## What's up Doc?

The following is the first of two articles focusing on developing an affinity for problem solving by avoiding the 'Solutions First' syndrome, as QNewZ columnist, lan Hendra explains:

Is it just me or are we seeing the 'Solutions First' syndrome becoming entrenched as the latest management 'flavour of the month'? Recently I have been hearing increasingly about the 'letting go' of senior managers, and their former staff then being asked: "What next?" I have also heard about Telcos carrying out modifications in one part of their network oblivious to potential impacts on other parts, and government selling off assets that will cost more to replace than to keep...

On one level, I suppose it could be due to 'Innovation', an overused word often bandied about in the marble towers of executive-land. But innovation isn't simply about coming up with bright ideas or doing research and publishing a paper. True innovation doesn't exist until the idea interlaces with a pertinent opportunity for improvement (problem); until then it's just another half-baked solution looking for a problem.

On another level ... it seems to me, for example, that employment courts usually find in favour of a dismissed staff member. Ever wondered why? I believe that in such cases dismissing the staff member was a solution to an undefined problem. Translating law court deliberations into the words of our QA profession: (usually) an errant employer has blamed someone for performance well within the behaviour levels of the processes involved. Jargonistic this may be, but the lessons from Dr Deming's Red Bead experiment 60 years ago are still not fully understood outside Japan. Many employers remain unaware that 'all work is a process', which, in my opinion, is a national scandal given that New Zealand was formerly on the leader-board of quality assurance management system certifications per capita.

On an individual level... how many times have you been called into a meeting to resolve an issue only to sit through

the meanderings and obfuscations of assertive participants airing their latest intellectual 'mutations', and ultimately coming to no clear conclusion? And didn't you hate it when you left with that "if only they'd listened to me" feeling?

## How good would it feel if...

How good would you feel if you had access to a really good problem definition process that dissected a problem into its component parts? Not only that, but a process that ensured all participants had equal opportunities to contribute, review, refine and ultimately to differentiate between components that were drivers and those that were outcomes by nature? And what if the icing on the cake was that at the end of the process, all the participants felt they'd had their say and agreed on the conclusion? Impossible, I hear you say, can't be done, humans don't work that way; we're people not robots, analogue devices, not digital! Not so, say I. I have done just that many times and I have never known it to fail. It works a treat. It goes like this...

#### Two tools - AD & ID

The trick is to use these two tools: the Affinity Diagram (AD) and the Interrelationship Digraph (ID) (AD and ID) for the transition procedures as they convert random input from participants into an ordered list of agreed issues. They are a marriage made in heaven and are the first two of the seven management and planning tools in Goal/QPC's Memory Jogger II.

In this article we will look at the Affinity Diagram (AD) and in the next column (QNewZ September) the Interrelationship Digraph (ID) ... and maybe we'll get further into the set in due course.

## **The Affinity Diagram**

The overall aim of the Affinity Diagram tool is to produce a set of answers to an agreed open question. See Table 1 for the procedure.

1.	Assemble the team	To have access to a body of knowledge and experience pertinent to the issue.	The AD is a team tool, so first assemble a team of knowledgeable stakeholders with an interest in the answer. HINT: Avoid teams of fewer than three or more than eight.
2.	Set up	To establish the forum	<ul> <li>Appoint a facilitator happy to run the AD process. If possible, it's better if this person is not an active participant in the team.</li> <li>Find a room with a large clear wall or window and a table and chairs for the number of participants involved.</li> <li>Make an answer-space by sticking a row of flip chart sheets about shoulder high on the large wallstart with three sheets, their edges overlapped by about 10mm but allow for sideways expansion because the bigger the space the better the answer will be.</li> <li>Obtain a supply of sticky notes, square type (75mm), half a block for each participant, but have more on hand, and</li> <li>marker pens, one for each participant.</li> </ul>
3.	Brainstorm the question	To achieve agreement on the question to be answered	Facilitator establishes acceptance of normal brainstorming rules: Only one speaker at a time Everybody else listens No such thing as a stupid idea Nobody is wrong No arguments No interrupting. Brainstorm the question: Start with something like "What are the issues in?" Make sure it is a question (with a noun and a verb) and has a question mark. Write it large on a couple of sticky notes big enough to read. Place it in the middle of the top edge of the answer space.
4.	Answer the question so far as possible	To collect all the answers on the answer-space	Brainstorm the answers as above. Write each answer on a fresh sticky note. Appoint a scribe to avoid scrawls if necessary. The Facilitator must ensure each sticky note: o makes sense (no smarts); o is a sentence (with a noun and a verb - no single words); o is legible; and o big enough to read from about 1m.

Table 1: The Affinity Diagram Procedure

continued on page 15

# Kaizen Kowboys

### I'm a SuperFactory fan, writes Malcolm Macpherson.

The creation of manufacturing systems specialist Kevin Meyer, SuperFactory, is the source of all wisdom on lean enterprise excellence, and Systems Thinking, Kaizen, The Toyota Production System, and anything else related to the Lean world. It's a virtual resource – www.superfactory.com – but amazingly comprehensive.

One reason for my adulation is Bill Waddell. Bill writes occasional feature articles with startling clarity for SuperFactory about topics that would otherwise turn me glassy eyed in the first five words.

His latest is a great example. But first, some context: One of the dilemmas that all performance excellence advocates face is getting organisations, or individuals, to buy into an improvement process. It's not hard to see why. Root and branch performance reviews – and the implementation of effective improvement solutions – are tough to do.

I speak from experience. As champion of a Systems Thinking intervention at the Central Otago District Council; as an advocate for Lean Systems at the Southern District Health Board; and most recently as the designer, writer and tutor of an applied business excellence degree/diploma qualification at Otago Polytechnic, I've been on that rocky road for some time.

It's too easy, as an advocate and champion, to be purist and theoretical – and far too ambitious – and scoff at lean initiatives that take a line of least resistance. Not wanting to frighten the horses, many interventions begin with a low-key, back office, hired-gun strategy. And it's common to go straight to the tools – the shrink-wrapped, no pain, glossy products peddled by mass-market retailers of fast solutions and easy projects.

Back to Bill ... This is what he says, summarised a bit (he won't mind): Those of us who are lean purists and

lean idealists, especially those of us who have been to the mountaintop and seen the other side – just how comprehensive the successful transformation must be – are perhaps too quick to criticise those organisations that see lean as the simple deployment of a few tools.

Yes, Bill adds, it's true that no one becomes lean by running a bunch of lean events, then sending the participants back to the culture, systems and structures that created the problems in the first place. This 'Kaizen Kowboy' approach to lean never accomplishes much.

The lean journey is like a long flight of stairs, Bill says, with problems lying on each step. From the bottom it's impossible to see how many steps there are. But as problems are solved, step-by-step, we can see further up the staircase. Tell an organisation that the flight of stairs is endless, that

it will involve a complete overhaul of how everyone thinks, and that replacing every system in place will be necessary ... and resistance and skepticism, if not outright rejection, shouldn't be a surprise. It's hard to explain the benefits, when everyone is still looking through the dysfunctional accounting and metrics lens the intervention is seeking to replace.

But is it better, Bill wondered, to withhold that purist's judgment. What matters is climbing another step, and seeing the next batch of problems. Better that than the common failure – using those tools to climb and see deeper problems – then ignoring them, rationalising a way out of addressing them, and opting to never climb higher than the tools take you.

Just about every organisation begins with tools. There is no shame in that. The key is whether they use those tools to climb, or quit when they encounter the next obstacle.

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## continued from page 14

4. Continued		The Facilitator then parks each sticky note answer somewhere on the answer-space, keeping them apart to encourage participants to provide more. The Facilitator's key role is to make sure everyone is involved in this, as the idea is to stimulate discussion. This is the noisy step! Conversational threads are seams of gold at this stage. The quieter participants often have the best answers! Carry on until new answers have all but ceased but look to have 20-30 answers minimum on the answer-space. Expect many more (lan's max is 120!).
5. Sort in silence	To group the answers into a workable set of agreed categories	<ul> <li>Have the team stand and approach the answer-space.</li> <li>Ask them to sort the answers as each of them sees fit into clearly separated columns or groups, but</li> <li>they must do this together AND in complete silence; absolutely no discussion is allowed during this step. The Facilitator must control this tightly as it is pivotal to the success of the process.</li> <li>If sticky notes keep being moved from one column to the next and back again, the Facilitator should write duplicates.</li> <li>Continue until sorting has stopped (ie mutual agreement has been achieved).</li> </ul>
6. Produce headers	To summarise the collected answers	Review each column in turn and agree on a summary sentence (noun & verb) that encapsulates the gist of the message in each.  The perfect header sticky note fully describes the issues in the answers to which it refers, to the extent that the individual answers can be discarded.  Place the header sticky note at the head of each column and draw a line around the answers below.

And that's it... and you will bring order to chaos. Reducing 75 answers to seven or eight columns is a typical outcome from this tool. This will give you your question at the top of the answer-space with a handful of pithy answers. The whole team will be in agreement! What you won't have, though, is any idea about the relative impact of these answers and that's where the Interrelationship Digraph (ID) comes in as it will deliver them in rank order from Driver to Outcome.

Next time we'll run through the Interrelationship Digraph using the sticky notes with headers from the Affinity Diagram, and I'll provide an example and some pictures.

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**Reference:** The Memory Jogger 2; Second Edition 2010, GOAL/QPC, www.goalqpc.com