

Is Radical Improvement Possible? – by Philip Viljoen (CEO TOCSA)

One of the basic assumptions of the Theory of Constraints is that every system can be substantially improved.

If substantial improvement means twice or three times the bottom line, in the short term, then it can be labelled radical. Established businesses typically believe that this order of magnitude improvement is impossible. It has only been achieved when they grew from small to medium sized, when times were good, but now they are stuck with, if they are lucky, a small percentage improvement or decay year on year.

The key to radical improvement is to focus on the top line, not the bottom line. Radical improvement cannot be achieved by spending less money, reducing expenses. Most often, spending less money leads to the decay of the bottom line as protective capacities are cut and the system becomes more and more exposed to the effects of variability and dependencies.

If the top line, sales revenue, is substantially increased with little or no increase in operating expenses, then the increased Throughput (sales revenue less true variable expenses) is added to the bottom line – radical improvement.

For example:

Let's say that sales revenue is 500m. True variable expense is 50%, therefore 250m. Throughput is then also 250m. Operating expenses are 200m and the bottom line is then 50m or 10% of sales.

Let's say the top line is improved with 20% through having less lost sales and a small increase in selling prices. The bottom line doubles to 100m or 17% of sales (Throughput is 300m and operating expenses remain at 200m). Even if operating expenses increase with 10%, to 220m, the bottom line improves to 80m or 13% of sales.

Further more, if inventory can be reduced from say 100m to 80m through shorter lead times and better flow through the system, then the return on investment improves from 50% to 125%. Radical.

A few generic assumptions are made in this example. They are:

1. The system has enough free capacity on the capacity constrained resource to accommodate the increased volume.
2. The demand for the product is not limited. In other words, the company has less than 20% market share.
3. Service levels are lower than customers would like because of long lead times.

These assumptions are valid for a large number of businesses. If this is your case, then radical improvement is not impossible, for you.