Discussion

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1. Overall Comments

I love this article! Its wisdom and focus on action are refreshing, especially on a subject, like quality, that is often approached with big words and small-to-few deeds. So, first, as a reader, a big thank you!

I will emphasize some of the authors' points further in what follows; but as someone who also was a referee, let me provide a special thanks to the authors for their listening skills. Because of that I have nothing negative to say. However, while I cannot comment critically, let me still kibitz a bit, hopefully not to an annoying degree? I will use the Dickens' character ([Dickens 1838](#)), *Oliver Twist*, in particular, Oliver's polite words: "Please sir, I want some more?"

Quality is a complex, multi-faceted subject. That the authors chose to emphasize product quality and specifically, accuracy, conditioning on its other aspects was wise, given the audience of official statisticians they are writing too. As Juran has put it well, one needs to "fool the immune system" to get anything really new across. That is why starting with the quality attribute "accuracy," or mean square error (MSE), was so well chosen. It is a part of quality we all know well.

Incidentally, I was a student of Juran and worked beside him for a while in the 1980s, so I am quoting from memory. But I have provided one of many possible useful references ([Juran and Godfrey 1999](#)) for those wishing to go deeper into the insights of this great quality guru.

But, if we are to escape "paradigm paralysis" and achieve full "systems thinking," as Deming has advocated, we must aspire (love that word too) for much more. Notice I have just used the word "system" in two senses. Sorry!

Again, with the phrase "systems thinking" I am quoting from memory. I have had the opportunity to be a student of Deming, as well as Juran. While famously nearly deaf in his old age, Deming retained his strong voice and Old Testament style to the end of his life – so unlike the gentle but equally insistent Juran. Deming and Juran were good friends, by the way. And, of course, I loved them both!

In the article the authors characterize the dimensions of product quality, besides accuracy, as *user dimensions* (their emphasis). Tukey might have said that this is a

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“roughly right” formulation – as long as we include all stakeholders, not just end customers, as users. That means respondents and taxpayers and employees, among others.

For more discussion of the traditional and some new quality attributes or characteristics to be emphasized, see the second edition of the forthcoming book by [Herzog et al. \(2014\)](#).

But let me take a moment to mention the changing systems capabilities of many of those users. To this end, let me add a little more to the fine (albeit brief) discussion summarizing our professional literature on quality.

In the days when I was starting out in statistics (before most of you were born) end users at best were statistically literate enough to read, not a lot more than, a simple two-dimensional (R by C) paper-published table. They had no computing power beyond a calculator, if that.

Today, my/our customers take survey and administrative data sets in an electronic form, frequently inputting our data into their micro-simulation (*what if*) models. Customers, many times, are even co-creating with us their own information – perhaps, their own data products. My work on the March Income supplement to the US Current Population Survey would be one example (e.g., [Turek et al. 2012](#))

How does what got said in the article change, even when seen from this wider perspective? Not much in my view. ASPIRE, as has been well explained in the article, has within its structure enough to accommodate this enlarged system: Where what we do for our end users is more of a service input for them and not just a traditional product, as in the old days when I was young.

But, by making this observation, maybe you will agree with me that there is a change in emphasis. That change can be important in some venues. So, this leads me to my first “more please.”

1. We should all follow the advice that the authors give us to apply this toolkit not just elsewhere but close to home – in a cooperative effort with our (very sophisticated and perhaps even more resourced than we are) customers. Our joint systems are interlocked and that insight is actionable with the tools in this article. The simulations done in the US for tax policy, social security and welfare reform are instances where I have been involved personally.

Permit me briefly to discuss two further “more please” requests, not just for the authors but perhaps for all of us: (2) How we can listen better both top down and bottom up; and (3) How we can afford all this better and better quality? After all, it is unrealistic to expect more resources

2. The Japanese word, converted into English, *Kaisen*, as used in the article in passing is roughly translated as “continuous improvement.” But it is a cultural construct, not a paradigm. It is an attitude towards our work and our lives that is, once imbedded in habit, a real asset to everything we do. ASPIRE must and can be partly like that too, not just periodic but empowering. A way to regularly check on the systems we work inside of.
3. Big changes are expensive and dangerous, especially for official statisticians, who are inherently risk adverse and live, like the earth, in a narrow band between fire and Ice. So, if ASPIRE is to become embedded, it must *not* be resource intensive. And not just in monetary terms but also in terms of opportunity costs? This is not

easy for westerners, especially Americans like me, who want to fix everything quickly and then go in to do something new.

Again, let me emphasize the important contribution that this article or paradigm really represents. The ideas here deserve follow up. For example, how about establishing an international group to share knacks and lessons learned; maybe with short regular calls over Skype, say? Another paper in a few years to share disappointments (hard lessons) and triumphs should be attempted please too?

Consider one example here where we have acted collaboratively internationally as a community. In particular, official statisticians are now addressing, simultaneously in our micro data releases, the goals of greater transparency, greater data access, and enhanced data confidentiality. Consider the June 2014 issue of the sister Journal to JOS, the Statistical Journal of the International [Association for Official Statistics \(IAOS\)](#).

2. References

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