Three tools to identify efficiency savings
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“Efficiency: Accomplishment of, or ability to accomplish, a job with a minimum expenditure of time and effort.”

How can we identify waste?

In order to increase efficiency, you have to be able to identify and eliminate waste. Not so long ago a client was keen on finding some quick ways to reduce waste and demonstrate efficiency improvements. He knew the “right way” was to plan and implement a process improvement project, but felt there might be some other ways to make progress. And, of course, there are other ways to identify and reduce waste. The following three tools came to mind:

The Seven Wastes

This is one of the techniques in the Lean toolkit and originated in the Japanese car manufacturing industry. Waste is defined as anything which doesn't add value to the customer, which is a pretty challenging definition. It certainly demands that you look closely at what might be called “business value-adding” activities; those which you have to do in order to run the organisation, but which the customer doesn't necessarily care about.

The Seven Wastes are:

- Over-production (just in case)
- Waiting (for people, equipment, paperwork)
- Transporting (between processes)
- Inappropriate processing (non-value-adding steps)
- Unnecessary inventory
- Unnecessary/excess movement (people, paperwork, materials)
- Defects
You can use these principles to walk out into your office, or factory (or wherever) and start spotting waste and opportunities to improve efficiency. It can be a sobering experience. Piles of paperwork sat on desks, people moving stuff from A to B, stocks of things done “just in case”. The list is endless and in some of our clients' offices everything looks pretty much like waste!

Once you've identified one, or more of the Seven Wastes, you then (only) need to eliminate it/them. You could simply tell people to stop doing some of the non-value-adding activities, but in many cases you will either have to use a root cause problem solving approach, or do some process analysis. This is where you do need to be a bit more systematic, otherwise you risk moving the problem elsewhere, or perhaps only address its symptoms.

**Cost of Poor Quality**

Back in the early days of TQM, the idea of the Cost of Quality was key to identifying opportunities for improvement. It was also known as the Price of Non-conformance (PONC).

In summary, every activity in your organisation can be categorised as one of:

- **Prevention** – those things done to ensure work is carried out Right First Time (e.g. Training, developing systems standards and specifications)

- **Appraisal** – those things done to check if work has been done Right First Time (e.g. Auditing, Checking, Inspecting, Supervising). Some of these can add value – e.g. audits; but most simply add cost

- **Failure** – everything that has to be done because something wasn't Right First Time (e.g. Re-work, corrections, answering complaints, dealing with enquiries about problems, problem solving)

- **Core Work** – everything else, done Right First Time to meet a customer’s need

The sum of Prevention, Appraisal and Failure is the Cost of Quality. In service businesses, it often amounts to 40% of operating costs, with Failure and Appraisal accounting for most of that. In production organisations, CoQ is typically 25% of Sales Revenues, again with Failure and Appraisal being the biggest part.

As with the Seven Wastes, improvement will require root cause analysis or process analysis. In our experience, it is possible to halve failure costs in less than two years.
A simple way of using the technique is to list all the activities you see going on, categorise them according to the four types and then measure (or estimate) the amount of time spent on each. Add it up and calculate the total time (and cost) spent on Failure and Appraisal. It's usually a big enough number to motivate management to want to take some improvement action! Improvement always requires process change and/or increased Prevention activity.

**Efficiency/Effectiveness Grid**

My final thought on tools to identify efficiency saving opportunities is the good old Efficiency/Effectiveness Grid [Right Things-Wrong Things]. List all the activities that you do and position them on a grid as follows:
“Right Things” are the same as Core work (customer value-adding activities) and Prevention activities (from CoQ). Wrong things are most Appraisal activities and all Failure activities. This is the “Effectiveness” axis of the grid.

“Done Well” means “Right First Time”. “Done Badly”, means anything with errors (or waste). This is the “Efficiency” axis of the grid.

The target is “Right Things, Done Well”. Everything else presents an opportunity to reduce waste. Right things, Done Badly need to be fixed; addressing root causes and improving efficiency. “Wrong Things” need to be stopped completely, but will require a check first, to confirm there is no customer requirement. Clearly, you don’t want to get better at doing the wrong things!

A word of caution:

All of these techniques (and probably several more), will enable you to identify waste (and efficiency improvements) in your organisation. How you go about improving efficiency, and how successful you are, will be very dependent on the approach you take. If you do it with people's involvement, it has a much higher chance of success. You do need to be careful that you don't just address the symptoms otherwise you'll find the wastes coming back again, or re-appearing in somebody else's part of the organisation.

There's nothing wrong with using these techniques in isolation, but don't expect them to achieve the sustainable improvements that a more systematic approach will deliver.

Our track record

Our consultants have been helping organisations in the private and public sectors to manage and improve their effectiveness and efficiency for nearly two decades. Typically, with the right approach, it is possible to reduce failure costs by 50% in less than two years.

We are not wedded to a particular methodology. We help clients identify their improvement goals and then develop an approach to achieve these; invariably ensuring their people develop the skills to make further improvements themselves.

Please contact us for more information about how we can help you to deliver efficiency improvements.
SIMPLY, IMPROVEMENT...

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