Leading and lagging indicators, don't forget the fuel gauge…

By Ian Hendra

This month I am pondering a point Michael Voss made at the recent NZOQ Central's Breakfast in Palmerston North. His talk was entitled 'Fight or Flight' and was about common sense in the face of our economic woes, and how NZOQ could assist with training and support in continual improvement systems.

This of course is not such a daft suggestion. Lean was developed in the 1930s by the Toyoda brothers after seeing what was happening in the Ford Motor Company. Having applied his skills in the economic cauldron of the Second World War, Dr Deming went to Japan in the late '40s to help develop a consumer product-manufacturing industry that would feed a starving nation. Originally based on NATO's supplier selection criteria, themselves designed to address the economic crisis inevitable if the Cold War turned hot, the worldwide adoption of ISO 9000 came from a crisis of confidence in the capability of British exporters to produce reliable exports. The Malcolm Baldrige criteria developed out of similar concerns in the United States. Six Sigma came about in the 1980s when Motorola were in serious trouble with quality control; and all they did was apply Deming's teachings just as the Japanese had done 30 years previously.

It's often said nothing changes without 'facing the abyss' and that's the point Michael was making; the abyss is before us and an opportunity is there to confront it. He said that more than ever we need Leading Indicators of performance because Lagging Indicators don't tell us about next month.

Last month's financials are a lagging indicator but in many businesses last month's dollars are the only measures that management worry about. That's OK in times of plenty when there's little pressure to survive but it's not enough under stress. "Drive Out Fear," Dr Deming told managers; but you can't do that if all you use are lagging measures. The following is based on a true story; the names and locations have been changed to protect the guilty.

Once upon a time in a land across the ocean on a continent far away, me and my mate Nat were asked to have a look at a problem client well cheesed off with our local buddies. The client ran a postal business and was obsessed with delivery on time; so much so that the CEO had a special alarm on his PC that alerted him if last week's late deliveries were over the limit…and woe betide the local manager etc… He also spent mega-dollars on a well known firm of chartered accountants to run a survey that measured delivery performance under controlled conditions.

Well, Nat & I toured the organisation for a few days talking to senior managers and supervisors and staff across the whole outfit in several locations, including their Very Large Sorting Centre. We found that whilst supervisors and line managers had a really good handle on what they needed to ensure that 'today' would be OK, the higher up the organisation we went the more the previous month's financials and last delivery performance became the only criteria used to 'manage' the operation. When I asked the senior guys what they did to get last month's late mail delivered on time, they looked at me like I was an idiot. I explained that if they had asked the line guys at that time if the mail was going to be late they would have told them, but it was above their pay grade to do anything about it. And then there was the breakthrough.

Mail sorting was done using very sophisticated equipment made by a well known defence company and it had a preventative maintenance schedule that was Important to do Properly. On the wall in the engineer's office was a bar chart showing how much maintenance had been missed month on month. Whoopdy-doo, you might think, except that this bar chart was very similar in shape to the delivery performance bar chart that plagued senior managers and scared the CEO witless. "Could it be," I thought, "that maintenance backlog is a leading indicator of delivery performance?" Cut a long story sideways, the client got the point and was tickled pink with the observations we made. They even set up workshops to develop the Leading Indicator theme.

In a nutshell, leading indicators tell you how ready you are, they're about the governance side of the organisation; lagging indicators are about how well you did so they're more about manager ego than managing. They're useful for validating your leading indicators but they serve little purpose when it comes to delivering the goods your customers want tomorrow and next month, whether they be products or services.

Two tips to keep it simple. First, reserve the term KPIs – Key Performance Indicators for leading measures, KRAs – Key Result Areas are what to call lagging measures like last month's financials. Make sure that for every KRA there is at least one KPI.

Second. if you're still struggling with the difference, the fuel gauge on your car's dashboard is a KPI, how far you had to walk to a gas station in the rain is the KRA when you thought you didn't need it!