

Cover note to talk by Martin Gibson

Deming said “Statistics is a basic but comprehensive way of thinking and acting which combines information, opinion and common sense for the better design of products, systems, strategies and decision making”. This is what I have used for over 30 years working in many organisations and functions in always striving to improve what an organisation does. As I said in the presentation I could not find a definition of a statistician on the RSS web site – very disappointing.

Over my career I have met very few people who are engaged with statistics. Usually I have met a lot of resistance to changing the status quo.

- ‘That’s not the way we do it here’,
- ‘What is in it for me?’
- ‘Not in my back yard’
- Not invented here – i.e., ‘we do things differently here’
- ‘You can not help me because you don’t know what I do’,

are some of the comments I’ve encountered. Last year a senior programme manager asked ‘what does a statistician do?’

As statisticians we are data driven and are neutral in our placement within an organisation. So we can help leaders to improve by helping them to deploy the work of Deming and Scholtes by:

- Thinking in terms of Systems,
- Understand the variability of work,
- Understanding people and their behaviour,
- Understanding how we learn, develop and improve, and,
- Understanding the interdependence and interaction between the above.

We must encourage leaders to utilise **Statistical Thinking**; a philosophy of learning and action based on the following fundamental principles:

- All work occurs in a system of interconnected processes,
- Variation exists in all processes,
- **Knowledge and management of variation reduction are the keys to success,**

in all areas of the organisation and not regard statistics as just a set of methods or tools to be used or not in certain conditions, viz, Lean Six Sigma continuous improvement programmes.

As Peter Scholtes told us,

- “All of the empowered, motivated, teamed-up, self directed, incentivised, accountable, reengineered, and reinvented people you can muster cannot compensate for a dysfunctional system”, Peter R. Scholtes, 1938-2009 – The Leaders Handbook.

Everyone whether they be a statistician, leader, manager or someone else should start by reading The Leaders Handbook. Unless leadership works on improving the System the organisation will be sub-optimal and ultimately may fail.

In common with Karen we need the RSS to promote Statisticians and Statistical Thinking by encouraging the integration of the Statistical Thinking in to other disciplines and functions. Statistics should not be viewed or taught as an add-on to a course and then be forgotten, never to be used again (e.g., accountants, engineers, etc.). Statisticians should be regarded as a valuable resource to help organisations ‘*see things differently*’ and promote cross-functional collaboration.