1. **Context:**Outline the reasons why the analysis is being undertaken. Be clear on the business or organizational question that is trying to be answered. Outline prior related work. Ensure that researchers have the freedom to make whatever conclusions the data leads them to.

2. **Methodology:**Record the methodology used. If there has been a choice of methodology, explain why the specific option was chosen. Be transparent about gaps or weaknesses in the methodology and the impact these may have on the accuracy and reliability of the results,

3. **Results:**Perform the analysis in a repeatable way. Ensure that appropriate statistical standards are adhered to. Record all instances of when results do and do not meet those standards.

4. **Discussion:**Ensure a thorough critique and peer review where possible. If not possible, declare so. Compare with any other results from prior work, Be fully transparent about where conclusions cannot be directly drawn from the results. Clearly highlight in particular where causality cannot be assumed.

5. **Conclusion:**Where conclusions are solid and pass scrutiny, consider the most compelling way to communicate them to stakeholders. Where there are uncertainties, present ‘possible avenues for further research’, and refrain from over-promoting results using language or graphics.

To those without scientific training, the research-based approach may sound like hard work, but I encourage any analytics professional who takes integrity and data-driven decision making seriously to adopt it and to stick by it. Lay out your work carefully and get the best answer you can before being tempted into a discussion of how you present that answer. You’ll be enhancing your reputation in the long run, and you’ll ultimately see that better decisions are made.