

Preface

I have a problem with numbers. I hate to see them tortured, abused and misused, or even simply ignored. But numbers do not have feelings, so my real issue is with the people who are subjected to numbers nonsense that I call Data Quackery. You may experience simple boredom, forced to sit through meeting after meeting, presentation after presentation, where the data, charts and reports make so little sense that you lose the thread of the discussion. And there are so many examples of this - bar charts, RAG (Red, Amber, Green) status, ratios etc. But data quackery also has a dark side, where the use of numerical targets, ranking and audits put employees under unhelpful pressures that impairs performance, drives the wrong behaviours and make many unhappy with their jobs. Therefore, I am asking you to join me on a crusade to root out data quackery and replace it with a much simpler approach that is much more effective. Everyone should be able to collect data, analyse it and be able to use it to make decisions. And this is much easier than you might think.

I have seen many instances where data was presented badly, obscuring rather than elucidating a situation. And this happens across all sectors, in every type and size of organisation and at all management levels, regardless of age, background, gender or any other factor that you care to study. It seems that none of us are immune to this, despite our best intentions. Heero Hacquebord used to emphasise that managers are paid to make predictions. Wrong data or the wrong analysis begets wrong predictions and wrong action. We try to use data to explain to others what is going on, to support our arguments or to justify our actions. But we tend to confuse more often than clarify. I know this because I have been the worst culprit - throughout my career as a supervisor, manager and director, I have made so many mistakes in analysing metrics and reporting performance, that I am embarrassed to admit it.

It was all my fault. I wish that I could blame some snake oil data salesman for convincing me to use nonsense metrics, charts and reports that looked pretty but were pretty useless. But I am culpable because I have chosen to use, of my own free will, all of the examples that I will discuss in this book. Looking back, I am surprised at my own naivety. But I have learned from my mistakes and my current role, teaching, coaching and facilitating continuous improvement, has given me great insight into how to use data properly. The best approach is to let the data tell its story, without all of the embellishments that look good at first glance, but make it hard for people to understand. Just because the Excel™ or PowerPoint™ software can produce all of these pretty displays, does not mean that we have to use them. Think about how your audience will receive the information that you present and make it easy for them to arrive quickly at the same conclusions that you have. Simple beats complicated every time.

A caveat - this book is for the 99% of people at all levels working in organisations who need to collect, analyse and use data as part of their jobs. It is not for the 1% of you who are analysts, statisticians and number geeks - you probably need more complex methods than I cover in this simple text. But you too could learn how to present your information to the rest of us in a way that allows us to understand your conclusions, if not your method. There is no point in being right, if people misunderstand your message

and think that you are wrong. I have sat through many presentations and read many reports that were just too hard to comprehend, so I gave up trying. This may not be the outcome that you wanted from all your hard work. Better to start with something simple and add the complexity only when everyone has understood the first bit.

My aim in this book is to make you reconsider the type of metrics, graphs and reports that you rely on and, hopefully, help you avoid some of the pitfalls that I have experienced and learned from. Here are the aims of the four sections...

1. Recognise Data Quackery (in all its various forms)
2. Realise the deleterious impact Data Quackery can have on individuals and organisations
3. Refresh the principles of simple data analysis
4. Reduce down to the only 4 data tools that you will ever need

I would love to hear about other examples of data quackery that you have been subjected to or even produced yourself. Just send me a message via mike.bell@dataquackery.co.uk or using the hashtag [#DataQuackery](https://twitter.com/DataQuackery) on Twitter and other social media platforms.

Please visit the website www.dataquackery.co.uk to find out more.



Dr Mike Bell runs Simple Improvement Ltd. a continuous improvement training and coaching business based in Scotland. He is unique in his ability both to understand complex data analysis and be able to simplify it down so that everyone can use it. Contrast this with statisticians who are not able to come down to the right level, or trainers without a background in analysis who are frightened of the subject - both tend to confuse, rather than clarify. Mike has been teaching simple analysis for more than 10 years and has had great success in helping people at all levels of organisations across all sectors. His experience includes training in 10 countries across 4 continents and has a reputation for making this potentially dry subject really good fun.