Raising the bar on operational improvement: from focusing on results to focusing on impact

Ewald van Ravenswaay
Today is an important day
Because today is the first day of the rest of your life
Why is it important
May day-job is actually very rewarding: I get to work with diverse groups of people and deliver breakthrough improvements to factory performance.
Chartwell was set up by 4 engineers who were fed up with seeing industries perform at ± 40% efficiency and organisations being blind to the losses.
I show my clients we are great at delivering results, and they only pay us when they are happy with what we have delivered...
Clients want to see a return on the fees they pay, so that is what we try to do. And we do: typically we achieve a return of 5 - 10 times the project fee/year.
But, what am I most proud of?

This client makes PVC coated fabrics.
In 2008 I was the consultant on site who ran a cost reduction program in their factory.
I saved them a couple of million € per year.

But, the thing that makes me proud until today is:

- Saved 250 tons of PVC per year.
- Equivalent 1’500 tons of CO$_2$ year
- **That is the total CO$_2$ footprint of about 190 people**

* CO$_2$ footprint in 2014 of northern EU citizen 6-9 tons/year, source the World Bank
Ewald’s personal mission statement:

Beyond the satisfaction of my own and my family’s direct needs through my professional work, it is my personal ambition to make the largest possible impact I can, to the long term prosperity of humans and animals on our planet.

Not unique

Most organisations and companies will probably agree (to some extent).

Yes, most people probably agree

It is in our mission statement / values / etc.

I / my company are already focusing on this a lot
Yes, we are all really already doing loads! We sure have some great examples, and I am sure so have you!

Just some examples of where our teams made a really significant impact:

1. A team of 3 of our consultants almost doubled the output of a smart gas meters factory, keeping the rollout on track, helping the UK meet their CO$_2$ reduction objectives

2. A number of years ago I was part of a team of consultants that increased the output by more than 50% of a laboratory that makes immunoglobulins, a medicine there was a global shortage of!

3. One consultant was supporting a German textile yarn manufacturer through a major cost reduction program. In the process, increasing quality and reducing waste from polyester and polyamide spinning by 306 mt/year

4. Many hundreds of tons of food waste reduced from cereal, biscuit, bread, cheese and ice cream manufacturing factories across Europe and the US

And, I know for sure, many of you will have loads more examples like these of your own.
From decennia of continuous improvement work, we already know that a strength of a combined top-down, bottom-up approach.

But still, we see mainly a top-down approach when it comes to sustainability.
Some of elements of the bottom-up approach are already there, but they are often not focused on the right things or do not see the opportunities clearly.

But still, we see mainly a top-down approach when it comes to sustainability.
To help our clients to combine the top-down and bottom-up approaches that we now are so powerful, we offer our clients the Chartwell Impact scan.

**Impact Scan**

1. **Zero-Loss Analysis**
   - Zero - Loss Analysis of key resources
   - Mass Balance of all key input materials
   - Energy balance of total energy consumption
   - In depth loss and waste stream analysis

2. **Identification of significant, immediate improvements**
   - Based on the Zero - Loss analysis and the loss and waste stream analysis we will:
     - Identify unknown or previously not understood losses
     - Identify low-complexity solutions to known and existing losses

3. **Impact map**
   - Create an Impact map based on:
     - Total spend
     - Zero - Loss Wastage %
     - Severity index

4. **Review current improvement efforts**
   - Based on the findings in the Zero - Loss Analysis and the Impact map we can compare:
     - Where improvement resources are currently directed
     - Where improvement resources should be directed to maximise their impact
     - Feedback to senior management and input for business planning processes

5. **Preparation for Change Management and Communication**
The concept of a mass-balance in a manufacturing process is simple, the execution often less straightforward and the insight usually very powerful!

**Project Example**

- **SAP usage for PO’s** 17,880 to
- **Fin. goods delivered in SAP** 17,324 to
- **To customers** (incl Give away)
- **Production losses** 607 to
- **Overproduction**
- **RM losses booked by logistics** 202 to
- **Materials „found“ by production** 51 to
- **FG losses booked by logistics** 457 to
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Impact map: Where should my improvement efforts be focused?

The size of the bubbles is a “severity index” on the severity of the loss against sustainability factors and company policy and values.

- Water: High losses, so you could find quick wins here.
- Electricity: High spend, this is where you are likely to also find significant savings/cost benefits.
- Natural gas: Lower losses and spend.
- Paper packaging: Lower losses but higher spend.
- Plastic packaging: Lower losses and spend.
- Food ingredients: Lower losses and spend.
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If you would like to discuss this topic further, please find one of us, or come to the roundtable discussion we are hosting on Tuesday.

Roundtable Tuesday during Lunch 12:50-13:50

Maximising the Impact of our operational improvement work

Sharing experience and best practices in

• Accelerating improvement work
• Increasing results
• Strategy and focus to increase Impact
• Measuring and communicating Impact vs Results
Let’s make sure we are going where we want to be going…

…and make the largest possible impact we can!