

'Fit for the future' by John Seddon¹

Step 1: Be prepared to change the way you think

Most managers receive this challenge as an affront. It is tantamount to saying there is something wrong with the way you currently think. Let me persuade you to stay with me by saying your problem – assuming you do need to change your thinking! - is not your fault. Through our organisations, government and educational institutions we have educated managers to think in ways that are sub-optimal. There is a better way.

To start at the start, I expect you recognise this: The organisation as a top-down hierarchy. Work designed in functional specialisms. Decision-making is separated from work – decision-making being management's job. In making decisions, managers use measures of budget, activity, productivity, standards and the like. Managers believe their job is to manage budgets and manage people. Most organisations are designed and managed this way. The news (if it is news for you) is this doesn't work very well.

Why do we teach this thinking? Because it worked originally – it is the thinking that was epitomised by mass production and at the turn of the century it led to a quantum leap in performance. Our problem is we have not continued to question; we invented a system of management and, over time, we have assumed it to be unsurpassable. Yet it has been surpassed. In case you doubt me consider this: The number of man hours it takes to build a Lexus is LESS than the number of man hours used to RE-WORK a top-of-the-line luxury German car at the end of the line after it has been made. Just stop and think about that.

Are the Toyota managers smarter, more committed, more enthusiastic or is it perhaps because they are Japanese that they can achieve this? None is true. Toyota achieved this extraordinary leap in performance by using better methods. These methods weren't dreamt up in a boardroom, they emerged from solving practical problems while working against seemingly insurmountable odds. Is this better thinking unique to Toyota? No, many organisations are learning to work this way. My consulting company has been dedicated to introducing these ideas to service organisations; we know they result in outstanding improvements to performance and morale.

So why aren't more people thinking and working in this better way? Because this thinking represents a fundamental challenge to current managerial beliefs and, consequentially, it is hard to understand if you think the 'other' way – you are naturally inclined to interpret what you hear from your current point of view.

You might be wondering why, therefore, I am foolish enough to attempt to help you change your thinking with a series of short articles. I fully recognise the limitation of the written word, but in each of the next five steps I'm going to give you something practical to do. I am sure that if you do these exercises with an open mind, you will learn. In any event, as my editor tells me, it might make for interesting copy.

The better way starts from a different point of view

While we have learned to think of our organisations as top-down hierarchies, they don't look like that to our customers. If you assume (as I do) that the purpose of any organisation is to get and keep customers, to take the customers' view of an organisation leads to a different and more productive set of problems to address. When you look 'outside-in', you always find out how unproductive your organisation is. What accounts for this, sometimes alarming, damage to productivity? The way the organisation is designed and managed. Because, for example, measures are related to functions and managers of those functions need to meet targets, the parts achieve their goals at the expense of the whole.

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Managers know this. They often give graphic accounts of the ingenuity they use to 'win' while others 'lose'. Even this obvious madness does not encourage managers to question whether there is a better way in part because to question the status quo is itself a dangerous thing to do. But if we are to gain a quantum leap in performance in UK organisations, we must learn about the better way.

While we might think of work as being managed and controlled through functional hierarchies and their associated measures, in practice work 'flows' through an organisation. If functional design and measurement can impede flow – which it always does – learning to manage flow will improve performance. The first step to managing flow is to think of your organisation as responding to customer demands. Think of it this way: if your organisation responds to a customer demand by doing what the customer wants and no more, your service will improve and your costs will fall. If Toyota's Lexus line can respond to a customer demand by making a car in a week it ought not be beyond the realms of possibility for any organisation to do likewise. If your organisation produces goods that are less complex than a car and, bear in mind, many service organisations 'make' nothing at all, the gains from this way of thinking can be achieved in a very short time.

Paradox...good service always results in lower costs. Traditionally-minded managers don't believe this, they think service and cost always need to be balanced.

If you are going to manage flow, you need measures that tell you about how well your flows work. These are capability measures. They should always be derived from what matters to your customers and they will tell you what you are predictably achieving for good or ill. This is to change management's attention away from 'costs' and instead to focus on the causes of costs. And as managers learn to eradicate the causes of costs what do you suppose happens to costs? It is self-evident.

How many managers proclaim their people to be their most important asset, yet design and manage the work their people do in ways that cause demoralisation? The answer is most. In traditionally designed organisations the managers see their role as managing people. The managers fail to recognise that their 'people problems' are, in fact caused by the way the work is designed and managed.

Paradox... standards are anathema to performance improvement. Working with standards focuses attention on achievement of standards. Working with capability results in learning about 'how high we can go'.

When an organisation's workers are judged by their managers on achievement of standards or targets, and, as is always the case in traditional thinking, their performance is governed more by their system than anything they can do, the workers become demoralised. By contrast, when workers have measures in THEIR hands that relate to purpose, and they have the freedom to experiment with method, they become tuned in and turned on. In short, changing the design and management of the work mobilises the people – it removes the causes of workers being disenfranchised.

Paradox... with every pair of hands you get a free brain – but whether the brain is engaged depends on the design of the work.

Managers foolishly pursue the 'engagement' of their workers by employing 'employee participation' programmes. The better way to engage employees is to change the role of management. When managers learn to manage by acting on the system, they naturally engage their workers – who know what is going on – in improving the system. And this is the heart of the better way. The better way of thinking is to understand and manage your organisation as a system, to understand how the parts work together to achieve the aim. The final paradox is that this is the starting place for improving your productivity – to understand your current organisation as a system, for it IS a system, regardless of how you currently manage it.

The next steps will take you through some simple exercises to do just that; but be warned. If yours is a traditional, functional, hierarchical organisation with all the attendant features, be prepared for some shocks. You will discover for yourself that what you currently do doesn't work very well. It could give

you the impetus you need to make a substantial change. I hope it does, for the future belongs to leaders of change.

Step 2: Think outside-in

To summarise the argument of Step 1 (Be prepared to change the way you think): our organisations are designed and managed as top-down hierarchies. It is this very thing – the design and management of the work - that precludes improvement. Thinking outside-in instead of top-down is much more than running customer surveys; it is to understand the nature of transactions you have with your customers. If you follow all of the steps in this series, you will discover for yourself how top-down thinking can actually impede performance. The control, for example, of costs can actually cause costs to rise. By contrast, the optimisation of flow – working outside-in – always reduces costs.

Change management thinking	
<i>From..</i>	<i>To..</i>
Top-down	Outside-in

Figure 1

What is the purpose of your organisation? To survive and prosper of course. But the question is by what method? Your budgets can only be used to set targets; they will not help in a discussion of method. In fact if you rely on budgets as your primary management tool you will engage your peoples' ingenuity in doing what it takes to be seen to make budget, that often means cheating, distorting and parts 'winning' at the expense of other parts 'losing'. What you need is everybody working to improve performance and to do that you need the means to discuss method – how well the work works.

Thinking outside-in leads to better methods

Think about it this way. Your customers can only take their view of you from the transactions they have with you. If those transactions are positive for your customers they will be likely to come back; if they are amazing, the customers will tell their friends. If, at every point of transaction you could understand the 'value' work – what matters to the customer – and do that AND ONLY THAT, your service would improve and you would be more efficient. Why? Because you would have no waste: good service always costs less – a concept many managers struggle with.

When you take an outside-in view of a traditionally designed (top-down) organisation, you always find an enormous amount of waste that in turn is associated with poor customer service.

Take, for example, a cable television company. Looked at from the point of view of its customers, it looks like this:

Cable TV - transactions

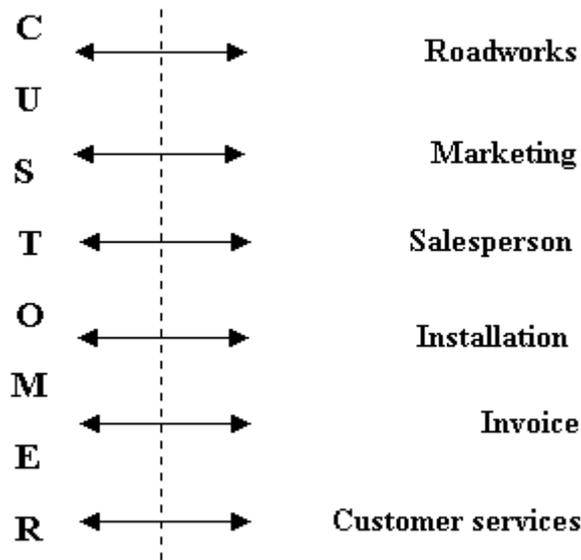


Figure 2

Managers, taking a top-down view might think they are wise to squeeze down the costs of sub-contractors who dig up the road. But go too far and the sub-contractors will focus only on time and cost. When prospective customers want to get out of their drives how will they be treated? I know a number of examples where literally hundreds of prospective customers have sworn never to buy from 'those ignorant people who dug up the road'.

Similarly, targeting installation crews on the number of installations per day can result in a predictable volume of problem calls into customer services. In a rush to meet their targets, crews leave jobs unfinished or untidy and/or the customers don't know how to operate their set-top box. The costs of the re-work go on other departments' budgets. The solution is not to allocate the costs of re-work to the installation department (a typical but fruitless managerial response) but to work instead on optimising installation – learning what it takes to install perfectly; causing no customer calls and no re-work.

Moving on to customer services, you often find enormous amounts of calls caused by 'failures' of the organisation to get something right. Rude road diggers and poor installations might be two causes; there will be others like failure to understand the bill or failures to provide expected services. Rather than see these things for what they are – failures of the system – and acting to remove them, you generally find managers in customer services setting increasingly impossible targets for answering calls and hiring more staff to work on the 'phones. The managers of customer services are, like their colleagues in other functions, trapped by their organisation's design.

Working outside-in leads to improvement

When managers learn to think and work outside-in, the result is always significant improvement in revenue, service and efficiency. The starting place is the identification of your organisation's transactions with customers. In the next two articles I will show you how to take measures that help you understand what's happening at the points of transaction and I will give you some simple principles for working on flow.

In the meantime, if you follow the activity recommended here, you may also discover for yourself some other problems associated with top-down management thinking. These problems become evident when you study your organisation from the outside-in.

Two common examples:

Telling people what to do at the point of transaction by procedures or other methods. This only works when you can predict 'value' or 'what matters to the customers' in the customers' terms. When you cannot – which is most often the case – the procedures enshrine waste of various kinds.

Setting service standards or service guarantees. They appear attractive but in practice focus people's attention on meeting the standards or guarantees, which is not the same as responding to what matters to customers. Sometimes you find extensive standard-setting and controlling bureaucracies that in practice are adding massive costs and interfering with the organisation's ability to serve its customers.

Customers define value

Customers want service to be customer shaped - they want to do business with organisations that respond to their particular needs in ways that suit their particular circumstances. Only by having intimate knowledge of customers, their attitudes, habits, their work and so on can one start to design products and services that are truly customer-driven. The best way to begin a customer-driven transformation is to know the nature of customer demands on your organisation, to know what 'value' is associated with those demands and to know how the organisation works with those demands (flow).



Activity

Using the same schema as for the cable TV company: Draw the transactions between your organisation and your customers.

Now ask yourself:

What do you know about what the customers' experience at each point of transaction?

Taking the 'inbound' transactions – those where customers make demands on you:

What do you know about the TYPE of demands customers make at each point of transaction?

What do you know about what matters to customers (the 'value work') at each point of transaction?

Now go to the points of transaction. Listen and observe; listen to telephone calls coming in, go out with a delivery person, a salesman, or anybody who spends time dealing with customers.

At that place look at what's happening from the customers' point of view.

What types of demand do your customers make?

What matters to customers with respect to each type of demand?

Does 'what matters to customers' differ by type of demand?

Ask the people who work there - what matters to customers with respect to each type of demand?

As you work on the activity, keep questioning 'How do we know?'. To improve for the long term you will need more than opinion and anecdote, you will need measures that help you predict and control improvements to the 'flow' of work. I call these capability measures and they will be the subject of the next article in this series.

Step 3: Think capability

To summarise the arguments of the first two steps: The major disease of twentieth 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 2 we began to look at the organisation in a better way, from the outside-in. If you conducted the exercise as suggested you will have a schema of the transactions with your customers and at each point of transaction, some ideas about the nature of customer demands. We will take this exercise further. But let me first introduce the idea of capability.

Change management thinking	
<i>From..</i>	<i>To..</i>
Top-down	Outside-in
Functional measures	Capability measures

Figure 1

Capability and prediction

The concept of capability is equivalent to prediction. If you want to improve an organisation, it helps enormously to know what is predictable about what is currently going on between your organisation and its customers. The simplest way to think about capability or predictability is in terms of demand and response – what demands do customers make at the points of transaction and how does your organisation respond? If you can improve your organisation's performance at each point of transaction, your profit and loss account will improve - always.

So the first question you should ask is: What is predictable about customer demand?

While conducting a demand analysis in a mobile telephone service provider, it became immediately apparent that a lot of customers were ringing in complaining about a letter demanding they send in their direct debit mandate. The customers' complaint was that they had already sent it. A walk through the work flow revealed the following: New customers' direct debit mandates arrived along with their contracts in a head office department. The mandates were then sent out to the customers' banks for authorisation. Banks were taking time to return the form. Meanwhile, the customer management IT system would regularly sort for those customers who were on contract but did not have payment facilities arranged. The computer system would send a standard letter to these customers. Incredibly, the organisation was predictably upsetting at least a third of its new customers.

This is an example of what I call 'failure' demand, or 'demand we don't want' – you might be surprised at just how much failure demand exists in traditionally designed organisations.



Activity

Using your schema of the transactions between your organisation and your customers (from step 2):

Go to the transactions where customers place demands on your organisation. Listen to the demands they make and sort them into two types – value demand (the things you want customers to make demands for) and failure demand (the demands that reflect a failure of your organisation to do something right).

To do this properly may take you a few days but, in the long run, it is vitally important to get a reliable view of customer demand. The ultimate purpose of the work will be to turn off failure demand and optimise the way your organisation deals with value demand – but that is for later in the series.

On your list, would you expect to have examples of failure demand? For example, progress chasing, complaints and so on? Is this work currently generally accepted as a normal part of doing business? If so, imagine the costs.

Having established the types of customer demand, the next thing you want to know is their predictability.

The mobile telephone example (above) and the next example show one way of establishing predictability – establishing a relationship or interdependency between parts. You can 'see' what is happening and why, hence you can predict that this will continue until the relationship is changed:

Conducting a demand analysis in a business-to-business printer revealed a high volume of customers 'phoning in to say their printing had not arrived. A walk through the process revealed that the notification of when to expect their printing was sent to customers by the scheduling department. As much as eighty percent of the work would subsequently be re-scheduled by any of three departments further on in the work flow.

The second method for establishing predictability is to take measures over time. Count the number of times a day or week that a particular type of demand occurs. You know you have a reliable view when you can predict the nature of demand in the next day or week. You may be inclined to rush this part of the work, especially as you will start to see things that are going wrong. Don't, it is vital that you first establish predictability, for otherwise you may act on something that is unpredictable and make things worse – a common mistake.

Now we turn to establishing the predictability of response.



Activity

Returning to your schema:

For every type of demand you customers place on your organisation, what measures can you find that tell you how well your organisation RESPONDS?

In most organisations we find few measures that inform managers about the predictability of responses to customer demands. Instead we tend to find 'internal' measures which tell you little or nothing. In the above examples, it took time to establish response measures – they were not in use in the organisation. The measures that were in use in each case, were measures of a different sort. In

the 'phone company, managers measured activity (calls per man per day). In the printing example, managers measured revenue against targets. Such measures not only prevented managers from understanding demand and response, they made response worse – something we return to in step 5 ("Think System").

It is important to bear in mind that view we want to take is 'outside-in', the customers' view of the organisation. So your measures of response should best be measures of how well the organisation does things for customers, for example, time to fix something, time to respond, time to quote, percentage of demand resulting in sales, percent of problems solved on first call and so on.

And finally, there will be one other type of transaction you will need to study:



Activity

Returning to your schema:

Go to the transactions where your organisation DOES THINGS TO OR FOR customers. What measures can you find which tell you how well these things work?

We call these 'outbound transactions'. The most obvious outbound transactions are marketing and sales. However, they are not the only ones. Delivery is an outbound transaction. Failure to deliver on time and to specification will cause waste (customer complaints, fall in customer loyalty, re-work, duplication of effort and so on). Invoicing is another outbound transaction. Get it right – what the customer expects – and the flow will be smoother, more customers will pay on time.

Have you heard the off-said: "I know about half of my marketing budget works, the only problem is I don't know which half". Whenever I hear this I ask: "How do you know it's half?"

An analysis of the sales department in an organisation showed the same expenditure, year on year on each of four methods for attracting new customers. Each method was then evaluated, using historic data, to see what worked – how and how well each different method produced customers. One method was far superior to the others and should have attracted more investment.

Once again, managers were focused on the wrong things – in this case total sales revenue. They should have been working to understand the performance of each of the sales or 'customer acquisition' processes.

Summary

If you understand what is happening at the points of transaction between you and your customers, any subsequent improvement will improve service, reduce costs and increase the probability that customer will keep doing business with you.

This is a very powerful analytic tool. It is concrete: people may argue over what we should or should not do for our customers, but they cannot argue over what we actually do. It is vital to get capability data before taking a look at how work flows through your organisation – the next step in the series.

Step 4: Think flow

To summarise the arguments of the first three steps: The major disease of twentieth 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 2 we began to look at the organisation in a better way, from the outside-in. In step 3 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’.

Change management thinking	
<i>From..</i>	<i>To..</i>
Top-down	Outside-in
Functional measures	Capability measures
Function and procedures	Value and flow

Figure 1

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, 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 5.

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 2). Do these adequately define your core processes? Did you establish capability measures for each in step 3?

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 3 – 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 3.

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 particularly 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.

Step 5 - Think system

To summarise the arguments of the first four steps: The major disease of twentieth 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 2 we began to look at the organisation in a better way, from the outside-in. In step 3 we looked at the idea of organisational capability – what is predictable about what is happening between you and your customers? And in step 4 we studied flow – how your organisation responds to customer demands, end-to-end. If you conducted the exercises as suggested you will have a schema of the transactions with your customers, at each point of transaction you will have reliable data about what is currently happening and you will know the flow and waste or sub-optimisation within it. Now we can move to the causes of current performance, the system.

Change management thinking	
<i>From..</i>	<i>To..</i>
Top-down	Outside-in
Functional measures	Capability measures
Function and procedures	Value and flow
Hierarchy	System

Figure 1: Change management thinking

The system governs performance

It was W. Edwards Deming who first argued that the system governs performance. "Do not assume", he said, "that people can be held responsible for performance, for their performance is governed by the system within which they work". What does this mean?

Consider, for example, the number of organisations that have embarked on customer care training yet have found little or no improvement in the care their staff give to customers. Generally, you find these people are not the problem, it is the system that won't let them serve their customers. For example, procedures people have to work to are written by head office, and from an 'internal' point of view; measures people have to work to cause them to work against the customers; the fact that managers are the only ones who can make decisions means people have to refer things, and so on. These things are all examples of 'system conditions'; they govern performance.

If you followed the exercise in step 4, you will have identified waste in your current flows; waste consumes resources. I find it helpful to remember that waste is a consequence of the way the work works – the way work is designed and managed - it is not and should never be treated as normal. **We** create waste; it is a consequence of the system and it is our responsibility. For example, we carry excess inventory that never gets used. Why do we carry it? Just in case. We re-work things that have not been done right the first time. Why do we have to re-work? Because we don't know how to design

quality in, we don't know how to control work before it is done as opposed to controlling it after it is done – and the latter (inspection) just causes more waste.

If you followed the exercise in step 3, you would have come across a particular and ubiquitous form of waste: 'failure demand'. Failure demand is the label I give to demand caused by a failure of the organisation to do something right for the customer. For example, customers call because they don't understand their bill or they are having to progress chase something that has not happened as promised. In most organisations you find this is treated as a normal part of doing business. Traditionally-minded managers don't notice failure demand because they look top-down, not outside-in. Such managers are concerned with functions and their costs, they cannot see the causes of costs.

Traditionally-minded managers use measures that encourage parts (functions) to 'win' while the whole 'loses'; we often waste enormous amounts of human talent by engaging people's ingenuity in surviving in or beating the system, rather than contributing to it.

Thinking system reveals all

When you can see your organisation as a system, warts and all, you learn about the 'what and why' of current performance. You can see what could be achieved and, moreover, you can see what needs to change to realise the potential improvements. Taking a systems view is totally different view from the traditional, hierarchical view. The traditional, hierarchical, view is to look at the organisation as having parts or functions. The systems view is to look at the whole. This is more than understanding how the parts work together – that in itself being only a useful first step. For a systems view leads ultimately to systems management, an entirely different way of designing and managing work from the more traditional mass production view.

Two simple examples:

How the parts work together

If you have discovered that part of your organisation is subject to high levels of failure demand, the first step would be to identify the cause – what part of the organisation is not working right and causing this unnecessary demand? The next step would be to 'turn off' the causes of failure demand. Very good so far, but the next step is the ultimate systems management step: to establish measures of the type and frequency of demand such that the same problem will be identified as soon as it happens in the future.

How system conditions damage performance

If you discovered in step 4 that the flow of work is damaged by functional measures, for example, people meeting their functional goals at the expense of the needs of the customers, causing re-work and other forms of waste, your next steps might be to size and remove the waste. But the ultimate systems step would be to remove the cause – to remove the functional measure that is driving the dysfunctional behaviour – and to replace it with a measure that will encourage the right behaviour (in most cases measures of capability – see step 3).

These (systems) remedies frighten many managers. Managers frequently want to hold on to what they know; they understand functional measures – measures of budget, standards, activity and the like. While they can appreciate the damage being caused by the use of these measures, they are often reluctant to remove them and instead try to maintain that if used 'sensibly', these measures will help and thus should remain. If you have a dog at home, raise a rolled-up newspaper – don't hit the dog – the impact is the same; and so it is with traditional measures.

Measures are not the only system conditions that affect performance. Here are the other common ones: Structure, roles, procedures, information and job skills and knowledge. Whilst the list is, in reality, more complex than that, I would encourage you not to worry about the potential complexity. If you have taken the steps I have outlined in this series - understanding demand, value, capability and flow - you will be looking into your system from the safe ground of knowing the nature of current

performance and, hence, will be able to identify the particular system conditions that are affecting performance in your case.



Activity

Take out the list of examples of sub-optimisation (waste) you found when you walked your flow in step 4.

Identify the causes – what particular system conditions are causing the sub-optimisation?

Structure? Measures? Roles? Procedures? Information? Job skills and knowledge?

The manager's job – act on the system

The prerequisite to a quantum leap in performance is a fundamental change in the role of managers. When managers learn to act on their organisation as a system, performance improves – always. For, whether they have ever appreciated it or not, their organisation **is** a system. The best way to start this transformation is to study the organisation as a system, to understand the 'what and why' of current performance as a system. If you have followed all of the exercises in this series, you will have done exactly that and you will have discovered for yourself that the primary requirement for effective change is that **you** change. You don't have to change who you are, but you do have to be prepared to change the way you think. Which is the topic of the next and last piece in this series.

Step 6: This means me

So did you change the way you think? If you carried out all of the exercises in steps 2 to 5, you should at least have had a few doubts about things which managers have traditionally taken for granted. You may have gone further, you may be a committed systems thinker. If so, this article will simply echo things you have discovered for yourself. For the uninitiated, this article will represent an affront to traditional management practice, so please don't spread it around, we don't want to upset people.

The central argument in this series has been that to achieve a quantum leap in performance, we have to be prepared to change the way we think. The major disease of twentieth century organisations is in their design and management, and through this series I have encouraged you to take a different and better view of the design and management of work. In sum, this is a systems view. I didn't invent it, I learned it from the work of W. Edwards Deming, Shigeo Shingo, Taichi Ohno and others. These are the people who led a transformation in Japanese manufacturing in the 1950s, their ideas are still not understood by most British managers, yet when employed, they can have an enormous impact on performance.

"Where's the proof?" I hear you ask. Let me give you just one example: The number of man hours Toyota take to build a Lexus is LESS than the number of man hours a German luxury car maker takes in re-work at the end of the line - after the car is made! How does Toyota achieve this? Do their people work harder? Is it because they are Japanese? No, neither of these; their secret is in the methods they use to design and manage work. Work is designed and managed according to systems principles. I often say to my clients "It's a good job you don't make cars! For it would take forty years to catch up with Toyota". However, if you make nothing, if yours is a service organisation, these ideas can be implemented and the benefits achieved in a very short time.

In this, the final article in the series, I shall summarise the distinction between traditional management thinking and systems thinking and discuss some truths that systems thinkers know, which go against the grain of what most managers take for granted. As space is limited I shall not give further examples; examples can be found in the previous articles in this series.

<i>Traditional thinking</i>		<i>Systems thinking</i>
Top-down	Perspective	Outside-in
Functional specialisation	Design	Demand, value and flow
Separated from work	Decision-making	Integrated with work
Related to budget, showing activity, productivity, standards	Measures	Related to purpose, demonstrating capability
Contractual	Attitude to customers	What matters
Extrinsic (incentives)	Motivation of people	Intrinsic (pride)

Figure 1: Traditional thinking versus systems thinking

Standards are anathema to improvement

Just about every Government minister hails the value of standards. If only they knew the damage that results. Standards appeal, they are grist to the political mill – 'publish a standard then publish

performance against it' is the simple and simplistic political cry. Yet this very behaviour undermines performance and worse, it engages people's ingenuity against rather than with their systems.

If a standard is beyond a system's capability, people distort the system or cheat – it is the only way to survive. If a standard is within the system's capability, sometimes you 'win', sometimes you 'lose'. If a standard is below the system's capability, people relax. Moreover, they encourage others not to over-achieve lest the standard is increased. We have seen all of these responses in our health services, police services and schools. They are not new phenomena, we have seen the same in our private sector organisations for years.

The minority of private sector organisations that have learned the error of these ways employ different and better measures – capability measures. Capability measures (see step 3) make it easier to connect ends with means and hence make it easier to get the discussion on to method. It is better to know what is predictable about the performance of any process or system than whether and how often it performs to a standard. The capability or predictability of performance is governed by the nature and extent of variation. Capability data leads managers to look for and understand the causes of variation; by acting on them performance improves – always.

Managing with productivity measures gets you less productivity

The cost accountants have had too much sway over the way our managers manage. The logic, as with standards, is plausible – if everyone makes budget, the organisation succeeds. But again the focus becomes 'make budget' by fair means or foul. The focus ought to be on understanding the relationship between means and ends, something only capability measures facilitate.

People do what you count, not necessarily what counts. If you 'count' budget, standards, targets, activity and other 'productivity' measures. That's what you'll get, regardless of the impact on your system. If, on the other hand you 'count' achievement of purpose, you'll get better at what you exist to do. Measures of purpose are always 'outside-in' measures, not 'top-down' measures.

If you have measures that relate to purpose in the hands of the people who do the work, they will feel able to experiment with method. At a stroke you will have a free brain with every worker – something traditionally designed and managed systems obviate. Motivation becomes intrinsic, people learn, people enthuse about what they change and improve, simply because measurement has been integrated with work, not separated from it.

Incentives get you less (not more)

Managers believe incentives have value in driving behaviour. They are wrong. This is not a matter of opinion. All the research evidence shows that incentives get you less work and, more importantly, they result in people attaching less value to their work. In America, for example, children have been given hamburger tokens as an incentive for reading books. When the tokens stop, so does the reading. What are the children learning? To not value reading.

What accounts for poor quality selling in so many sectors? Incentives. In the few organisations that have removed sales incentives they have improved co-operation between salespeople, decreased sales force turnover, improved the quality of selling – hence improved customer satisfaction - and, above all, they have improved revenue.

Systems thinking is a better way to make the work work

As we approach the millennium, we are witnessing a fundamental challenge to our beliefs about how to design and manage work. In my experience, this is not something that can be stirred by lectures and presentations, it is something you have to feel. As the American expression goes, "You have to be there". If you have followed the exercises in this series you will have made a good start; you will have found for yourself the sub-optimisation caused by traditional methods of designing and managing work. I have found it is only this type of 'hands-on' experience that gets managers interested in the better way.

If you really want to get fit, if you really care about productivity and profit, I recommend you learn take a systems view. It starts with you.