

The cost of failure...

The tax credit system has been criticised for "completely unacceptable" errors, with one third of recipient families having been overpaid, according to a new report.

news.bbc.co.uk ; 22nd June 2005.

Failures and Re-work

Coping with failures and re-work can be a significant contributor to inefficiencies, as the tax credit example above shows all too well. In this article we will be looking at how failures and re-work can be identified and reduced, as part of a continuous improvement process. Clearly, this is completely consistent with the current challenges faced by organisations to be more responsive to the needs of their customers and to do this in ever more efficient ways, demonstrating value for money.

Failures and re-work are just two examples of inefficiencies and waste that can be found in most organisations. **Waste** is any resource-consuming activity that adds no value to the customer. That's pretty challenging and has clear implications about the need to decide who your customers are. Customers are the users, or consumers, of your services. Clearly, most organisations' focus is on external customers, but identifying waste can be applied just as easily to the support activities that serve internal customers. In many organisations, particularly those in the public sector, or where there are strong regulatory frameworks (e.g. Financial Services), many of these support activities will be mandatory for good governance, or simply to enable the organisation to deliver its customer-facing services.

Failure is any activity that is not carried out right the first time. **Re-work** is any activity carried out to cope with failures. So, producing a purchase order with an incorrect cost code is a failure activity; re-doing the PO is re-work. Delivering the wrong service is a failure; having to re-deliver it, is re-work.

How do you spot Failure? One of the obvious indicators is customer complaints. Another is items being returned (e.g. the incorrect PO being sent back to its originator).

To the untrained eye, re-work can be more difficult to spot. This can be because, in some cases, the whole purpose of somebody's job is to carry out re-work. An obvious example is "Complaints Departments". Less obvious might be the huge amount of effort often spent within Contact (Service) Centres dealing with things that haven't been done correctly and promising to get them fixed. How many contact centre managers know (quantitatively) how much time is spent on dealing with failures and how much is spent on more positive aspects of customer service?

Unfortunately, all too often, re-work is actually built into people's day-job. Errors just get corrected, faults get fixed and it's all part of the daily workload. And, in these cases, most people don't even recognise that they are dealing with failures. This is particularly true of many middle managers who see their role as one of "problem solving". It may be uncomfortable to admit it, but that is a failure activity. In the perfect world, we wouldn't have problems and so wouldn't need to spend time dealing with them.

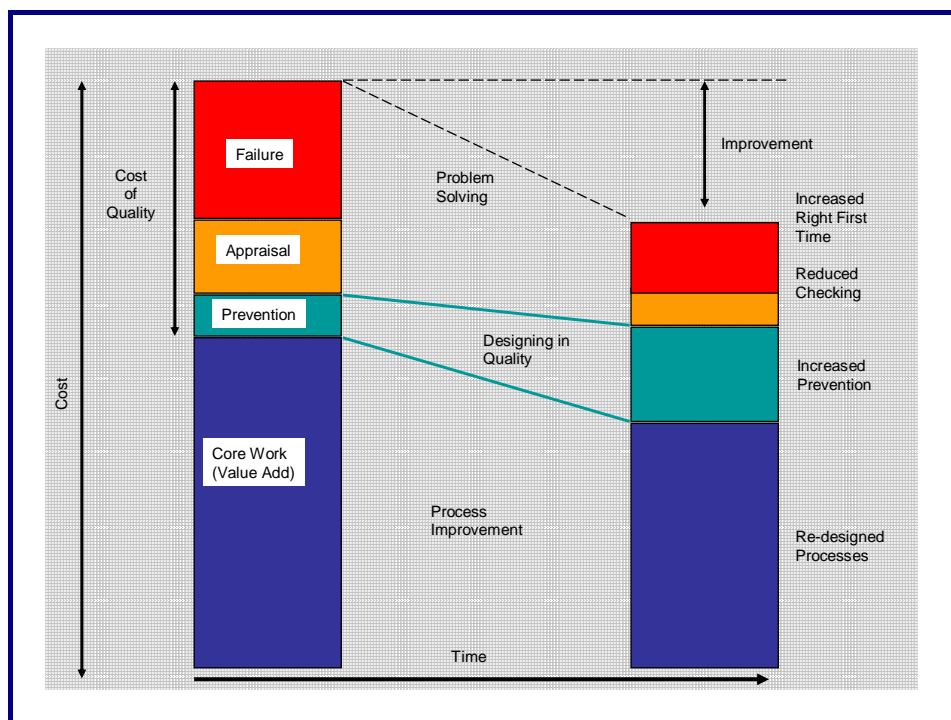
95% of failures are caused by the system, rather than by people. Very few people come to work with the deliberate intention of causing failures, or doing a bad job.

The Cost of Failure:

A really useful tool to help people (starting with managers) recognise failures and re-work is the Cost of Quality (CoQ) Model. In this, every activity is classified either as Core Work, Failure, Appraisal or Prevention. The Cost of Quality is the sum of Failure, Appraisal and Prevention costs. The tool was widely applied in continuous improvement processes a few years ago, but seems to have been forgotten more recently. It is still relevant, as a way of thinking about waste and failure.

Core Work	All work carried out directly for the benefit of a customer, done right the first time. These are real, value-adding activities. Customers would happily pay you good money to do these, on their behalf.	Examples: Delivering service to a customer, manufacturing a product, issuing an invoice, processing an order
Failure	Any activities associated with producing errors, or services that are not right the first time, or dealing with work that was not done right the first time. None of this is "good".	Examples: Handling complaints, paying compensation for proble, dealing with queries, responding to help-desk calls, correcting errors, solving problems, repeating previously done work
Appraisal	Any activities carried out to check if work has been done right the first time. Some of these activities are "good", if they lead to prevention activities that improve core work.	Examples (good): Audits that lead to improvement, staff performance appraisals Examples (bad): checking somebody else's work, authorising, counter-signing, QC checks
Prevention	Any activities carried out to ensure other activities can be carried out right the first time. These are "good" things to do.	Examples: Training, coaching, developing standard operating procedures, identifying customers' requirements, briefing staff on plans and requirements, developing error-proofed systems, establishing policies

The theory behind the Cost of Quality (CoQ) Model is that, the more time that is spent on Prevention activities, the less time will need to be spent on Appraisal and dealing with Failures. Prevention activities build quality in. Both Appraisal and Failure are "after the event", and therefore are too late and add cost.



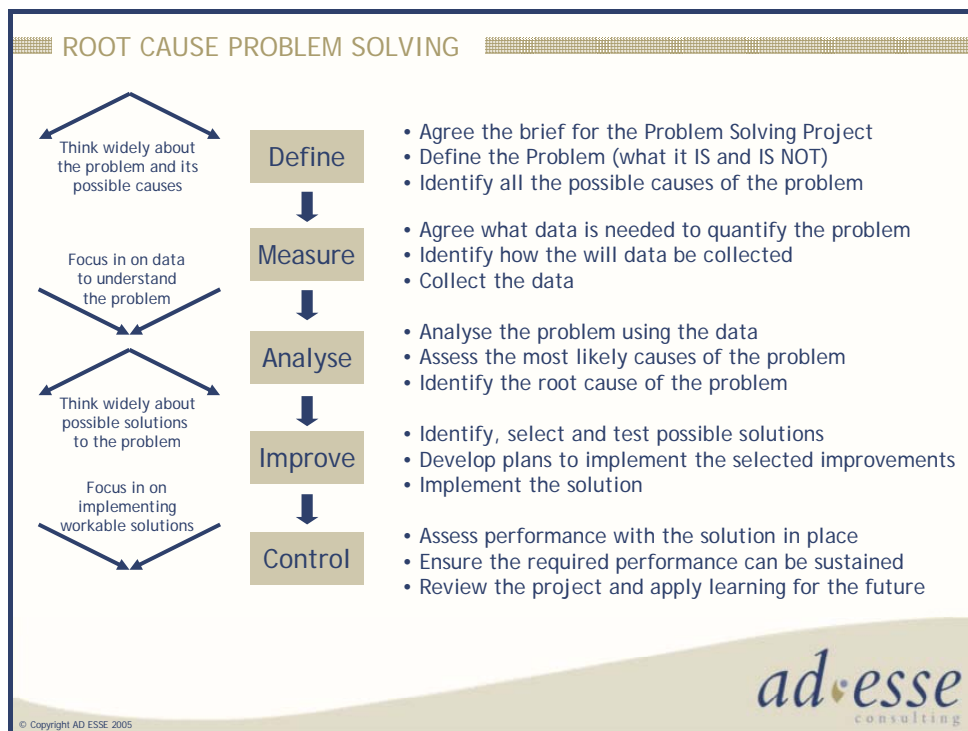
The CoQ Model has been widely applied in manufacturing organisations since the 1980s, but less so in services, particularly in the public sector. Some of this may be cultural, where people see that raising problems, or exposing failures, can be “career limiting”. Some of it is down to the fact that re-work and failure isn’t normally as “visible” as it can be in manufacturing where you have scrap products and productivity is easier to measure, as you are producing a tangible “product”. But, it can be made more visible by thinking about what adds value for customers.

The other factor mitigating against use of the model in organisations where there is a high degree of regulation, and some in the public sector, is the inbuilt culture of checking and inspection. This is often done with the best of intentions, such as protecting public money and ensuring good governance. Not all Appraisal activities are “bad”. Audits and inspections that lead to improvements are good. Those that “tick the box”, or “catch people out”, are not exactly in the spirit of continuous improvement.

The main point to bear in mind with Appraisal activities is that they do not build in Right First Time performance because they are always after the event. We analysed one claims payment process where there were two 100% QC checks done by Admin grade staff looking at what they received from the previous process step. These checks were followed by a 10% “dip-check” done by a Supervisor. And still, at the end of the process, 73% of the outputs had errors. Inspection doesn’t work.

Reducing Waste:

In the Cost of Quality Model, the main way to reduce waste is to get to the Root Causes of problems. That means finding out what the systemic reasons are for errors. We help clients to apply a systematic approach to problem solving, based on the DMAIC approach:



In our experience, too few organisations have such a systematic approach in place and do not give their managers and staff the skills to apply it. If you’re lucky, staff will know how to generate lists of ideas, but these are usually about solutions, rather than necessarily being based on identifying possible causes, or any analysis of data.

Continuous improvement relies heavily on a high degree of staff involvement in solving problems. To achieve that, managers have to be willing to free up staff time for them to participate in problem solving teams. Managers also have to stop “providing solutions” and telling people what to do. They must create the climate where staff analyse problems for themselves, develop workable solutions and are committed to implementing them.

Does it work?

Organisations that have used the CoQ Model successfully have typically involved their staff in defining what they mean by Failure, Appraisal and Prevention. Once staff understand each of these concepts, it is much easier to recognise them in daily activities. Data gathering over a period of two to four weeks is usually enough to expose the amount of waste in the system. We're not looking for accuracy to 2 decimal places here; plus or minus 5% is close enough.

The typical results of a CoQ assessment, either done on a process, or an organisation, shows that in service organisations, CoQ can account for 40% of operating costs. Of that, half is usually Failure (i.e. 20% of costs), Appraisal accounts for 15% of costs and Prevention accounts for 5%, or less, of costs. CoQ is a great model to apply if a large proportion of your costs are people costs – because that's where the waste is hidden (how people actually spend their time).

Even if you believe those figures are out by 50% for your organisation, calculate the annual cost of Failure (in £) and ask yourself where that money could be better spent.

Interestingly, there will almost certainly be a Pareto effect behind your Failure costs. 80% of the costs will be associated with 20% of the reasons for failure. So, you don't have to fix everything before you can make a big difference. If you apply systematic problem solving (e.g. DMAIC, with high staff involvement), it is perfectly possible to reduce Failure costs by 50% over 18-24 months. The investment to get that return is, of course, freeing up staff time to analyse the problems and develop workable solutions. If you're not prepared to do that, you can wave goodbye to the potential efficiency improvements.

Managing the change and people issues

A lot of people assume that if you streamline processes and reduce waste this will lead to fewer people being needed and fewer jobs. We certainly wouldn't say this is never the case, but more often it's about re-deploying staff to do more value-adding tasks, or delivering on all of those priorities you've never quite had the time, or staff resource, to tackle.

Increasingly, in a competitive and contestable public sector world, continuously improving organisations may also have a clear “growth” strategy to win new business.

Clearly whatever the impact on people, good change management and a high degree of staff involvement in understanding waste and improvement are critical to success.

Ad Esse Consulting can help you to understand and develop an approach to continuous improvement in a number of ways; from our innovative programme “Leading Lean” for managers and leaders, developing an improvement strategy across your organisation, or hands-on improvement of key processes. Skilled in a wide range of continuous improvement techniques, our consultants all have extensive experience of working across the Private and Public Sectors. We understand the challenges of implementing improvements in complex, changing and political environments and we work with people in the organisation to make change happen.

Contact us: If you want to discuss how we can help your organisation to create sustainable performance improvement, give us a call on 0870 458 6162, or e-mail us at seriousfun@ad-esse.com