Transforming IT
from cost centre to strategic enabler

This article is based on a webinar presented by Sue Rule, with Alan Cameron, Tom Cagley and Mike Harris, broadcast by ITMPI on 4th December 2012.

The effective IT organization is invisible. It is fully integrated into a business which is, as a consequence, ahead of the game in exploiting the potential of new technology.

Many if not most business IT functions are still some way away from this ideal. There is little shared vision of the value IT delivers. The business managers only see the cost, and the more IT budgets are cut, the less is spent on innovation and "nice to have". So business users get more irritated and alienated, and however hard everyone in IT works, the perception of value delivered decreases.

It's a vicious circle that benefits neither those who work in IT nor the business which funds them. Nor does it benefit the end customer. So often the customer-facing staff of an organization still have to work hard to compensate for the systems and software they have to work with. In these circumstances, far from supporting the prosperity of the company, IT is driving business away from your door.

This article looks at how evidence-based decision-making informed by intelligent use of metrics underpins successful management of IT performance. Such a disciplined quantitative approach provides the right business and management context for IT professionals to deliver full value, and enables both private and public sector organisations to embrace the potential of technology to improve the experience of customers and taxpayers.

Intelligent Metrics Practice

As measurement specialists, we observe varying levels of maturity in the use of metrics for managing IT performance:

Level 1: Minimal Metrics
At the basic level, measurement is not seen as important, so the metrics collected are the easiest to gather – activities, tasks, costs. Effectiveness and value are abstract concepts that are outside the scope of measurement.

Level 2: Reporting
At the next level, Management understands the need for some measurement, but there is little or no business context in which to make sense of the metrics collected. Results are reported after the event, and tend to come as a surprise. The response to perceived under-performance is typically to allocate blame. Measurement programmes which are stuck in a Level 2 environment are likely to be canned as they are adding no value.

Level 3: Understanding
At this level, the management team understands the value of objective reporting in understanding root costs, and the root causes of systemic issues. Internal teams and suppliers can be benchmarked effectively, and the organisation develops the ability to focus on addressing problem areas. There is recognition of the need for real improvement rather than managing the numbers.

Level 4: Prediction
Once understanding the effective use of metrics is a given, the organization can begin to engineer-in value based on a factual knowledge of how improved performance is leveraged. The balance of the time/cost/quality is understood. The effects of process improvement initiatives are predictable, removing the risk of expensive investment in change programmes which achieve no real business benefit.

Level 5: Controlling
An organization with mature metrics capability makes investment decisions based on data. Strategic planning is based on historical data and benchmark comparisons to afford the best opportunity for success. Development processes are assessed for value delivery, and continuous improvement based on these quantitative measures is enabled.

These levels tend to correlate to the effective use of IT as a business enabler – which is hardly surprising. What you manage is what you are actively measuring. If you are primarily measuring cost, then cost is what you are managing. In order to manage value delivered, then value delivered is what must be measured.

Assessing IT Value

IT is complex and so one has to define the factors to be taken into account by value-mapping capabilities. The IT- Capability Maturity Framework has been developed specifically to give a 360 degree view of IT capability, and is a useful tool for both baselining the current state and managing an organization-level IT transformation.

Managing IT Like a Business

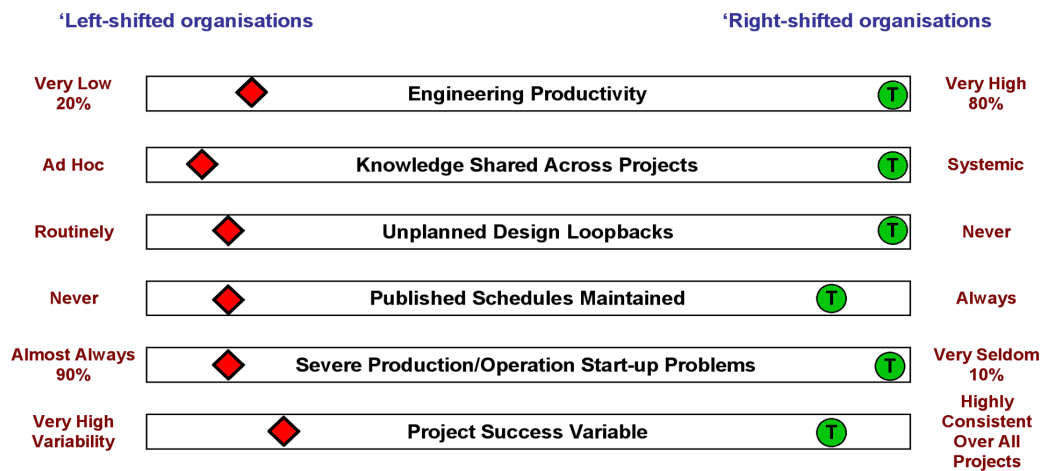|	
ITG IT Leadership & Governance	**RM** Risk Management
BPM Business Process Management	**AA** Accounting & Allocation
BP Business Planning	**ODP** Organisation Design & Planning
SP Strategic Planning	**SRC** Sourcing
DSM Demand & Supply Management	**IM** Innovation Management
CFP Capacity Forecasting & Planning	**SAI** Service Analytics & Intelligence

Used as a strategic tool, an IT-CMF assessment provides the data to move the organization from Reporting to Understanding, Prediction and Control. It begins to change decision-making from subjective and emotion-based, and link it to facts and measureable changes. This enables IT to be managed like any other business function, and begins to nurture a shared vision of value.

People + Knowledge = Value

Effective IT organisations demonstrate the following characteristics:

- high level of productivity in software engineering
- high level of knowledge-sharing across projects
- few or no unplanned design loopbacks (rework)

- high level of predictability
- low levels of production/operation start-up problems
- consistent levels of project success

'Left-shifted organisations   **'Right-shifted organisations**

Very Low 20%	◆ Engineering Productivity Ⓣ	**Very High 80%**
Ad Hoc	◆ Knowledge Shared Across Projects Ⓣ	**Systemic**
Routinely	◆ Unplanned Design Loopbacks Ⓣ	**Never**
Never	◆ Published Schedules Maintained Ⓣ	**Always**
Almost Always 90%	◆ Severe Production/Operation Start-up Problems Ⓣ	**Very Seldom 10%**
Very High Variability	◆ Project Success Variable Ⓣ	**Highly Consistent Over All Projects**

Ref: "Product Development for the Lean Enterprise", Michael Kennedy, 2003

IT is knowledge-work. It requires skilled and experienced people, and none more so than in the area of software development.

Thus, the key factor to creating and sustaining value from IT is the management of people and the management of knowledge.

People learn by exploring, through trial and error. Agile recognises this fact, and applies it to the process of software development. But if we talk about "Agile Transformation" we are not talking just about a set of techniques for developing software. We are really talking about the change of mindset needed to move IT out of

"Try again. Fail again. Fail better."

Samuel Beckett, Irish poet

its high-cost/low-value box into its rightful place as strategic business enabler. Getting the metrics practice right is crucial to successfully making this change. A top-down management culture which penalises failure and seeks to reward heroes stifles any sense of scientific exploration. It creates a management straitjacket that actively discourages workers from using their skills and expertise to best effect.

To deliver value, the management approach needs to focus on creating a learning organization where people can work together towards a common purpose, learn from mistakes, and take ownership of their own goals and activities. This requires clarity of business purpose, and alignment of goals, incentives and activities towards the achievement of that purpose. Metrics must of course also align to the direction of travel, so that the necessary information is gathered to improve future decision-making and increase knowledge.

Fixed Mindset	Agile Mindset
• Ability – static • Goal – look good • Challenge - avoid • Failure - defines your identity • Effort - for those with no talent • Reaction to challenge - helplessness	• Ability – can grow • Goal - to learn • Challenge - embrace • Failure – provides information • Effort - path to mastery • Reaction to challenge – resilience

Summary

IT processes huge amounts of data really fast. IT allows you to do things you couldn't do any other way. What you do with the information processing capability IT offers is what adds value to the business. It is a still a young branch of industry and we are still making discoveries about its potential. Transformation is about changing business thinking to harness that potential.

The agile mindset believes that we are all a work in progress: continuous improvement IS 'business as usual'. In fact, if you are not continuously improving, performance is continuously degrading due to the inevitable change that is happening around you.

An agile business philosophy isn't fixed, but continues to change and grow as we learn more about it. The journey, and the knowledge gained along the way, is more important than reaching an arbitrarily fixed destination – which, once attained, will only reveal another and more distant objective.

Three key capabilities which will help us facilitate a real change in the way business and IT work together are:

1. Understand and define IT value

2. Create an ability to predict and control outcomes

3. Nurture an Agile mindset