

Improving NPI in a Measurable Manner to make use of multiple inputs in a Holistic manner

2026 Agenda



Martin Shaw – Reliability Solutions
www.reliabilitysolutions.co.uk

Reliability Solutions – Background

Biography

Martin Shaw (BSc Hons), Reliability Solutions

18 Hillside, Houston, PA6 7NT, Scotland, UK

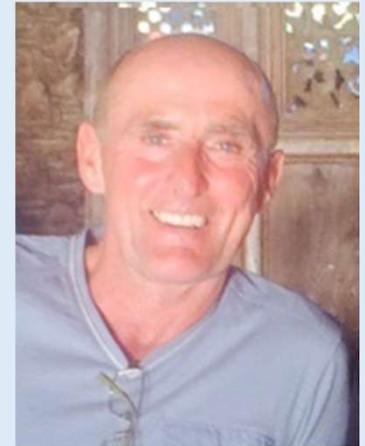
Reliability Solutions focuses on providing the complete range of Reliability Improvement tools and Application Solutions to Significantly Reduce your product failure levels at the most expensive end of the product cycle , the Consumer

Reliability Solutions was formed in 1997 by Martin Shaw, previously of IBM as Quality and Reliability Specialist within PC business unit. Martin Shaw worked as specialist in Product and Commodity Quality / Reliability optimisation for the Electronic Product Suppliers to IBM between the years of 1982-1997. During this time he worked extensively throughout Asia, USA and Europe with wide range of suppliers. Since 1997 he has worked with a wide range of companies Worldwide and provided solutions to ensure RAPID improvement in a dynamic environment. These companies include many Blue-Chip companies: Daewoo Electronics, LiteOn, Astec Power, Philips, TPV, Vestel, Acer, LiteOn Power, LG, Amtran, Fairchild Semiconductors, Atmel Semiconductors, Wolfson Microelectronics, ULTRA Electronics, Melexis, IDEAL Heating, SKY TV, Hua Wei, Emerson Power, EE Phones, TCL, SMART Technology, Singapore Technology Kinetics, Eetc.

He provides a range of 2-3 day Reliability Improvement Seminars and Application consultancy to meet the exact needs of any Electronic Manufacturer. He can be contacted at

www.reliabilitysolutions.co.uk

reliabilitysolutions@yahoo.co.uk



Reliability Solutions – Background

For achieving World Class Reliability and Customer Experience we should always think of 2 famous phrases ;

- 1. You cannot manage something you cannot control and you cannot control something you cannot measure**
 - *Main reasons is most complex Product Manufacturers commonly **LACK GOOD OBJECTIVE MEASUREMENT** of their design and Reliability / Quality levels*
- 2. Transform data into information and information into strategic decision**
 - *Any Reliability Improvement Programme requires deeper thinking and making some major changes in how we use a wide range of information and measurements to drive improvement*



DAY 1 - Agenda

- What is the significance of NPI for businesses and do complex NPI programmes add sufficient value ? *Module 1*
- Why is NPI primarily treated as a checklist item without measurement focus ? *Module 2*
- What key elements do most NPI models miss when handling new projects and how can we control Design performance within NPI ? *Module 3*
- Why do standard NPI approaches fail to uncover major weaknesses ? *Module 4*
- How can NPI be transformed into a quantifiable KPI within your organization ? *Module 5*



DAY 2 - Agenda

- Developing an NPI matrix that produces a maturity rating score for NPI. *Module 6*
 - Using the matrix to connect with historical product customer failure rates and create an algorithm that predicts future failure levels based on the NPI score.
- Transitioning the NPI approach from merely completing checklists to prioritizing performance prediction *Module 7*
- Focusing on the key NPI focus items and aligning with Business Strategic Objectives with Risk Ranking to ensure the 'low hanging fruit' approach is minimised to achieve higher performance *Module 8*
- Designing a simplified PPAP-style Master Quality Plan that highlights key NPI deliverables to effectively reflect / manage new product performance. *Module 9*
 - Including objective measures for DFM, DFA, Design Quality Maturity, Production Readiness, Design Function Robustness, etc

