

Joined-up leadership

Using evidence to optimise your system

1. Introduction

Few organisations can claim to be achieving their goals. Few managers feel on top of their jobs, happy that they know how to do what is demanded of them. Over the last twenty years many quality based leadership skills and behaviours have created some remarkable improvements but their full potential has rarely been reached. When diligently applied the evidence is that they work, but turning them into fully implemented, practical, programmes requires integration of well established tools and thinking and can result in powerful new insights into long established problems.

We use the “joined-up” phrase as shorthand for many combinations of concepts in leadership and management. We hope that, in spite of the reader’s possible irritation with an apparent cliché, we can cause them to look beyond the words—to the evidence—and into the potential of the idea.

2. Background

Many managers are on a treadmill of having to respond to never-ending declarations of how important this year is, and of how unique this set of targets is, or that their very job is on the line if they do not perform. They have two choices to make in response.

One is to cut back yet again, concentrating on cost reduction or specific target achievement, regardless of the consequences. We have all seen these decisions—no training for the rest of the year, all cheques to be personally signed by the general manager, re-use copier paper, etc etc. The manager survives another year while someone else gets the bullet – a colleague in big companies, a competitor in smaller organisations. And since cause and effect are generally separated in time and space we generally do not suffer the consequences of our decisions—it becomes someone else’s problem. Cutting back is disastrous to the wider system, a gloomy approach to take for your career.

But: It’s always the toughest year, Cost is (nearly always) a problem and our bosses don’t understand and anyway the real problem is not in my department (maybe!). My job is on the line. So if I’m a line manager is there really anything I can do differently and create benefits for my team, my employer and myself? And what if I’m an adviser to a line manager or department, my options seem very constrained?

Is it just a case of more of what we’ve done before? Such as:

- Management by Objectives which go back to the 1960s,
- Quality Circles from the 1970s,
- Total Quality Management (TQM) from 1988 in the US,
- Business Process Reengineering (BPR) in 1991/2,
- Lean/Kaizen from 1994,

or perhaps

- Six Sigma, which has recently gained enormous coverage.

All these ideas and programmes achieved something for their protagonists. What happened to them, did they die? Were some of them just name changes? Are they all different and disconnected? Or are there some common themes and lessons to be applied?

Yes there are, but interpretation and implementation of apparently the same thing can make them unrecognisable from one place to another. And some principles are mutually exclusive but that won't be evident if they are considered in isolation.

Let's see if there's a sensible leadership structure or sequence that would help:

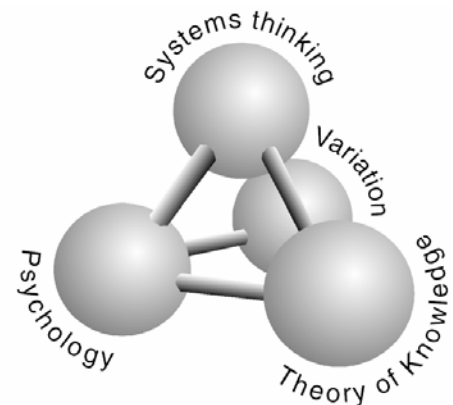
Leadership in starting: In all this uncertainty leadership is clearly called for, since we aren't where we want to be.

Direction: Someone needs to figure out where we should be.

Method: how to get there, taking the risk of being the first to move, but take others along as well. Deploying resources in the right area, using a systematic approach.

Leadership in persisting: Sticking with it for years, as this overall transformation is taking a long time.

The authors have practised leadership, management, consulting and training for many years. Their company, Process Management International's purpose is to help clients achieve self-sustaining improvement through jointly designed interventions. Based upon Dr Deming's system, we provide consultancy, project facilitation and development of client capabilities in the context of a deployment model for strategy, implementation and skills development.



Deming's System of Profound Knowledge

3. Leadership in starting

The prime need then is not for management, though that will be important at times, nor power or authority, though the more you have the easier it will be. It's a particular kind of leadership, using evidence from the organisation and the wider world, to expose the big picture and enable the individual steps toward something better. Joining up what we see with what we think, linking what we learn with what we do, and completing the loop back to how we think differently when surprised, in short challenging assumptions of how the world works and particularly our business.

Many have of course started already, perhaps with years of quality improvement expertise. The joined-up approach builds upon this knowledge and experience.

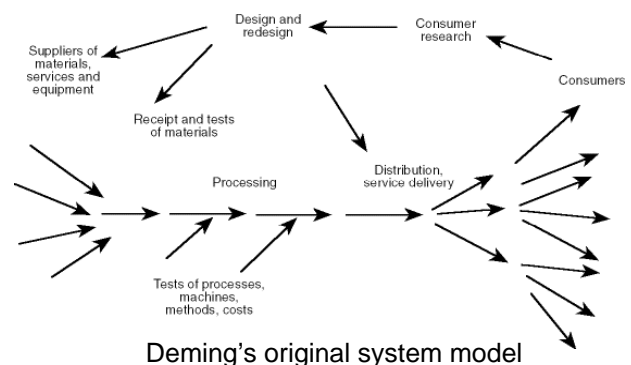
Joining-up one's leadership

The joining-up phrase captures concepts we consider vital to successful improvement and ongoing management. The following are some of the most important;

- Optimising the whole system, not just the department, location or business unit. It's the opposite of function management,
- Using all the thinking set at one's disposal, not just that which suits the immediate problem,
- Using tools in the right context, not for their own sake,
- Making sense of the world of work, bringing the customer into the decision making process, and
- Bringing quality and business improvement together—ISO 9000 2000, Lean, Business Excellence, Variability Reduction, Six Sigma, all have their part to play.

Deming's foundations

Although widely known as a quality guru or even just as a statistician, Deming taught systems thinking from the early 1950s. This simple diagram can be used for one person to understand their own job, or for the board to see the natural system of the whole corporation.



Whilst it can never be accurate, since all companies, even small ones, are three-dimensional and constantly changing, the system model is flexible and gives insight and clarity. It shows connections between people, departments, functions etc. It enables the planning of projects that support rather than conflict with each other, and for objectives to be shared and balanced, building for the benefit of all. If these seem ambitious claims we can nevertheless point to examples where we have helped them be achieved. And since they are how most managers would like things to be their achievement is well appreciated.

Determining to integrate one's knowledge and actions is the next step.

4. Direction: The joined-up leader's conceptual target

Regardless of the job, Genichi Taguchi provided a universal target for all managers:

To get their system, their area of responsibility, to be "on target with minimum variation"

How do we do that?

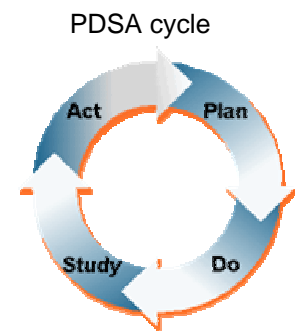
Everyone needs to understand their business processes, their place in the system and be able to monitor and improve them in real time

Given this understanding of the system the leader has to figure out the target, which may be more or less customer based, and obvious depending upon the circumstances, but method is needed to integrate this target with actions and behaviours.

Joined-up learning

What would be useful is a personal learning model that could be used irrespective of the context, and Drs Shewhart and Deming developed this 50 years ago, in the late 1940s when they adapted the scientific method for management. Linking evidence from the work (Check) with decisions on what actions to take (Act), using the evidence to propose hypotheses (Plan) and testing them in trials or indeed real work (Do) the resulting data becomes more evidence to be used in another Study. Were the results a surprise, what did we learn from the differences?

The cycle was known as Plan—Do—Check—Act for 40 years, and still is in many places though Deming changed Check to Study in 1989. Toyota, amongst others, have called it Check—Act—PDCA, and use it as the core of their whole management system, the first application of the scientific method to organisational operations. Bearing in mind that the scientific method is the intellectual power behind the technical progress that blesses and haunts us all, it is perhaps not surprising that Toyota made themselves, through organic growth, worth more than the collective value of GM, Ford and Chrysler.



What did western management do with PDCA?

Many used it as a mechanism. *Plan* came to mean just that, often in isolation from knowledge of the subtleties of the ongoing system and its origins. *Do* is a well known action to every manager, often joined up to firefight, fix, and fudge. *Check* means see if it's close enough to get away with, and *Act* is better than no decision. We have even seen PDCA written in a straight line, some kind of justification for strong-minded programme managers to force things through against all the odds!

Consider PDSA as a liberating cycle, enabling you to get started and control the risk:

1. **Study** the evidence around you: process, data, customer needs and wants, organisational constraints. What are you trying to accomplish?
2. **Act** upon the evidence to mitigate any adverse effects upon your customers, but move swiftly to
3. **Plan** for improvements. Develop theories based upon the evidence, sharing the thinking process with all those affected. How will you know if a change is improvement? Uncover process indicators that correlate with the key results measures (which will probably require several experiments of their own), and make predictions of the expectations of the changes proposed.
4. **Do** the trial or experiment. Collect data with the intention of accuracy and learning, not for the purpose of confusing the inspectors or auditors as it may have been in the past.
5. **Study** the results, comparing the outcomes with the predictions.
 - a. Where they agree you have the basis for improvement, the theories have been supported, and the changes can be implemented on a wider scale.
 - b. Where they do not agree you have learned something—the theory was not valid in this instance. The scientific method tells us that only one instance of data not agreeing with a prediction is enough to undermine a theory.

Organisations run for years with evidence hidden behind the fear of failure, theories that become truths unchallenged until after bankruptcy.

6. **Act** to make the changes, run new trials, or whatever is appropriate to the relationship between the evidence and the theories. But before moving on:
7. **Plan** again
 - a. To share the learning, both the specifics of the test and the general of the principles, so that the individuals have had a chance to internalise their experience, and others, even in very different circumstances, may benefit from the concepts. This is key to Knowledge Management.
 - b. Mount a contradiction test to verify the changes made. If necessary re-run the process with the so-called improvement taken out. If the problem does not re-appear the so-called solution was perhaps just luck.

Some of these individual activities are part of managers' lives. But they are usually disconnected, not building insight, corporate intelligence and improvement. Most science graduates have not felt able to apply their discipline in leadership activities, and few none-scientists have had the whole set explained in context.

5. Applying Joined-up leadership

All managers can therefore decide to interpret leadership as

“Working on the system to continually improve it, with the help of the people”

So you can take this on personally, and propose it for others, using PDSA everyday.

Because of the depth of insight created by the new thinking, and in spite of the evident potential of using some of the approaches that have powered Toyota's success, one should not expect a smooth road in application. However, once you commit, the potential of the PDSA cycle can and should be explored through many rapid cycles, not as a series of major events. The following sequence will work, in the sense of being useful and do-able by any manager at any level:

Applying to ongoing work – Joined-up Process Management

1. Understand the natural system by using the system model,
2. Identify the key processes and start to diagnose the condition of the relationships between them. Use the Excellence Model to add insight on process results: it is a useful self-help tool for joined-up leaders.
3. Analyse the key processes,
 1. the objectives,
 2. customers and suppliers,
 3. uncover the useful results data,
 4. establish process date that correlates with it,
 5. learn how to collect it simply and accurately,
 6. display and understand the variation that is displayed, in order to reduce it in real time and to redevelop the processes for improved overall capability

This is the approach called for by ISO 9000 2000 and its relatives such as TS16949, and assessed by the Excellence Model. Six Sigma uses it for multi project, organisation wide improvement.

Joined-Up Project based Improvement

Processes and projects are two sides of the same coin: the only practical difference is that processes repeat whereas projects are one-offs. Joined-up leadership is capable of revolutionising project management too, by clarifying the purpose of the whole, surfacing and using evidence during the course of the project to keep it on track and reduce last minute surprises.

The ingredients of a whole change programme, or of an individual project, can also be integrated into a five part repeating cycle for change management.

The sequence for any particular example needs to be developed to provide a robust foundation for improvement, differing in implications, dependent upon whether you are a senior manager or an appointed project leader.

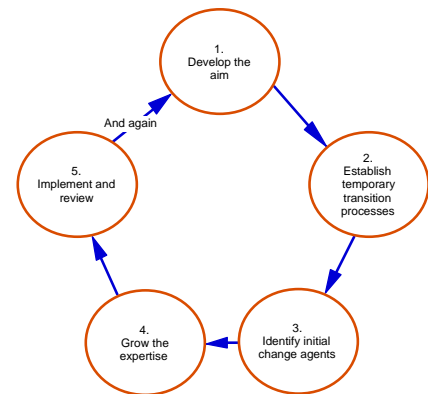
If you are a senior leader,

1. Use policy deployment (Hoshin Kanri) to identify projects, clarify objectives with those affected and gain commitment for the resources to be allocated
2. Ensure that leaders, champions and facilitators of key projects are properly trained in project and process management and improvement.
3. Require that appropriate tools be used to develop the charters, the structures and plans. A Gantt chart should be the end product of a planning process, not the first document to be produced.
4. Ensure that the whole project work to be understood as a series of processes, with all the insights of process improvement applied to it.
5. Start-up should be joined up to plans for a steering structure for this and other projects.
6. Ensure that reviews take place and that learning is made available for others

Good Six Sigma implementation confirms that as a senior leader you must personally understand a lot in order to be able to drive these components in an integrated manner.

If you are not a senior leader, and are launching just one project in you own area you can use the five-part model and the appropriate tools within it, all the better to be able to direct and coordinate when given the opportunity across a wider field

PMI's Five part change model



6. A joined-up leadership illustration

The aim was to dramatically reduce cycle time. In fact this was a deliberately joined-up target, as to achieve the improvements would depend upon getting the whole production system acting together in a coordinated way. Quality issues would have to be improved, the supply chain brought into the development, planning and scheduling cycle. More rapid assembly would reduce work in progress, releasing cash and space. The highly capable processes would have much less rework, all leading to lower costs and a more competitive market position. Sounds like some academic illustration, but the methods followed show that such ambition is now a practical proposition for joined-up leaders:

1. The system model was used to identify core and support processes and to allocate appropriate projects and their leaders
2. The measures were linked to on-going business reporting, with an accountant close to the steering team to provide credibility.
3. The work was carried out under the same banner as before, so providing reassurance and continuity to the employees
4. The teams underwent training in small modules as the projects developed, linking the classroom work with everyday application. The project leaders themselves took three weeks of improvement mastery training, so as to be able to direct the efforts of the facilitators in an expert manner
5. Trainers supported and coached the live application and stayed involved in the reviews

The work is transforming the whole environment, making a new resource available for more long-term improvement and immediate problem response. Cycle times are improving and there is every expectation of achieving the 75% reduction over two years required by the strategy.

7. Persistent leadership

Not for nothing is Deming's first principle "Practise Constancy of Purpose". Most readers will have seen initiatives and programmes that promised much but lost momentum after a year or two. What does the joining-up concept have to offer in support of long-term persistence?

First by lining up this work to the history of improvement within the organisation, honouring what was useful and can be built upon, learning from that which was not.

Secondly in the foundations laid: if it has been integrated with key business objectives as understood by and demanded of line management, then they will be the ones wishing to add pace when the first rush is over.

There are many other joined-up ideas that will occur to the reader as the work progresses. Issues like planning for continued education for new starters as part of the plan, not an afterthought, like ensuring that being an improvement leader is a required part of the career development path. All such integration moves people on from seeing systematic improvement as optional.

Joining up the methods for long term improvement with the challenges of immediate problem response is also vital for the credibility of any transformation. Change agents must learn how to apply their systematic methods to the urgent problems, not letting a theoretical "best" be the enemy of "good enough for the moment". There is a long list of process improvement methods, which help, but they have to be used!

8. In conclusion

Joined-up leadership: evidence—theory—application—learning—decision, does make sense but it's far from common. It's not compulsory but we think it's essential, for we have tried functional, reactive management and found it wanting.

It's rarely rocket science at the technical level, but you have to really know the whole basic tool set and learn how they work in many different environments.

Deming's model—his System of Profound Knowledge—sets the scene and guides individuals and organisations in their learning.

And it works when it's done properly as anyone who studies Toyota can see.

But using it properly needs soft and hard skills, intimately joined up, and that takes a lot of learning and practise.

Joining-up is worthwhile!

PMI helping leaders

PMI has grown up along with the quality movement, beginning in the early 1980s in the US, and since 1990 in the UK. We have worked with many organisations whose improvement efforts have a similarly long pedigree, and strive to keep our application knowledge at the leading edge, so as to add value for even the most experienced practitioners in our clients. Clients over the years have included Rolls-Royce plc, Rover Group, now BMW at all their UK plants, Corus, Airbus UK, Woolwich Insurance Services, plus many smaller companies and suppliers of the above.

We have watched with some frustration the routine compartmentalising of improvement programmes and initiatives, which may have been the only way that new ideas could be absorbed at first. Two factors now lead us to be more ambitious for our clients and ourselves.

More and more managers who are now achieving senior line positions have first hand experience of the benefits of systematic improvement as the way to achieve their business goals. They are ready to demand the same from their new teams and have the knowledge to ask for their support staff to integrate the work.

In our practice we have seen the practical benefits of using Deming's System of Profound Knowledge as the foundation for all improvement work, including Lean and Six Sigma. And we have integrated the technical toolsets (which, as all practitioners know, work when used diligently, but can generate so much resistance when forced upon people or disconnected from critical goals) with the consulting and influencing skills needed by all change agents. With this background we can deploy the skills and application of Six Sigma in a unique way.

So whether you are a line or support manager, PMI can help you understand where you are, make sense of where you could aim to be and how to get there. We can jointly develop a plan for rapid progress, and as we work with you and your staff we ensure that you get results and that your collective knowledge and skills are deployed so that you can maintain them and improve further.

Jan Gillett, Jane Seddon