Cost of poor quality

Why should a taxpayer support inefficient processes?

From early June, there has been much said about our national carrier, Air India. Almost all have been critical about its operational inefficiency, as well as interference of politicians and bureaucrats.

The *Economic Times* suggested 'Try bankruptcy for Air India's sale'. Capt G.R. Gopinath added, "The government is scaring away bidders for Air India. It has to seriously rework its strategy." CAPA, the respected aviation research advisory envisaged that if not divested, Air India is likely to accumulate further losses.

On the other hand, industrialist Anand Mahindra called for converting the crisis into an opportunity. He recommended appointing E. Sreedharan as chairman & CEO, with complete insulation from political pressure. Sreedharan is known as the 'Metro Man' for smoothly executing the Delhi Metro. Sreedharan walks his talk. Tough talk.

As an unsolicited recommendation, one of the tough measures Sreedharan must take is to estimate the Cost Of Poor Quality (COPQ) in the operational/support/supplier processes that drive Air India. COPQ is locked in the chronic waste, rework and rejects of processes within an organisation. The COPQ in any private sector organisation is 20-30 per cent of the total costs. For Air India it will be significantly higher. Is this an opportunity?

Next, once Sreedharan has a handle on COPQ, he will need to prioritise the chronic problems that are generating COPQ. For those few problems that have the maximum impact, he must deploy senior managers into project teams to solve the problems, with a structured approach, and deliver results. Results that go straight to the bottom line. COPQ reduction is not capital intensive.

I believe, Air India can be transformed into a benchmark for best practices. The Singapore Prison has benchmark best practices. The Dubai Police Department has benchmark best practices.

Now, let me expand on COPQ in action, through two quality fables.

Purchase Department as a Quality Consultant

What do you purchase from vendors?

The following quality fable may help you articulate your answer.

I was invited to speak at an Annual Vendors Meeting of a car manufacturer in North India, a couple of decades back. Very excited at the prospect of learning from Japanese leaders about the state-of-the-art methods for quality management,



SURESH LULLA

I readily accepted the invitation.

The meeting was held at The Taj Palace, New Delhi, in the largest conference room available. Horseshoe seating was provided for the top 100 vendors. Seated in the front, facing the vendors, were the managing director of this car manufacturer, two Japanese leaders, a consultant from the Juran Institute, and me.

The session commenced with an address from the managing director. The essence of this address was as follows...

"A warm welcome to all our A-Category vendors. Thank you for your contribution to a very successful year, even in these turbulent inflationary times. We are appreciative of your product quality and timeliness of deliveries. On behalf of my company I would like to see each of you prosper and grow. Therefore, from next year we would like each of you to drop your price by 3 per cent..."

OMG! Did I hear it right? Must be a mistake! What you really mean is an increase in price by 3 per cent. These were the thoughts racing through each of the 100 vendors' minds. Smiling, he continued...

"I have trained my executives in the purchase department on 'Quality Improvement & Cost Reduction'. Each executive will be assigned to a couple of vendors. Their mandate is to improve your process capability by solving chronic problems using a structured quality improvement methodology. The related reduction in Cost Of Poor Quality (COPQ) should be 10 per cent of your total costs for next year. You keep 7 per cent of the savings and transfer the balance 3 per cent benefit to my company..."

OMG! Can this be true? He continued...

"The COPQ in any of your companies is likely to be over 20 per cent of your total costs."

Thereafter the Japanese leaders explained the concept of chronic waste in cross-functional processes. Waste that is even budgeted for by top management!

Next, the consultant from the Juran Institute explained the underlying concepts of COPQ.

Oh yes, on my part, I shared the experiences of my clients from the automotive sector with the 'Juran on Quality Improvement' methodology.

I am sure you have by now guessed the answer to the opening question. It's Process Capability.

Lessons Learned

• Top management budgets for chronic waste in cross-functional processes

Author, Quality Fables ◆ 70 ◆

JUNE 18-JULY 1, 2018

The author is Founder

of Qimpro Consultants

• The by-product of quality improvement is cost reduction

• COPQ in any organisation is over 20 per cent of total costs

• The purchasing department should serve as quality improvement consultants to vendors

• Organisations purchase process capability of vendors

• Win-win partnership between purchaser and vendor

• Transparency in joint costing facilitates partnerships

• Purchase department must conduct itself as a world-class customer

Legitimising absenteeism

A chronic problem at a steel plant in the late 1980s was absenteeism. There was nothing alarming about it as it was just under 1 per cent.

So what did management do about it? They factored absenteeism into the operational plans and budget. Therefore at the stroke of a pen, absenteeism was legitimised at this steel plant!

The Quality Council, at the steel plant, selected absenteeism as one of the five pilot problems to be solved by the Juran on Quality Improvement (JQI) methodology. The business case for this selection included high visibility and ease of understanding the problem organisation-wide.

But how can you eat an elephant in one bite? You can only eat it bite by bite, project by project. So the bite-sized pilot project for absenteeism was localised to the Tubes Division.

In defining the problem, it helps to estimate the COPQ. In the case of the Tubes Division, the works manager identified the following heads that he considered non-controversial:

• The appointment of a daily *badli* (substitute) worker, who is obviously not as well trained as the absent worker.

• The variation in tube lengths resulting from the *badli* work. This led to an additional step of cutting and trimming the tubes, burdening production with more physical waste and loss of productivity.

All quite elementary. But what was the COPQ? A non-debatable ₹14,00,000 per month. Multiply that by 12 months and you have an alarming annual COPQ that corrodes the bottom line of

business results.

The diagnostic journey involved meeting absent workers at home. One instance involved the following conversation in the afternoon at the home of a healthy looking absent worker:

"Why are you absent, Sardar?"

"My son is not well."

"Is it serious?"

"No. Just a simple cough and cold."

"In which case, why are you absent?"

"Sir. It's like this. When I went to our on-site hospital, the paperwork took three hours. Then I waited in another line with my son to see the doctor. That was another hour. Thereafter, I waited for half-an-hour for the prescribed medication. By which time, sir, you had already marked me absent for the full day".

The remedial journey lay in re-engineering the admissions procedure at the on-site hospital. This process was reduced from three hours to 30 minutes.

The results from cracking this project had a multiplier impact on the entire campus of the steel plant. What I did not mention earlier is that the Tubes Division was the smallest manufacturing unit at the campus.

Lessons learned

• Chronic problems should not be legitimised in the budget

• Use a structured problem-solving methodology

• Elephant-sized problems must be broken into digestible bite-sized projects

• When estimating COPQ, work with non-controversial factors and non-debatable numbers

• See the problem with your own eyes

• Improvement projects should always be approved by senior management

Conclusion

I wish to end the suspense. The two fables are based on my experience with two large organisations: Maruti and Tata Steel.

In conclusion, if the COPQ approach is adopted by organisations and institutions supported by Central and state governments, the taxpayers will have reason to celebrate. Why should a taxpayer support inefficient processes?

