

Systems thinking - Management by doing the right thing

John Seddon, 1999

What we have witnessed in the last 20 years is a series of programmes of change failing to achieve their intended outcomes. Customer Care, ISO 9000, TQM, ABC, BPR. All the research and experience show that the latest panacea does no better than its predecessors. Over and over again improvement programmes are thwarted by commonly-known but illusive forces. The problem labelled as 'organisation culture', which typically leads to rationalisations like 'change takes time', or 'each programme is an element in the total change programme'.

Rationalisations prevent learning. Why does behaviour not change as was intended? How much time should change take and how do we know? How should each element of a change programme impact performance and why? If we don't ask and answer these questions we are unlikely to learn. If we do not learn we are more likely to continue to waste resources on ineffective programmes of change. The cost of failure goes far beyond the price-tag of the programme. Demoralisation of staff is a frequent and costly consequence of failure.

To understand change in organisations we must understand what influences people's behaviour within an organisation and how it does so. Behaviour is conditioned by the information people have, their knowledge of what it is they are to do and the means provided to them to do it. It is also conditioned by the prevailing norms - people know what is expected of them, what is acceptable and what is not acceptable. Experience shows that there is a myriad of influences on people's behaviour, but it also shows that some factors have far more influence than others.

To improve our methods of change, therefore, we need to understand more about what actually governs people's behaviour. When no change occurs, it is the pattern of behaviour that remains unchanged. Deming and Juran demonstrated that people's behaviour is governed by the system they work in. It was a finding which went against the accepted wisdom of their time and remains outside prevailing management thinking. Yet this is the single, common cause of the failure of programmes of change. When programmes fail it is generally because the attempt was non-systemic. Change in performance requires a change to the system.

The failure of many programmes of change is masked by the plausible aspiration to 'do things right'. For example, the focus of registration to ISO 9000 is often 'what do we need to do to achieve registration?', regardless of whether these are the 'right things' to do. Training everybody in customer care assumes that if people do 'as they should' with customers, customer service would improve. In practice, their behaviour in front of the customer is governed by their system. So many programmes of change, even when we give them the right labels ('co-operation', 'teamwork') fall far short of success because they don't change the system.

There is a critical difference between doing things right and doing the right thing. Much of the effort in programmes of change is given to doing things right: there is not much questioning whether these are the right things to do. Perhaps the labels are the first line of defence against such programmes being questioned.

The organisation as a system?

Doing the right thing means we have to learn how to view an organisation as a system and understand the implications of that view for what it means to manage. It is what Deming taught the Japanese in 1950.

A system is a whole made up of parts. Each part can affect the way other parts work and the way all parts work together will determine how well the system works. This is a fundamental challenge to traditional management thinking. Traditionally we have learned to manage an organisation by managing its separate pieces (sales, marketing, production, logistics, service etc.). Managing in this way always causes sub-optimisation, parts achieve their goals at the expense of the whole.

The 'compartmentalisation' logic of traditional thinking is not limited to the design of organisation structures. A systems view of organisations shows the fallacy of conceptualising performance problems as people problems ('if only they would do it'). They should not be considered separately from other 'task' features. Failures in co-operation, poor morale and conflicts in our organisations are symptoms, their causes lie in the system. Training in teamwork or co-operation will only treat the symptoms. The causes usually remain. Managers have been encouraged to think of the 'human' (or 'soft') issues as distinct from hard or 'task' issues when they might be better understood if they were seen as interdependent.

Managers of 'traditional systems' impose conditions which limit, constrain or in other ways control people's behaviour in ways which result in sub-optimisation. Being prevented from doing their work as they could, people become demoralised. Managers then treat people as though they are the problem. Lack of empowerment, for example, is a pre-occupation of 'traditional' management. Unwittingly, they have created systems which disempower people. Sending people on empowerment training does not solve the problem. It frequently produces greater cynicism. Only changing the system solves the problem.

A systems view of organisations leads to a different collection of problems to address. Traditionally, managers manage with output or financial data. Their view of the organisation is thus conditioned by the data they use. Problems are thought of as variations from budget and such variations attract management attention. While such a view will show up problems of cost, the causes of costs is a different question and can only be addressed from a different perspective. Only a systems view will illuminate the opportunities and scope for improvement.

For example a tele-marketing team was measured on number of calls, contacts, and 'sends' (a sale subject to trial). Daily and weekly targets were set. Making target resulted in a bonus. The people were demoralised. They had to experience going home having failed to meet their target. They knew in their hearts they had done their best but their performance had been governed by their system. Success depended on the quality of the lists. Lists had duplications, unused parts were batched and stored for re-use. As all lists came from the same source this resulted in much wasted time and customers being re-called frequently (and not being happy). Product knowledge varied between operators, the time taken to process orders depended on other departments and the type of product, there were frequent 'fire-fighting' interruptions to the working day.

People learned to do whatever they had to do to make their target. They hid good quality lists, falsified activity records, 'bounced' incoming customer calls to others so as not to get tied up with a customer problem and so on. Not because they were bad people; they were working in a bad system. Having to behave this way causes further demoralisation.

The performance of this system didn't depend on how the parts act independently (getting lists made 'on time' and meeting activity targets for calls), it depended on how the parts interacted. It is management's role to manage the interactions (or process), not the activity.

Attention to the system would improve performance. Improving the quality of lists, product knowledge of operators and removing the causes of customer problem calls would improve the performance of the system. It is not unusual to find such 'traditionally managed' tele-marketing systems under performing by half.

Management of the tele-marketing team was focused on activity, not purpose. The measures they used encouraged them to explain differences in performance as people differences and the management job was thought of as 'motivating' people. Yet they had designed a system which robbed people of pride, the most important source of motivation. The managers assumed people would be motivated by targets and bonuses. People will do, in these conditions, whatever it takes to get the bonus, but the consequences are that the wider system is put at risk and the task loses its intrinsic value. Pride is lost.

Coming to terms with how the traditional system causes sub-optimisation is a powerful way of learning - it is important to learn why something is wrong as well as simply that it is wrong. Managers

who had relied on measures of activity to (mistakenly) manage productivity would recognise the need to give them up if they understood just how such measures are damaging productivity. They would give them up with confidence if they knew which measures to use instead (measures which relate to purpose) and they knew how best to use such measures (to learn from variation).

Understanding the causes of failures introduces the user to the fundamentals of systems thinking. The tele-marketing example is a relatively simple system. Similar phenomena occur throughout organisations which are managed in a traditional way. 'Management by the numbers', whether these are output data or standards, causes sub-optimisation.

Studying failure is a good way to learn how to understand an organisation as a system. For example, customer care programmes fail when people are put back into a system which won't support their delivery of service. A system is a whole made up of parts. Each part of the system can affect the way a system works. Managing for improvement starts with understanding the relationship between parts.

Managers who appreciate this view act on the features of the system which govern quality of service, and consequently improve the behaviour and attitude of front-line staff - and improve service. The behaviour and attitude of front-line staff is governed by the system - it is frustrating and demoralising to work at the front of a poorly designed service organisation. Knowing that the manager is adding value, and seeing the results of changes to working practices is motivational. People like to learn.

To take another example: A customer service office took thousands of customer calls every day. Their purpose was to create value for customers and, when appropriate, sell the customers services. Managers had been measuring 'time to answer' and number of calls taken. Investigation showed that more than half the incoming customer calls might have been described as 'calls we don't want', that is, calls which, in an ideal world, would never have occurred and which were caused by a failure to do something the customer expected (billing queries, complaints, progress-chasing).

Marketing was the source of many of the unwanted calls. Customers would respond to a direct mail campaign but would not qualify for the service (and in very obvious ways). Marketing was not learning how to improve its processes, they were working to budget.

Finance included credit control. Their failure to resolve customer queries immediately, and their larger failure to run a billing service which did not cause queries, meant a flood of calls into customer services. The productivity of customer services was governed by the system. Managers were doing no more than making things even worse by managing activity.

'Traditionally' minded managers see the organisational world in parts. They put in place reporting and accounting procedures which account for, or report on, parts of the organisation separately. The prevailing thinking would have it that if each part of a system performs as specified (to budget), then overall the system will perform as expected. It is assumed that looking at the parts gives us the means to manage the whole. Nothing could be further from the truth. It may be true in many cases that the numbers add up to the intended budget, but managing in this way guarantees sub-optimisation. This is the first step in changing a manager's thinking. It is not a step to ignore. If a manager does not know what was sub-optimal about the old system and why, he or she is likely to repeat the mistakes of the past (management attitudes are as strongly held as any others). Change in organisations begins with a change in thinking.

Change means changing the system

Change for improved performance means changing the system. When features of a traditional management system are left in place, they undermine (or, minimally, compete with) quality principles and practices. If change doesn't change the system, the system doesn't change.

Any intervention in a system which does not change the thinking will produce no change. This is why training in quality techniques fails to improve performance over the medium term (and sometimes even in the short term). The principles and practices of traditional, hierarchical, functional management, which today constitute the accepted norm, are antithetical to quality principles and

practices. This is not just a matter of attitude and belief. The everyday practical matters which managers work with are different in a quality organisation in very real ways. A systems view of the organisation leads to different measures used in a different way. It means designing work according to different principles.

A systems view of an organisation starts from the outside-in. How does this organisation look to its customers? How easy are we to do business with? (One company used this as its slogan but was very difficult to do business with,. It was the customers who had to manage them to get anything done). The starting place for understanding the organisation as a system, is to be able to predict what will happen next week if nothing changes.

Implications for management

It is only when people's view of how to do work changes that their behaviour changes. Changing the system means taking out things which have been limiting or damaging current performance. For example, removing activity measures, arbitrary targets and ceasing to manage performance through budgets; changing structure and processes to enable them to better achieve their purpose. Managers will only take such radical action if and when they appreciate that their traditional means of control in fact give them less control: managing costs causes costs.

When the organisation is understood as a system, the inappropriateness of such practices becomes stark. It is a major source of motivation for action. Action means 'doing the right thing', putting in place the right 'system conditions' to ensure that performance is managed from a strong base of understanding.

Deming taught the Japanese to manage their organisations as systems. In four years they out-achieved his expectations. When people work from theory they learn. What Deming gave them was a theory of management which started from the premise that the organisation is a system. Organisations of the future will be learning because their people, the people who do the work, will be learning. But that will only happen as fast as we change the way we run organisations. Without doubt it is the right thing to do.