

## Doing is understanding: A3 ... a profound Lean tool.



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I have before me a book entitled *Understanding A3 Thinking* (Durward Sobek and Art Smalley, Productivity Press 2008). In meetings with American and European Lean practitioners this book seems to be respected universally as an introduction to the Lean community's current hot topic. Although I've only recently obtained a copy, I join those who regard it as an excellent overview and introduction. Let's see why.

The first chapter goes to the core of A3s: their connection to the PDCA process at the heart of Lean and indeed any sensible problem-solving process. So, the A3 structure will require you to 'grasp the situation' you're addressing: you really have to explain why this situation is under the microscope. Then explain your thinking and proposed actions, following the Plan-Do-Check you have in mind.

While PDCA may sit behind all sensible problem-solving, getting people to work that way is challenging to say the least: shoot from the hip, fire-fighting and workarounds are much more widely used, and, sadly, quite often rewarded. Some managers reward such behaviour in the flawed belief that they prove users to be proactive.

"Of course we need proactive behaviour, but in Lean we also want thoughtfulness and a scientific approach. The A3 format gives structure to that intent: providing a tool for managers to use in coaching others into the PDCA way of working."

**Sobek and Smalley provide an insightful overview of the 'seven elements of A3 thinking':**

1. Logical thinking process - the consistent use of PDCA thinking.
2. Objectivity - basing understanding of the problem on quantitative facts.
3. Results and process - this point links well with the 'Practice-Performance Matrix' as featured in the [TRACC Value Chain Improvement Solution](#) uses to argue that

- practices are not ends in themselves but must deliver results in support of clear objectives; similarly, good results achieved by chance serve little wider purpose.
4. Synthesis, distillation and visualisation - the very brevity of the A3 report requires distillation and synthesis of the information gathered and a picture is still worth a thousand words when presenting information.
  5. Alignment - '3D communication' (horizontally across the organisation, up and down the hierarchy, and back and forth in time) should be used to achieve practical consensus about and alignment of the problem context; the key facts clarifying the problem; the thinking process regarding the problem; the proposed actions; and follow-up plan.
  6. Coherency within and consistency across - does it all hang together? It's crucial to be able to see if the proposed countermeasures actually address the stated problem.
  7. Systems viewpoint - the reader of the A3 must be able to see the proposed actions in the context of the organisation's overall goals.

"Sobek and Smalley make a valuable point: the other elements are just extensions of the first and last elements: logical thinking and the systems view are fundamental to successful A3s. Logical systems thinking is what many of us strive for. The A3 is a test of our success in this."

But we shouldn't be on our own as we strive: coaching is an inherent part of working with A3s. This is demonstrated clearly by John Shook's book, *Managing to Learn*. The book uses dialogue between a manager, Sanderson, and his direct report, Porter, to develop an A3 as part of a coaching conversation. Sanderson uses questions to probe Porter's problem framing, his data sources, the connection of the countermeasures to the problem, etc. I've been fortunate to be coached by John Shook in my use of A3s – his questions, apparently so naïve, were astonishingly revealing of my logic (or lack thereof).

*Understanding A3 thinking* is the title of the Sobek/Smalley book. However, 'doing is understanding' according to my sensei, Takeyuki Furuhashi of Nagoya, Japan. (This phrase is one of the many gems he uttered over the years.) And it's very true of understanding A3 thinking: it can only come through doing and the conversation in a coaching relationship. Think about it. Do it.