach to blame behaviours and to secure support
- Ensuring containment doesn't become the permanent 'solution':
  - Understanding emotional response to problems
  - Influencing to ensure on-going commitment
  - Resisting the pressure to move on once containment achieved

Engaging the right team
- Forming the right team to support problem solving activity
  - Getting the right team – the right skills and experience
  - Developing team cohesion quickly – getting a G.R.I.P
  - Building collaborative and constructive team behaviours for effective problem solving

Facilitating Problem Definition
- Securing 'visible & active' support
- The barriers and biases that can result in poor problem definition and how to challenge these
- Effective questioning and listening skills to support problem definition and Is/Is Not analysis
- Addressing the common pitfalls and developing and practicing intervention strategies

Facilitating Identifying & Verify of Root cause(s)
- Facilitating effective use of Root Cause Analysis tools - Cause & effect analysis & 5 Why analysis, including:
  - Identifying hidden assumptions & tacit knowledge
  - Overcoming cognitive bias
  - Handling difficult situations sensitively

Facilitating Identifying & Implementation of Corrective Actions
- Techniques for facilitating effective brainstorming sessions – understanding and managing team dynamics and cultural differences
- Tools to facilitate prioritisation of correction actions
- Obtaining commitment and buy in for changes

Facilitating the handover & exit from the 8D process
- Ensuring ownership of new processes and actions – building confidence and commitment
- Facilitating lessons learnt – ensuring open and honest inputs and avoiding 'silent dissent'
- Celebrating and acknowledging the achievements of the team – tips and motivational recommendations

Coaching Support & Accreditation
Optional add-ons to further enhance post training outputs

Coaching

- Whilst all the courses in this portfolio provide practical training in the correct use of the problem solving toolkit, returning to the workplace to tackle live situations and activities can raise new challenges and issues.
This is where follow-on coaching and mentoring support can make a real difference in helping to fast-track skills, confidence and competencies.

- The coaching can support teams working on real problems, or conducted on a 1-to-1 basis – either as part of a structured programme or on an ad hoc basis when required.

- Please contact via train@smallpeice.com to request a call back to discuss the coaching options and packages in more detail.

Accreditation

- For the 8D Problem Solving module, training can be supplemented with an Accreditation framework which provides formal assessment and qualification of practitioner levels of competency.

- The certification framework requires participants to submit a portfolio of problem solving activities for review by a Smallpeice assessor. Detailed feedback is provided – and candidates must demonstrate their competency in a range of mandatory deliverables.

- A multi-choice online test is also included as a formal knowledge check.

- Please contact via train@smallpeice.com to request a call back to discuss the coaching options and packages in more detail.
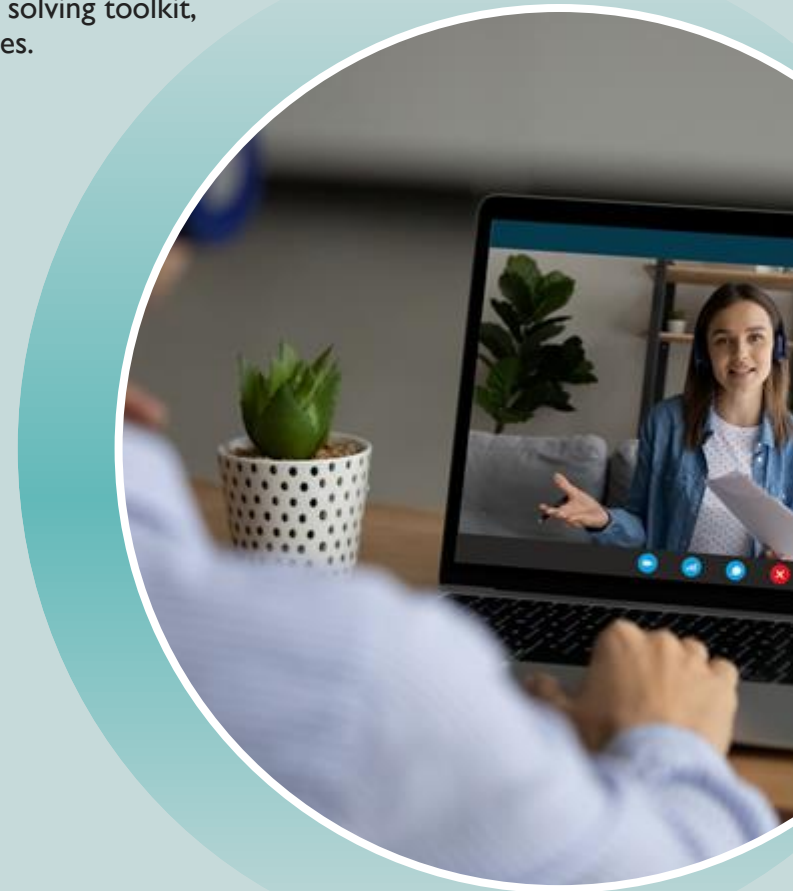
Open Enrolment Calendar

Our virtual training programmes incorporate multi-media features and are delivered by masterclass trainers. Following enrolment, participants will be issued with MS Teams invites in readiness to log-on to the masterclass webinar modules.

Open Enrolment Courses

	Duration	Fee	2024 Dates
8D Problem Solving ➤	12 hours	395 GBP	**May course: May 22nd – 24th 2024** (8.30am – 12.30pm BST / 7.30am – 11.30am UTC each day) **June course: June 24th – 26th 2024** (1pm – 5pm BST / 12pm – 4pm UTC each day)
Human Factors Awareness ➤	4 hours	195 GBP	**July course: July 18th 2024** (1pm – 5pm BST / 12pm – 4pm UTC)

Fees include:
- Live training via MS Teams
- Supporting course materials

Booking Process:
- Please email Smallpeice via train@smallpeice.com with your enquiry / requirements.
- Our experienced booking team will then liaise with you to complete the enrolment process.

In-company Courses

Root Cause Analysis	Strategy & Tactics for Deploying 8D
Human Factors Awareness	Facilitating 8D Problem Solving

These programmes are only available for cost effective 'in-company' group training. This provides the opportunity to customise the content and to include practical activities that are linked to your own processes and products. Before training onsite we will discuss and scope your and provide a bespoke delivery plan and proposal for your review.

For more information on the options, please contact Smallpeice on +44 (0)1926 336423 or email train@smallpeice.com

Sample Client Base & Feedback on Virtual Training

"I went from having never been exposed to 8D (a 'I' on the knowledge scale), to becoming very familiar with how to use a new tool. Having 8D in my toolbox will be a great help in the future."

"The commentary to support the example problem was very beneficial to understanding the entire 8D process. Each step was broken down and explained in detail."

"I really enjoyed the course. Lots of info and principles/ techniques to take from the learning and apply within my workplace."

"The trainer was very engaging and the examples used from real life were relevant and useful. I liked the format – it wasn't just listening to a barrage of information."

"Fabulous course and extremely enjoyable. Great mix of content and exercises."

"The trainer was very engaging and the examples used from real life were relevant and useful. I liked the format – it wasn't just listening to a barrage of information."

"The course provided an interesting view on problem finding. It was particularly beneficial in understanding the overall process of improving performance by finding and dealing with root causes."

"I really enjoyed the delivery of the material. The trainer's enthusiasm made virtual training very engaging."

Smallpeice Enterprises
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For more details on the
Smallpeice training curriculum,
please email us train@smallpeice.com

Lean Six Sigma	Lean
New Product Development	**Business & Management**