



Lean Enterprise Architecture: Making the Change

Written by

Sue Rule

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In the first paper in this series, P. Grant Rule looked at some of the reasons why four out of five organisations fail to obtain the quality software systems their business needs.

The market leaders – the one in five - not only predictably deliver what their customers want, but they do it up to ten times faster, for costs that are as little as one eighth of ‘the norm’. In this paper, Sue Rule looks at what makes the difference.

Being Lean means being effective at delivering customer value. Lean principles, properly applied, revolutionise the management, organisation, development and delivery processes of the business. Because it eliminates unproductive activity (and thereby reduces costs), Lean is not only a valuable tool for the smart commercial business, it also has a huge amount to offer a public sector struggling to cope with budget reductions.

Unfortunately, Lean applied as a buzz-word to a cost-cutting or process improvement exercise at best achieves very little. At worst, it actually detracts from the effectiveness of the organisation, resulting in more waste and higher costs in the medium to long term.

A Real Lean transformation involves a fundamental change of thinking throughout your value chain. You can't really be “a little bit Lean” any more than you can be “a little bit pregnant”. It's the once for all business change that enables your organisation to flex and respond to future changes. It's not something that you can fly consultants in to do for you but it does need the support of a knowledgeable Lean guide.

Buyer beware. With Lean becoming an increasingly fashionable term, there are growing numbers of exponents of LINO – Lean In Name Only. If your transformation programme is LINO it will deliver value to your consultant. But not to your customers.

If you want to get somewhere, don't ask directions from someone who has never been there.

Planning Your Journey to Lean Effectiveness

Each individual organisation will have a unique current footprint of effectiveness. Every organisation has different priorities and constraints. It will have different goals and different priorities. Those responsible for the Lean initiative need to understand what *their* customer values:

- why the organisation will benefit from Lean transformation;
- what the organisation is seeking to achieve (quantified goals) and
- how it is going to achieve those goals - not in terms of a detailed tactical plan but in terms of an effective, outcome-focused approach

The scope of your transformation programme depends on how extended and complex your value stream is. Neglecting key suppliers is risky - as Toyota themselves have found to their cost. This is why it is essential for Lean thinking to encompass your complete value stream. A fully effective



Subjective decisions about sourcing and procurement, performance and project management, repeat past failures again and again.

Lean transformation must include the IT function - both in terms of operations, maintenance and support AND in terms of enhancement, new development and innovation.

We observe that one of the characteristics of left-shifted, ineffective organisations is the tendency to make business-critical decisions based on the experience of the decision-makers and their preferred advisors. This can work reasonably well in business areas where the decision-making unit has a good body of knowledge and experience to draw on. However, one of the consequences of persistently low effectiveness in IT is that hardly anyone - no matter how senior they are - has experience of effective software systems. Subjective decisions about sourcing and procurement, goal-setting and performance measurement, supplier and programme management therefore repeat past failures again and again.

There is huge potential in IT not only to better support a Lean focus on customer value, but also to remove waste elsewhere and free up expensive human resources to do the creative work they do best. To release this potential, it is essential to focus the organisation's decision-making and management processes on the delivery of value to the customer - and not on a portfolio of individual agendas.

If everyone at all levels in the organisational value stream uses a systemic, experiment and evidence-based approach to decision-making, it builds trust between the stakeholders, and fosters a positive culture of continual learning and discovery. It keeps the Lean value stream honest by making performance metrics visible to all, and the responsibility of all. Success becomes a joint venture, and the need for individuals to pursue personal agendas is significantly diminished.

Identifying Value From the Customer's Perspective

The arbiters of Lean effectiveness are your customers. The people who have most information about what your customers value are your marketing department - so a good starting point to finding out what your customers value is to read your company advertising! The smart business offers its customers what the marketers reckon its customer base wants. But does your advertising make the man or woman on the Clapham omnibus think, "Ah yes, I must recommend that company to my friend." Or does it elicit cynical laughter?

No matter how tuned-in your marketing department is, if your firm doesn't deliver, in these days of social networking it won't take long for the word to get out.

No matter how tuned-in your marketing department is, if your firm doesn't deliver, in these days of social networking it won't take long for the word to get out. So you need the performance management in place to make sure your customers actually do enjoy the value your marketing department promises in every aspect of their dealings with your business.

In my personal experience as a consumer of various business services, there is usually no-one in the value stream who is able to *see* the end-to-end process as the customer experiences it, let alone manage it. Locally-optimised processes therefore continually frustrate the attempts of the

customer to get what she needs. This is not the fault of the individuals she is dealing with, but of the process in which they are working - and which they clearly have no power to influence.

Software as a component of the value stream is growing in importance every day, and “Computer says no” does not wash with anyone’s customers. Business software is competing against the effectiveness of web apps that live or die on delivering customer value. There may be an “app for that” but most people will only use it if it’s better and easier than the alternative.

The Net Promotor Score® folk reckon it takes 6 promoters to counter-balance just 1 detractor. So next time you are evaluating the cost of improving the value-focus of your production team, or the risk of empowering your customer-facing staff, consider the impact on your marketing budget. How much can your business afford to spend playing catch-up?

Making the Change - Gather The Evidence

Real Lean starts with a hard, honest look at current performance. Objective analysis of your complete systems performance is the only way to truly map the value stream and identify where waste occurs.

You get what you measure - so if you want success, it is a good idea to measure success. A quantified baseline of performance puts numbers on your improvement goals so that you can measure the success of your change programme.

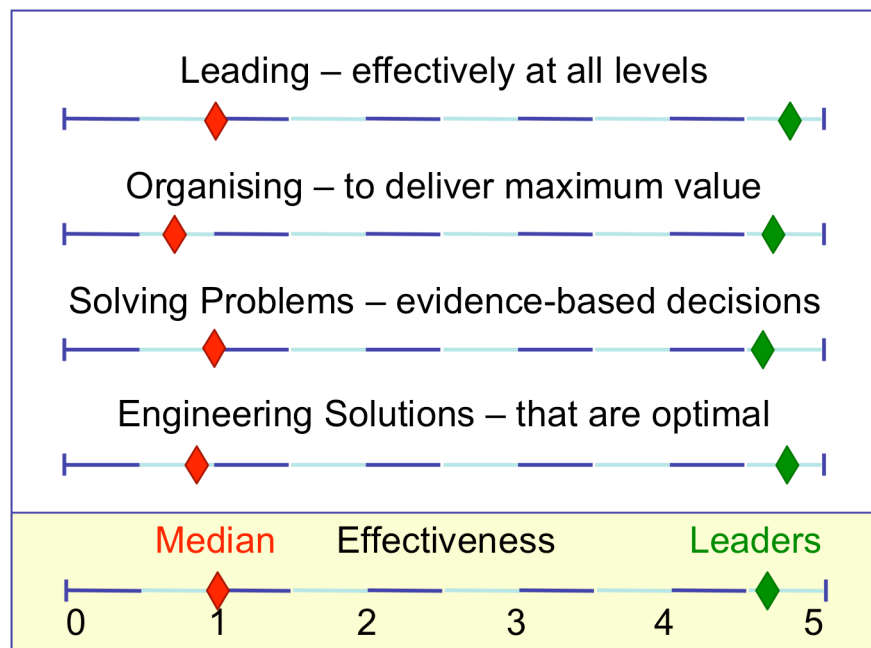


Fig. 1 The Symptomatic Diagnostic for Rightshifting Effectiveness gives you an objective view of how well your company culture supports the four essential ingredients of effectiveness.



Measurement guru Tom Gilb regularly challenges his audiences to come up with a goal he cannot quantify. So far, no-one has found one. Do it faster and cheaper by all means, but the focus is on doing it better. If you have no measure of “better”, it’s likely to be LINO.

Essential Ingredients of Effective Systems

SMS has been studying and researching the causes of endemic “left-drift” in software-intensive systems for over a decade. We observe that businesses delivering performance at the right-hand, high-performance, end of the graph organise themselves differently. Throughout the system of work, there are people thinking about how to improve the value delivered to their own internal customers – the next step in the value stream – to enhance the experience of the end-customer. Not only that, but such people are able to act on their ideas and insights, inspire others, and make a real difference. We label this characteristic “Entrepreneurial Leadership”, but the whole point is that this behaviour is very much NOT the sole preserve of the organisation’s senior management. Entrepreneurial Leadership is a core business skill for all contributors to the value stream.

It’s not the people that are different – although high performing organisations are good places to work for all sorts of reasons, and do attract the best people. But effectiveness is about enabling the talent of the people you already have. It’s the processes and organisation around them that obscure and suppress that talent, so the next keystone of effectiveness is Organisation.

This is where the Manifesto for Agile Software Development can help us. The Agile manifesto states:

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- *Individuals and interactions over processes and tools*
- *Working software over comprehensive documentation*
- *Customer collaboration over contract negotiation*
- *Responding to change over following a plan*

That is, while there is value in the items on the right, we value the items on the left more.

As it clearly states in the manifesto, this approach was promoted by leading thinkers in the software industry who could see the waste of talent and resources caused by redundant processes and dead-hand management techniques. It is a bottom-up rebellion against the crippling ineffectiveness of traditional approaches to managing the software development process.

The focus of Agile is on improving the experience of staff engaged in the development process. Lean is focused on improving the experience of the

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organisation's customers. Together, they can be used to create enterprise-level business agility which delivers optimum value to all stakeholders.

Effective organisations set skilled development teams business goals informed by customer demand. Schedule, budget and scope are arrived at by collaboration between the business side and the development team, and jointly monitored to keep development activity aligned to the delivery of business and customer value. The development team takes ownership of schedule and budget, leading to much better compliance and significantly reduced risk. Performance measures are the metrics that are in daily use by the team, not figures grafted on to keep problems and failures hidden from management dashboards.

We label this characteristic “responsibility-based planning.”

Of course, one of the biggest issues with responsibility-based planning arises where an outsourced relationship is involved, since it asks the customer to place some responsibility for their business outcome in the hands of the supplier. But the reality is that this happens anyway. The Standish Chaos Report charts a dismal history of failed and challenged IT projects – what is the cost and impact on business outcomes for the organisations that commissioned them? How do you begin to measure the waste of time, talent and money, let alone the lost opportunities?

Better to recognise reality, and create a collaborative process which brings all the essential stakeholders into the decision-making process.

Whether development is sourced in-house or externally, it is a complex creative process. Problems will arise and there are numerous decision points to tackle. The adoption of a systemic, experiment and evidence-based approach to decision-making is crucial to achieving effectiveness. It is difficult to prioritise the four essential ingredients of effectiveness, since they fit together like genetic code. But if the approach to transforming effectiveness is based on the experience of the existing management team, their traditional advisors, and their traditional procurement practices, it carries within it the seeds of its own failure unless there is some attempt to identify what they don't know, and plug the gap.

Evidence-based decision-making creates the right environment for the fourth pillar of Rightshifting – an expert engineering workforce. By this, we mean a skilled, engaged and innovative design and development team, able to take responsibility for the concept-to-cash value stream.

It is well known that software requirements cannot be defined up front. The mere fact of starting to develop a software-intensive solution affects the way the user thinks about the problem. Not to mention the other factors which affect the user's needs and preferences, most of which are outside the control of the user, let alone the development team. Effective organisations recognise the fatal flaws of the “big design up-front” approach and explore as many solution options as feasible, narrowing the set of solution options to be pursued at each critical decision point.

Using a systemic, experiment and evidence-based approach to decision-making is crucial.

Set-based concurrent engineering... gives innovation room to breath

Commitment to any one set of options should be deferred until the last responsible moment. This is known as “set-based concurrent engineering”. It gives innovation room to breath by allowing development teams to test ideas and gather evidence on which to decide, based on the business parameters of the project, which are the best options to pursue. Knowledge gained in exploring other, discarded options, is collected for future reference. In this way, it is not wasted, but can be used to better define the parameters of possibility on future projects.

Expert engineering is about people using and growing their talents. It’s not about writing computer code. Rather, it is about achieving the most possible with the least impact on available resources. Agile teams that are fully engaged with the delivery of value to the end customer can also help the business understand the limitations of technology and support the development of the *right* solution - whether it has an IT content or not.

Summary: The Four Essential Ingredients of Rightshifting

1. LEADING: Entrepreneurial Leadership.

Creating, communicating and implementing a compelling, achievable vision; inspiring commitment and enabling cross-competency innovation focused on delivering value to all stakeholders.

2. ORGANISING: Agile, Responsibility-Based Planning

Collaborating to achieve maximum value at minimum cost; team responsibility for work schedule, budget, and value delivered.

3. PROBLEM-SOLVING: Evidence-based Decision-Making

Everyone at all levels of the organisation using a systemic, experiment and evidence-based approach to solving problems and making decisions.

4. ENGINEERING: Expert Engineering Workforce.

Developing innovative, value-focused, solutions using a set-based, outcome-driven approach that builds and uses relevant know-how.

The four essential ingredients of effectiveness are all interdependent. Trying to pursue one without the others is likely to optimise the local performance of one group or department, often to the detriment of the end-to-end value stream.

“The Essential Ingredients of Rightshifting fit together like genetic code.”





Where to Start

An objective analysis of current effectiveness, together with the organisation's value map, will identify the biggest current constraints on effectiveness are and therefore where investment will deliver the best return. It may not be where you think they are - so start as you mean to go on, by collecting and studying the evidence.

The SMS Symptomatic Diagnostic of Organisational Effectiveness is a low-cost, objective assessment of your current effectiveness levels. It is specifically designed to turn the lights on at your party, and open the conversation with key stakeholders about what improving effectiveness means to your business bottom and top line.

Author Biography



Sue Rule is Director of the SMS Rightshifting Programme with responsibility for SMS communications. She is a member of the Chartered Institute of Marketing.

Sue has worked on the organisational structure and processes of SMS for five years, playing a key role in the company's adoption of the Lean approach it advocates to clients.

She is passionate about improving business sustainability through better management of creative people.

Sue has worked closely with SMS' MD, Grant Rule, to apply lean engineering principles to develop the SMS Rightshifting product suite for transforming the IT-Business relationship. Rightshifting aligns all activities in the value chain to deliver the results business needs from 21st century technology.



SMS quantifies the value and potential of information systems. We work with private and public sector decision-makers on behalf of stakeholders to improve outcomes for the customer and taxpayer while reducing cost & risk.

Our recognised specialists have wide experience, enhanced by SMS' objectivity as an independent consultancy and trusted 3rd party. This definition-to-deployment know-how enables us to contribute authoritatively on the cost-effective use of softsystems to implement our clients' business strategy.

Through data collection, studies and analysis, we provide selected clients with unique and objective insights into the whole-life effectiveness and efficiency of software-intensive systems. Using evidence-based methods and benchmarks of value delivered, we coach business people and technologists to work as partners in delivering better value to customers and stakeholders.

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SMS Ltd.
St. Clare's, Mill Hill,
Edenbridge,
Kent TN8 5DQ

T: +44 (0) 1732 863 760
<http://www.smsexemplar.com>
rightshift@smsexemplar.com

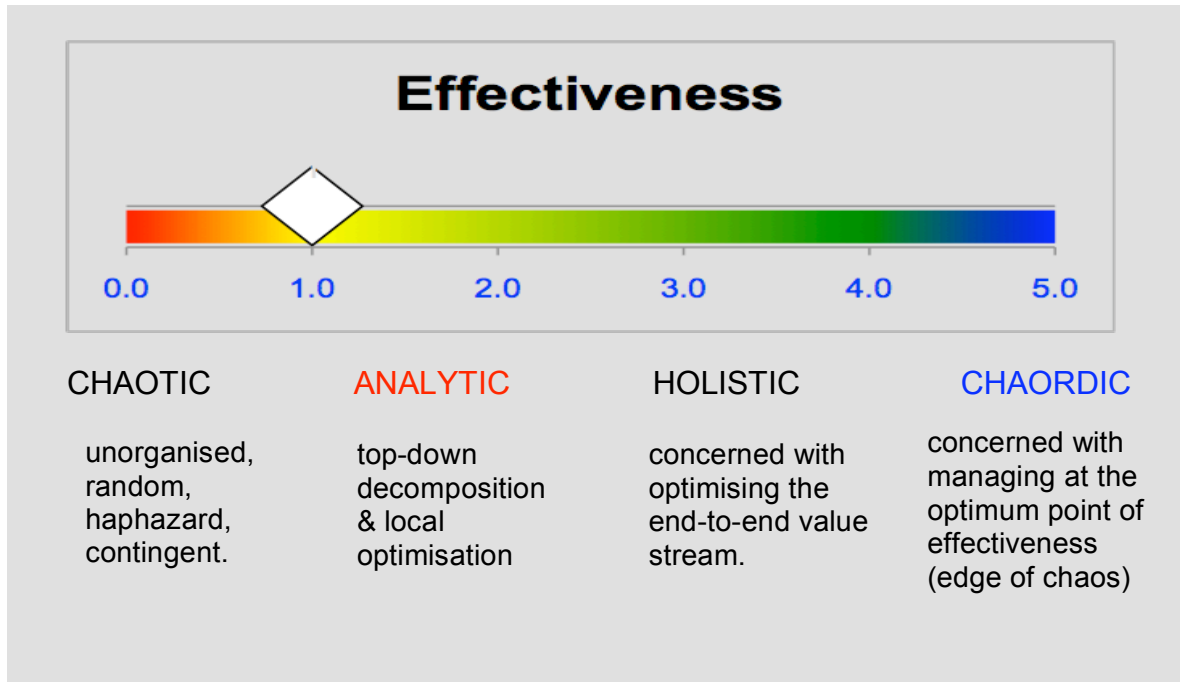


How to deliver real results in a challenging world

Look – Ask – Model – Decide - Act

Step 1: Look at the symptoms:

The Symptomatic Diagnostic for Rightshifting Effectiveness

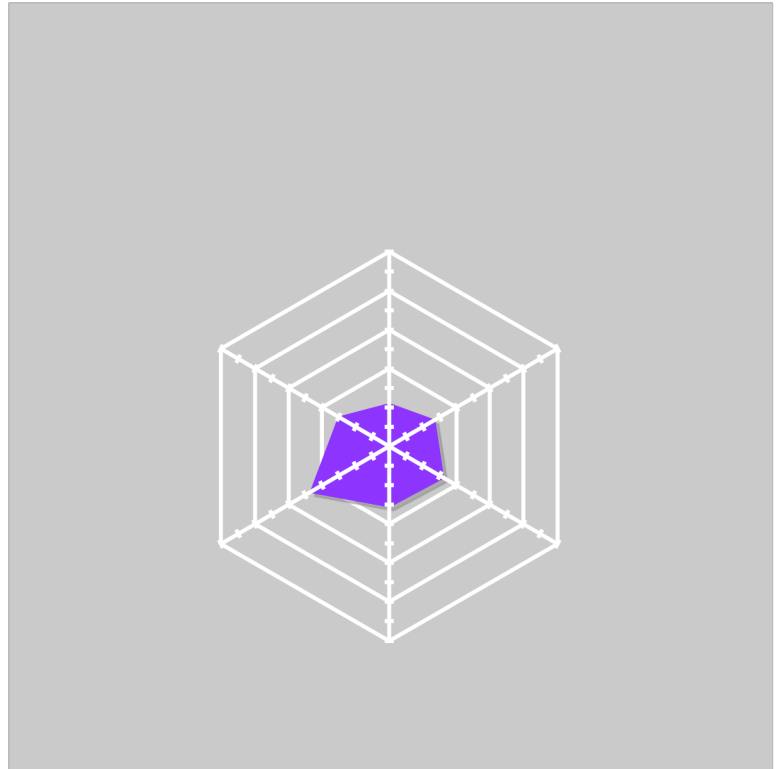


- How does your organisation score on a 5-point scale of effectiveness?
- Does your organisation have a shared corporate focus on the vital few things that matter?
- How does your organisation score on the four essential ingredients of effectiveness?
- How sustainable is your business?

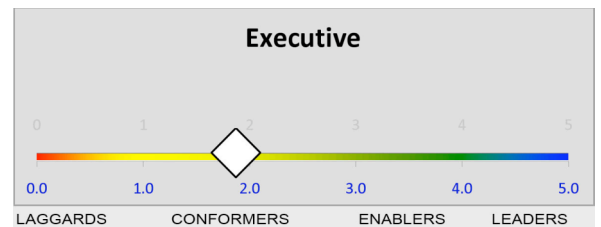


Effective organisations foster a corporate focus on the vital few things that matter:

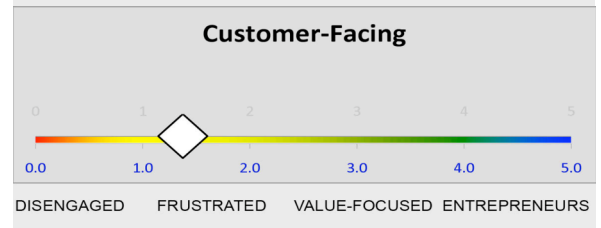
The Symptomatic Diagnostic for Rightshifting effectiveness tells you how well aligned your system of work is.



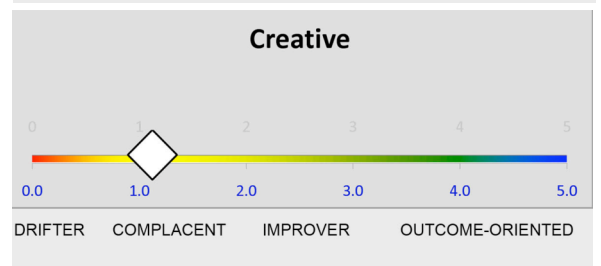
EXECUTIVES are responsible for establishing the organisation's vision, strategy & goals, for deciding the market in which the organisation will operate, for designing the system of work and enabling customer-facing and creative staff to deliver value effectively and efficiently.



CUSTOMER-FACING staff are responsible for understanding the customers' desired outcomes and what they perceive to be of value; they are crucial to deciding the design of products & services, and for the effectiveness of their value streams.



CREATIVE staff are responsible for their own competency, for generating the new know-how that is needed to solve problems and engineer solutions that are valuable to all the organisation's stakeholders.



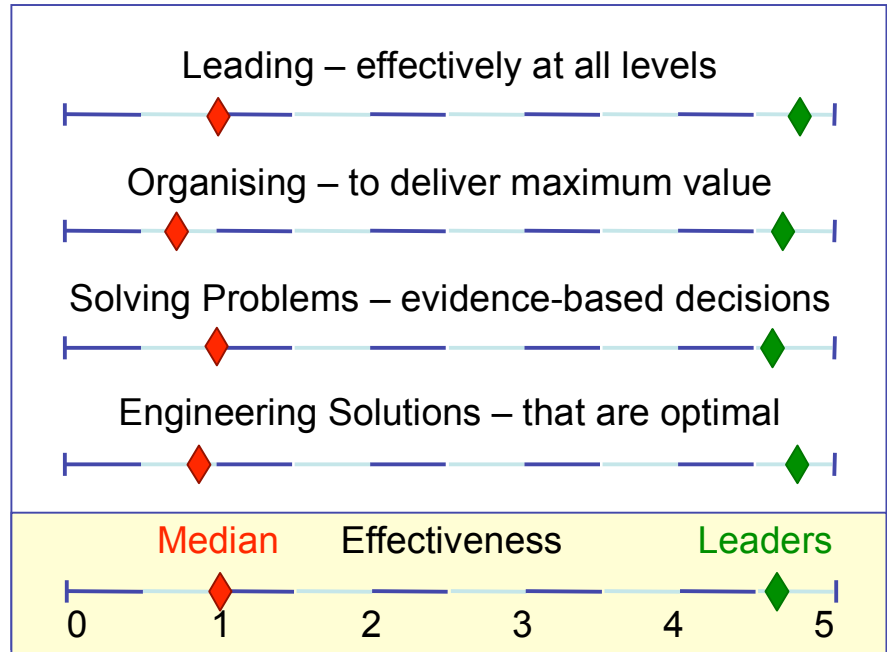
Are your executive, creative and customer-facing teams pulling in the same direction?



There are four essential ingredients of effectiveness:

Leading – Organising – Problem-solving - Engineering

The Symptomatic Diagnostic for Rightshifting effectiveness gives you an objective view of how well your company culture supports the four essential ingredients of effectiveness.



LEADING involves creating, communicating & implementing a compelling, feasible vision while inspiring & enabling cross-competency innovation & commitment focused on delivering value to all stakeholders.

ORGANISING involves employing responsibility-based planning & collaborating to achieve results efficiently.

PROBLEM SOLVING involves everyone at all levels in the organisation using a systemic, experiment & evidence-based approach to decision-making.

ENGINEERING SOLUTIONS involves innovating via a set-based, value- & outcome-oriented approach to design



Effective Leading, Organising, Problem Solving & Engineering form the DNA of the Rightshifting organization.

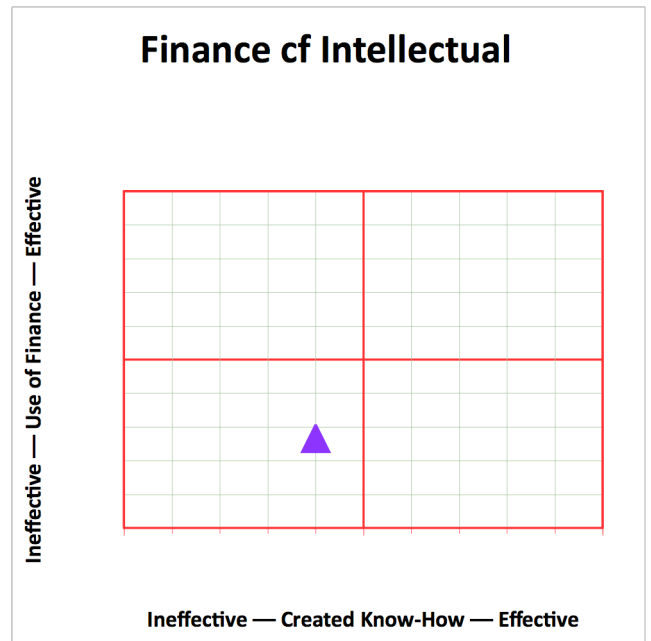


Why do we need to transform the Business-IT relationship?

The current level of waste in the average value stream is unsustainable. It drives up costs, haemorrhages critical knowledge, depresses staff morale, and infuriates consumers and taxpayers. Softsystems are failing to deliver the full potential of technological advances.

The Symptomatic Diagnostic for Rightshifting effectiveness gives you a Balanced Scorecard view of four key capitals:

- Financial Capital
- Manufactured Capital
- Intellectual Capital
- Social Capital



Plan for tomorrow. Act today.

How does the Diagnostic work?

An SMS specialist in effective systems performance will spend one day on site interviewing staff in various roles. This gives us the evidence to prepare a detailed report diagnosing your current performance levels.

Your Rightshifting Coach will then arrange a suitable date to present the report findings to key stakeholders and decision-makers, identify the biggest areas of concern, and work with the stakeholders to develop an action plan.

How much does it cost?

The initial outlay to gather evidence and present the findings in an Executive Briefing is just £4,900

Can the Diagnostic be combined with traditional benchmarks and assessments?

A Diagnostic can be combined with other studies to benchmark productivity, departmental performance, or compliance to quality standards. Talk to us about what you need.

How do I start?

Call the SMS Rightshifting team on +44 (0)843 289 5174 and arrange for one of our Rightshifting Partners to visit you.