2 Performance Measurement

One of the greatest challenges faced by those trying to manage IT in today's fast moving economy and complex technical environment is knowing whether the "ship is on course" and being able to predict and anticipate failures before it is too late. Like driving a car or steering a ship, good instruments are essential. The use of measures to help steer the IT function has for many years been a challenge that few appear to have successfully addressed, which is why the expression "it's like driving a car with a blacked out windscreen and no instruments" is often used. If it is difficult for those literate in technology and relatively close the IT function, then it is even worse for the end customer who finds technical jargon a smokescreen and lack of information relevant to his business a major headache.

There is no doubt that a practical and effective way to measure IT performance is an essential part of any IT Governance programme, just as transparency and reliability of financial results is a Corporate Governance necessity. Performance management is important because it verifies the achievement of strategic IT objectives and provides for a review of IT performance and the contribution of IT to the business (i.e. delivery of promised business value). It is also important in providing a transparent assessment of IT's capability and an early warning system for risks and pitfalls that might otherwise have been missed. Performance measurement provides transparency of IT related costs, which increasingly account for a very significant proportion of most organisations' operating expenses.

Stakeholders play a key part in IT Governance, since at the heart of the governance responsibilities of setting strategy, managing risks, allocating resources, delivering value and measuring performance, are the stakeholder values, which drive the enterprise and IT strategy.

For performance measurement to be successful, it is important to understand who the stakeholders are and what their specific requirements and drivers are so that the performance measurements will be meaningful to them. An IT Governance best practice is the approval of measures by stakeholders. A performance measurement system is only effective if it serves to communicate to all who need to know what is important and then motivates positive action and alignment to common objectives. The measures are not an end in themselves but a means to take corrective action and to learn from real experiences. Concise and understandable communication and clear accountabilities are therefore critical success factors if measures are to be turned into effective actions.

"If you can't measure it, you can't manage it"

2.1 Why is performance measurement important?

"Teams that don't keep score are only practising."
Tom Malone, President Milliken & Company

Performance measurement is a key component of IT Governance. It verifies the achievement of strategic IT objectives and provides for a review of IT performance and the contribution of IT to the business (i.e. delivery of promised business value).

▼ Performance measurement supports the other key elements[2] of IT Governance by:

- *Alignment – monitoring the strategic direction of IT and the alignment of IT and the business.*
- *Value Delivery – assessing whether the IT/Business organisation is providing business value from IT and assessing ROI.*
- *Risk Management – monitoring whether risks are being identified and managed and measuring the cost and benefit of risk management investments.*

2. Board Briefing on IT Governance, 2nd Edition, the IT Governance Institute®.

- *Resource Management – measuring the effectiveness of sourcing and use of IT resources, the aggregate funding of IT at enterprise level, and measuring IT capability and infrastructure compared to current and expected future business requirements.*

Performance measures are required to ensure that the outcomes of IT activities are aligned to the customer's goals. Internal IT process measures are required to ensure that the processes are capable of delivering the intended outcomes cost-effectively. Advanced performance measurement enables the measurement of key aspects of IT capability such as creativity and agility (new ideas, speed of delivery and success of a change programme), development of new solutions, ability to operate reliable and secure services in an increasingly demanding IT technical environment, and the development of human resources and skills.

Performance measurement may also be a vital tool when assessing mergers and acquisitions to allow earlier insight into IT strengths and gaps. The introduction of a performance measurement system focused on a few key measures can be an excellent way to kick-start an IT Governance initiative, providing, perhaps for the first time, transparency of critical activities and a way to bridge the communication gap between IT and its customers.

2.2 What does performance measurement cover?

Performance measures are the "vital signs" of an organisation. They quantify how well the activities within a process or the outputs of a process achieve a specific goal. The measures tell people what and how they're doing as part of the whole. They communicate what's important throughout the organisation: strategy from top management down, process results from the lower levels up, and control and improvement within the process. Only with a consistent view of the "vital signs" can everyone work toward implementing the strategy, achieving the goals, and improving the organisation (Vital Signs, by Steven M. Hronec).

- An IT performance measurement system should help to:

  - *Focus on the customer to increase customer satisfaction*
  - *Improve processes so problems are anticipated and prevented*
  - *Understand and reduce costs*
  - *Encourage and facilitate change by obtaining facts about current state, desired state and the gap that needs to be met*
  - *Set realistic benchmarks for comparison*

- Effective performance measurement of IT will enable management and other stakeholders to know whether or not IT is meeting its objectives. It provides a transparent and objective communication mechanism, as long as the measures are understandable by both the customers and the service providers. The measures should address two aspects (The IT Governance Institute's CobiT Management Guidelines provides example metrics for all IT processes and explains the difference between Goal Indicators (KGIs) and Process Indicators (KPIs)):

  - *Outcome focused – is IT meeting the objectives set by the customer?*
  - *Process focused – are the IT processes operating effectively and likely to lead to the customer objectives being met?*

- The IT Governance SIG recommends that performance measures meet the following requirements to be successful:

  - *Defined using a common language appropriate and understandable for the audience*
  - *Approved by the stakeholders*
  - *In keeping with the culture and style of the organisation*
  - *Based on targets derived from IT's objectives*
  - *Contain a mix of objective and subjective measures*
  - *Flexible and responsive to changing priorities and requirements*
  - *Based on easy to collect actual measurement results*
  - *Include both positive measures (to motivate) and negative measures (to correct)*
  - *Balanced, i.e. measuring more than just financial results. The Balance Scorecard is recommended as an effective approach providing financial, customer, internal and learning dimensions (The Balanced Scorecard, Kaplan & Norton)*
  - *Limited in number and focused only on priority areas but sufficient to support decision making (passes the "so-what?" test)*

- *Easy to interpret (e.g. reporting should be visual using RAG or heat map techniques) and permit drilling down for more detail and examination of root causes. A scorecard is sometimes not appropriate, e.g. for project review and prioritisation or detailed analysis (where aggregation distorts or confuses)*
- *Show trends to enable backward examination and forward extrapolation*
- *Consolidated for hierarchical reporting*
- *Support benchmarking internally between peer groups and externally with best practice*
- *Integrated if possible with any existing business level performance measurement system*

2.3 Who are the stakeholders and what are their requirements?

Stakeholders play a key part in IT Governance. At the heart of the governance responsibilities of setting strategy, managing risks, allocating resources, delivering value and measuring performance, are the stakeholder values, which drive the enterprise and IT strategy. For performance measurement to be successful, it is important to understand who the stakeholders are and what their specific requirements and drivers are so that the performance measurements will be meaningful to them. An IT Governance best practice is the approval of measures by stakeholders (IT Governance Institute – Board Briefing on IT Governance).

For the purposes of performance measurement, we have classified stakeholders into three groups: investors, controllers and deliverers/providers with specific measurement interests and requirements as follows:

- Investors – (business management, business partners and IT management)

  - ***Interests*** *– they provide the funding and want to see a return on their investment and alignment with their strategic objectives*
  - ***Requirements***
    - *Financial – ROI, cost v. budget, productivity, benefits realisation*
    - *Customer – surveys and feedback (subjective as well as objective), strategic objectives v. actual projects/activities*
    - *Process – capability benchmark, performance exceptions, transformation capability and tactical agility*
    - ***Learning*** *– attrition, retention, skill profile, resource short fall, training and development*

- Controllers – (internal and external audit, risk and compliance officers, finance, human resources, industry specific regulators)

  - ***Interests*** *– they monitor risk and compliance and have an interest in due process, regulatory and legal requirements, evidence of governance and risk management, amount of rework/repeat effort, and compliance with strategy*
  - ***Requirements***
    - *Financial – losses, investments in control improvements*
    - *Customer – exceptions/breaches, risk management, compliance with legislation and regulations*
    - *Process – control effectiveness, compliance*
    - *Learning – risk identification, risk prevention*

- Deliverers/Providers – (IT service and product suppliers, in-house and outsourced, contract and procurement management and staff involved in IT delivery and support)

  - ***Interests*** *– they need to meet customer expectations, and deliver in an efficient and effective way, preserving and enhancing reputation*
  - ***Requirements***
    - *Financial – operational and project costs, cost allocation/recovery, service credits, cost optimisation*
    - *Customer – performance against SLAs, satisfaction feedback e.g. survey responses, customer retention and growth statistics, effectiveness of dealing with business churn*

- *Process – internal improvement in efficiency and risk reduction, internal v. outsource decision support*
- *Learning – capability to deliver, readiness for new requirements, time to market for new initiatives*

2.4 What should we measure?

The ownership of measures and accountability for achieving targets should be clear. Furthermore, ownership and the collection of measurement data will not always be an IT responsibility, e.g. measurement of customer-focused outcomes. It should therefore also be clear whose responsibility collection is. Where appropriate, measures should be formalised in Service Level Agreements (SLAs) based on service descriptions written in a language and using terms meaningful to the customer. For third party service providers an SLA should form part of the contractual agreement so that performance measurement can be backed up with contractual recourse in the event of performance failure. To support IT Governance the following top fifteen areas to measure are recommended, with an indication of who has a primary interest and therefore who should approve the measures (figure 2.4)

Area	Investors	Controllers	Providers
Business & IT alignment	√		
Major project delivery performance (objectives, time and budget)	√		√
Overall financial performance (costs v. budgets)	√	√	√
ROI for IT investments (business benefit)	√		
Status of critical risks	√	√	√
Performance with respect to reliability and availability of critical services	√		√
Complaints (QOS) and customer perception	√		
Number of significant reactive fixes to errors			√
SLA performance by third parties	√		√
Relationships with suppliers (quality & value)	√		√
Capability e.g. process maturity			√
HR measures for people involved in IT activities			√
Internal and external benchmarks	√		√
Audit weaknesses		√	√
Business continuity status	√	√	√

Figure 2.4

2.5 What is best practice?

Experiences gained by the IMPACT SIG members have identified a number of enablers and inhibitors that will assist in the achievement of Performance Measurement best practices when supporting IT Governance. Since the Interest Group is not primarily focused on performance measurement techniques we are not attempting to provide best practice guidance on measurement methods and/or tools.

In general, performance measurement should support this classic control model (figure 2.5)

▼ Enablers

- *Support and ownership of performance measurement by Stakeholders*
- *Measures that are approved by and meaningful to the Stakeholders*
- *Measures that align with agreed IT objectives*
- *Measures that focus on processes critical to the success of IT objectives*
- *Measures that are easy to collect and understand*
- *Targets that are challenging but also achievable*
- *Measures that are balanced e.g. based on the Balanced Scorecard technique*
- *Measurement reports and scorecards that are easy to interpret, with explanations of exceptions*
- *Where possible, measures should be automated*

▼ Inhibitors

- *Too much focus on technical measures (especially if they are not aligned to IT objectives)*
- *Lack of ownership and accountability*
- *Measures which are not straightforward to interpret or encourage counter-productive behaviour (cf. National Health Waiting List targets)*
- *Measures which are expensive to collect or not focused on priority areas*
- *Too many measures obscuring relevant and important information*

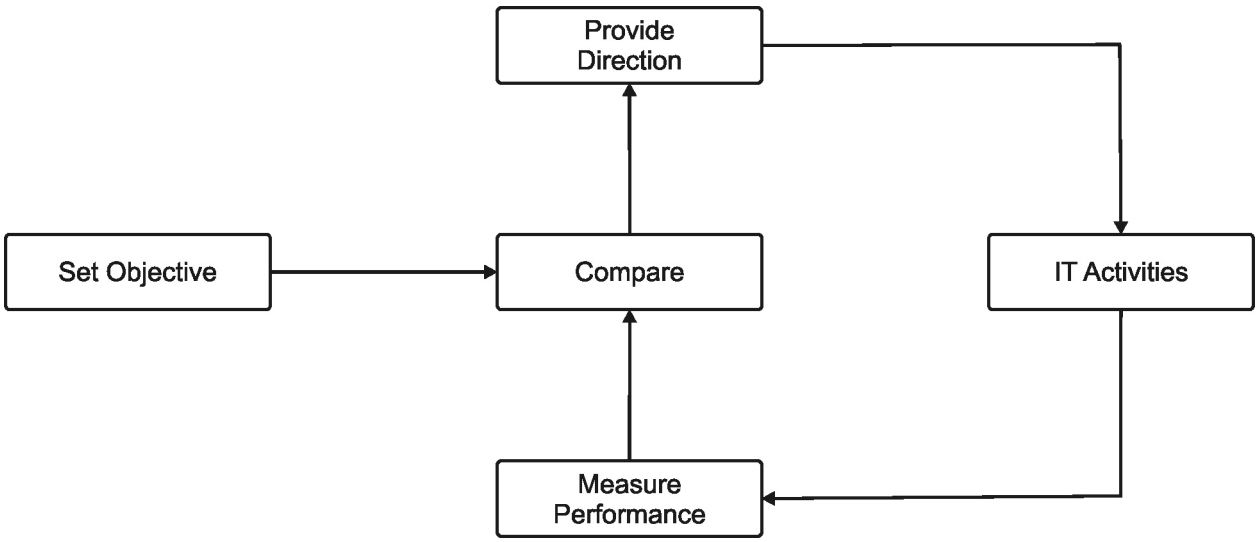

Figure 2.5[3]

3. Board Briefing on IT Governance, 2nd Edition, the IT Governance Institute®.