



**Fit for the Future – part four of a six part series introducing systems thinking, by John Seddon.**

To summarise the arguments of the first three steps: The major disease of 20th century organisations is in their design and management. If we want to achieve a quantum leap in performance, we have to be prepared to change the way we think. In step one, I exposed the problems associated with designing and managing organisations as top-down functional hierarchies. In step two, we began to look at the organisation in a better way, from the outside-in. In step three, we looked at the idea of organisational capability – what is predictable about what is happening between you and your customers? If you conducted the exercises as suggested, you will have a schema of the transactions with your customers and at each point of transaction, reliable data about what is currently happening. We will take this further, as we now move from the ‘what’ to the ‘why’.

**Flow tells you why**

Capability tells you the ‘what’ of performance, flow tells you the ‘why’. Many organisations claim to be working on their processes or flows, but the question I always find myself asking is how have they decided their focus? In many cases I find people simply re-defining their functions as processes, resulting in improvement work that doesn’t improve very much,

**Change management thinking**

From..	To..
Top-down	Outside-in
Functional measures	Capability measures
Function and procedures	Value and flow

Figure 1

if anything. If you have completed the previous exercises you will be in the most effective starting place for defining your processes. Your core processes are defined by the transactions with your customers – how the work flows end to end to deliver your current capability. Any other process is a support process – it should be supporting what is done in the core processes.

In most organisations there are a plethora of functions – Human Resources, Finance, Information Technology and so on, whose only purpose ought to be to help the core processes work better. Their contribution should be measured that way – a challenge to some. Often the policies adopted by these functions (for they are seen as functions rather than processes), interfere with the flow of work. We return to this issue in system conditions, step five.



# THINK FLOW THINK FLOW



### Define your core processes

The next activity is to define your core processes. In order to help you avoid the pitfall of taking internal, functional perspective, remember:

The focal point for a systems view is always the customer – outside-in.

The process must be viewed from end to end – from the point that the customer makes the demand, to the point where the customer's need is fully met.

### Activity

Take out your schema of transactions between you and your customers (from step two). Do these adequately define your core processes? Did you establish capability measures for each in step three?

If you did, the exercise in step two – a schema of transactions between you and your customers – you will have defined your core processes. If you did the exercise in step three – measuring capability – you will have measures of your core processes performance. This is of critical importance. If you don't have measures of your process before you study it, how will you know whether it is worth improving, and how can you judge any improvement? If you haven't completed this step, my advice is: return to step three.

### Studying your process flows – learning about the 'why'

In this step we will study the process flows. Why? Because better flow will result in lower costs and improved service – always.

### Walking the flow

From your map of core processes, choose one that has a high volume of customer demand. Metaphorically 'pin one to your chest' – take a customer demand and follow its every move through the organisation. As you travel, look for the following causes of sub-optimisation:

### Activity

Walk your flow. Keep in mind the following questions:

- What is the purpose from the customers' point of view?
- What is the 'value' work – what matters to the customers?
- What are the steps in the flow?
- And as you go, list all forms of sub-optimisation you find.

### Response failure

The customer doesn't get what he or she needs. How often are customers' needs met at the first point of transaction? Are there delays in getting a response?

### Re-work

This is easy to measure in manufacturing – how many parts or assemblies do not work and have to be re-made or scrapped. Similar examples occur in service industries. How often is a piece of paper or 'phone call ready for action versus needing to be completed, re-done or checked before the action can be carried out? How often does the work not meet the customers' needs and the customers call back asking for it to be replaced, re-worked or added to.

### Duplication

Different departments doing the same work, resulting in it being done more than once. Another type is caused by customer confusion. The customer calls one part of the organisation with a problem and because of an unclear or unhelpful response, calls another part with the same problem.

### Sorting/re-routing

Work being sorted or passed on with no 'value' work being carried out. Sorting is often the work of supervisors whose task is to decide who should be allocated what. It may seem plausible but it is wasteful.

### Internal requirements

Work carried out to meet requirements set by other departments or management, but which adds no value to the customer. Some of this may be unavoidable in the short term but must be viewed as something to be 'designed out'. (A particu-

larly pernicious form of waste is 'compliance with procedures'. Managers, having specified what people should do – procedures – then inspect for compliance. The outcome is that people often do work because the procedure requires it rather than because the customer requires it.)

### Inspection/double checking/authority levels

Checking work is pure waste. With ever more inspection, you get ever more errors. Similarly, authority levels typically cause delays and errors in the work-flow.

### Delays

A useful method for analysing flow is to measure the 'end to end' time – how long does it take to meet a customer demand – and compare it with the amount of time the 'value work' takes.

### Bottlenecks

These are usually easy to see as things are piling up. It is important to understand where bottlenecks exist as they will dictate the capability of the process.

### 'Black holes'

Work getting lost in a department where no value is being added, for example, authorisations, financial or quality 'controls'. The true waste here is not just the delay but the removal of responsibility for good work from the operators.

### Batching and Queuing

The consequences have much in common with those of bottlenecks. Making inventory can be seen as an example of batching and queuing.

### Filtering

One of the more subtle but pernicious examples of waste being designed into flow is filtering work – getting 'cheaper' labour to do things at the front end of a flow to avoid 'wasting' more expensive resources. It is often described as the 'dumbing down' of work. Actually it shows how 'dumb' productivity thinking can be. No value work is done and often it makes it harder to do the value work later in the flow.

### What do you do now?

If you have completed this exercise and found lots of examples of sub-optimisation, you will feel compelled to act to remove them. The object of your work will be to change your flows to only do the value work – as a consequence your costs will fall and your service will improve. But a word of caution: The sub-optimisation of your current flows exists because of what I like to call 'system conditions', for example the design of work, the types of measures and control in use and so on. To get to and remove these causes, you have to understand the relationship between system conditions and performance. So that will be the next step in this series.

**This series 'Six steps to improving productivity' is based on The Vanguard Guide to Understanding Your Organisation as a System, published by Vanguard Education.**

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John Seddon is an occupational psychologist and management thinker credited with translating the Toyota Production System (TPS) for service organisations.

John began his career researching the reasons for failures of major change programmes. This led him to W Edwards Deming, whom John credits with introducing him to the importance of understanding and managing organisations as systems, and Taiichi Ohno who showed the practicality and power of doing so in manufacturing. The economic performance of the TPS is legendary. John has translated the principles behind the TPS for service organisations. In service organisations change can be much faster than in manufacturing, but managers firstly have to change the way they think.

In his time John has been a leading critic of management fads, in particular ISO 9000, which he describes as being based on bad theory. Most of his criticisms of management and their fads are based on his view that it is management thinking that needs to change. John has been an ardent critic of the government's approach to public sector reform, in particular the adverse consequences of targets and specifications. These, he says, are components of the 'command and control' philosophy which, he argues, is a failing management paradigm. John proposes that instead managers learn to adopt a systems perspective.

John is a visiting professor at the Lean Enterprise Research Centre, University of Cardiff. He is an entertaining, controversial and informed speaker. John's latest book *Freedom from Command and Control* and other publications are available from the Vanguard website: [www.lean-service.com](http://www.lean-service.com) or direct from Vanguard, Villiers House, 1 Nelson Street, Buckingham MK18 1BU.