



Practical Process

Roger Tregear

Consulting Director, Leonardo Consulting

r.tregear@leonardo.com.au

Measuring Processes

Whether working at the individual process level or across an enterprise, too many BMP initiatives do not deliver on promises made – or, even if the promises are delivered, there is often no solid evidence and, in a skeptical, busy world, the work is dismissed. We ask staff to be involved in process improvement. We encourage them to innovate. Six months later, the post-it notes have fallen off the wall and the memories have faded. If strategic, operational and tactical decisions are not being made based on the measured performance of business processes, why would process management and improvement be taken seriously?

It doesn't have to be like that. The discovery and use of effective process performance measures can be designed, implemented and maintained to deliver significant benefits for strategic and operational management. This creates a 'virtuous cycle' with process improvement, small and large, embedded in daily operations.

Why Measure?

Why measure process performance? Because, if you don't, all of your process analysis and management efforts are a waste of time; you don't have control over the things that really matter, and organizational decision-making can only be suboptimal.

The only reason for doing process analysis, improvement and management is to improve organization performance in meaningful ways. No organization has a problem called *we don't have enough process models*. Without measurement, we don't know if there is improvement; we don't know what is meaningful.

Business processes are the way an organization delivers value to its customers. On that basis alone, the argument for measuring process performance is easily made. Are we delivering value to customers in a way that impresses them and is sustainable for us? The plethora of measures about internal achievement – budget tracking, policy compliance, project completion, people management, etc – say little, if anything, about value delivery. Process performance says it all.

A great deal can be gained from effective process-based management, but every organization has the right, indeed the obligation, to demand that those involved continuously demonstrate that the promised benefits have been realized.

The *process of process management* also needs to be constantly improved. For this to be possible, there must be regular assessment of the effectiveness of the changes made. Process practitioners are not in the business of just making recommendations; their purpose is to make positive change – and to prove that they have done so.

A government organization implementing a new service did a lot of planning, created lots of process models, and had many sessions with a wide range of stakeholders. Green lights everywhere, so the service was launched with appropriate 'ribbon cutting'. Two days later,

everyone was relieved that the launch had gone well; two weeks later there was a slowly rising murmur of complaint; two months later, service delivery was in virtual gridlock and the murmur was a cacophony. One month after that it was finally discovered that a key process in the delivery of the service was often failing, and causing significant rework and introducing inordinately long delays. Further analysis found a way to reduce these delays by 95%. After resolving the backlog, normal service delivery was resumed, but customer, and staff, memories of the fiasco will never be erased. It didn't need to be like that. Careful analysis of process performance expectations before launch, and appropriate measurement of process performance from launch, would have either avoided the problem, or detected it early allowing resolution before it became a major issue.

Measuring business process performance delivers many benefits:

- factual evidence of customer-service levels
- better understanding of cross-functional performance
- enhanced alignment of operations with strategy
- improved understanding of where, and how, costs are incurred
- evidence-based determination of process improvement priorities
- detection of performance trends
- better understanding of the capability range of a process
- uncovering actual and latent problems
- changing behavior based on factual feedback
- improved control over the risks that really matter.

BPM initiatives that do not incorporate process measurement will fail. Process measurement is not always easy, but it is always possible.

Process, Process Improvement and Process Management

Before moving to the substantive topic of this Column – (measuring the performance of business processes), it is as well to first define what I mean by *business process*, *process improvement* and *process management*. These are key concepts and many different definitions and understandings of them and approaches to them can be found in the literature.

Business processes are collections of cross-functional activities that are the only way any organization can exchange value with customers and other stakeholders. Business processes are the conduits through which value is exchanged. By themselves, the separate functional areas of any organization cannot exchange value with external customers or other stakeholders.

The definition, improvement, and management of business processes include all the resources involved in the execution of each process. Business Process Management (BPM) is not a one-off project, nor an IT system; it is a management philosophy.

Value is accumulated, not up and down the functional organization as represented in an organization chart, but across the organization as the various parts collaborate to create, collate and exchange value.

A more common description would be to say that processes *deliver* value to customers. However, this is too one-sided. The continuous flow of value in one direction is neither realistic nor sustainable. I prefer to conceptualize business processes as facilitating the *exchange* of value.

It follows that an organization executes its strategic intent via its business processes. The profound sequence *from strategy to execution* is shown in the breakout box, *From Strategy to Execution*.

Given the context described above, can there really be any good reason for not measuring the performance of our business processes?

Process-centric organizations discover, document, analyze, manage, and continuously improve business processes within a consistent and ubiquitous framework. Being process-centric means it is easier to consistently make the *right things* happen, at the *right time*, for the *right result*, for the *right people*. To achieve that, you must be continuously measuring processes.

Measurement Friendly Culture

One of the most significant roadblocks to robust performance governance - and subsequent process improvement and management - is the absence of a measurement-friendly organizational culture. In an organization where measurement is a precursor to the allocation of blame, the instinct is to measure as little as possible and to conceal the measures that are unavoidable. Where performance measures are collected to facilitate disparagement, we cannot expect enthusiasm for testing and reporting performance.

During one process-improvement project, I found myself in a strange conversation with a senior manager. We were investigating a process with a customer satisfaction problem and had developed three change ideas that would significantly increase customer satisfaction at quite low cost. Quite rightly, the team was pleased with its work. However, our senior manager pushed back and found reasons why the changes should not be made. This went on for several days, with the team dispatching each new objection as it came up. Finally, the manager took me aside and explained that his real concern was that if we took customer satisfaction from 83% to 95%, he would get sacked. He was prepared to accept a new target of 85% and that, over time (perhaps a year or two), it might be "safe" to achieve the 95% mark. He was serious. This was a culture of *continuous dissembling*, not continuous improvement.

Most people and organizations will readily agree that *continuous improvement* is a noble aspiration and a practical objective. The other side of that same coin, however, is to be continuously finding aspects of the organization that are not performing as well as they might. This 'negative' perspective is not always as welcome. Explaining to a manager that you have found ways to cost-effectively achieve significant improvement in the performance of one of her processes may not be received as the good news you thought it was. The manager, and the organization, might focus on that as a *past failure* rather than an *ongoing success*.

To some extent, this happens in all organizations. When was the last time that finding a new performance *problem* triggered a celebration in your organization?

Measurement phobia, caused by an organization's predisposition to use performance data to censure rather than improve, is the enemy of process improvement and management. The personal, team, and organizational culture must be such that all stakeholders are always looking

From Strategy to Execution

Organizations exist to exchange value with customers and other stakeholders - *that's strategy*. They do this via a series of coordinated activities across a number of functional elements of the organization - *that's a process*. It makes sense to optimize these processes so that they satisfy the requirements of customers and other stakeholders - *that's process improvement*. Taking a coordinated view of the performance of all of the processes by which an organization exchanges value, optimizes performance - *that's process management*. Process management allows organizations to focus on activities that create the value exchange outcomes described by the *strategy - that's execution*.

for, and openly finding, things that need to be improved. A measurement-friendly organization culture is a prerequisite for the success of process-based management.

Process Performance Perspectives

Drawing on the work of Roger Burlton and Paul Harmon, the Chief Consultant and Chief Methodologist of BPTrends Associates respectively, I define six perspectives (see Figure 1) from which to measure performance: inputs, outputs, guides, enablers, flow, and management. These perspectives provide a balanced view of a process, taking into account both the needs of customers and other external stakeholders, and the equally real needs of internal stakeholders. The six process perspectives are defined as follows.

Inputs: all that is taken into a process and transformed into outputs.

Outputs: the results of process execution – the value delivered by the process.

Guides: things that guide or constrain the transformation of inputs into outputs.

Enablers: people, technology and facilities used to transform inputs into outputs.

Flow: detailed activities within the process that develop and deliver the value.

Management: governance of all aspects of the process; oversight of the other five process performance perspectives.

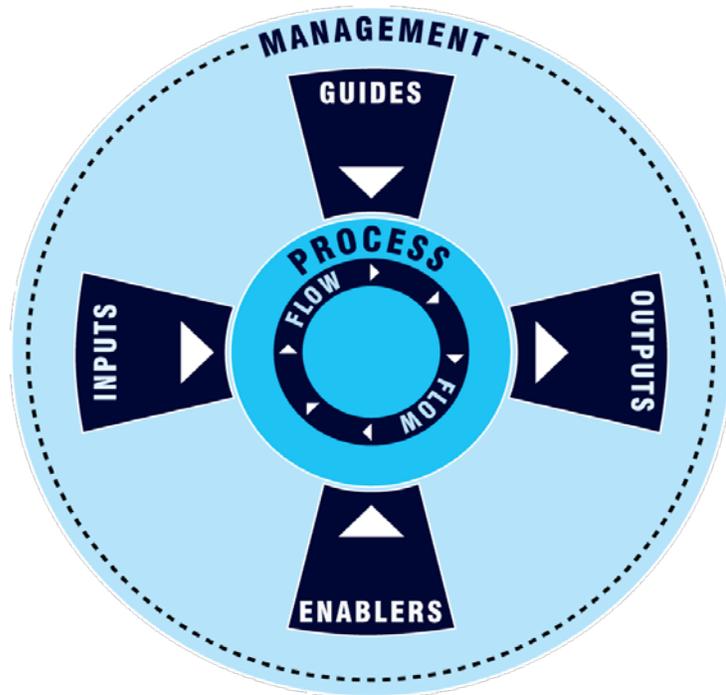


Figure 1: The Six Process Perspectives

In thinking about inputs, outputs, guides and enablers, we treat the process as a black box. We don't worry about what is going on 'inside', but focus on the context in which it is working. Then we make the process a glass box and look inside to see what is happening in the detailed flow. Lastly, we consider how all aspects of the process are being managed.

These six process perspectives are fundamental in determining the most appropriate, the *critical few*, process performance measures and their related measurement methods. We may not conclude that measures are required in each perspective, but the final measures will come from one or more of these perspectives.

ProMeasure

ProMeasure¹, as shown in the schematic at Figure 2, is a consistent and coherent series of steps: from process identification, through to a complete description of the important process performance measures, and their measurement methods, that meet the requirements of the key stakeholders.

¹ ProMeasure is a methodology developed by Leonardo Consulting.

Assigning correct performance measures to a process must not be a casual best guess; it must be the result of a systematic, efficient, continuously measured and improved analysis process.

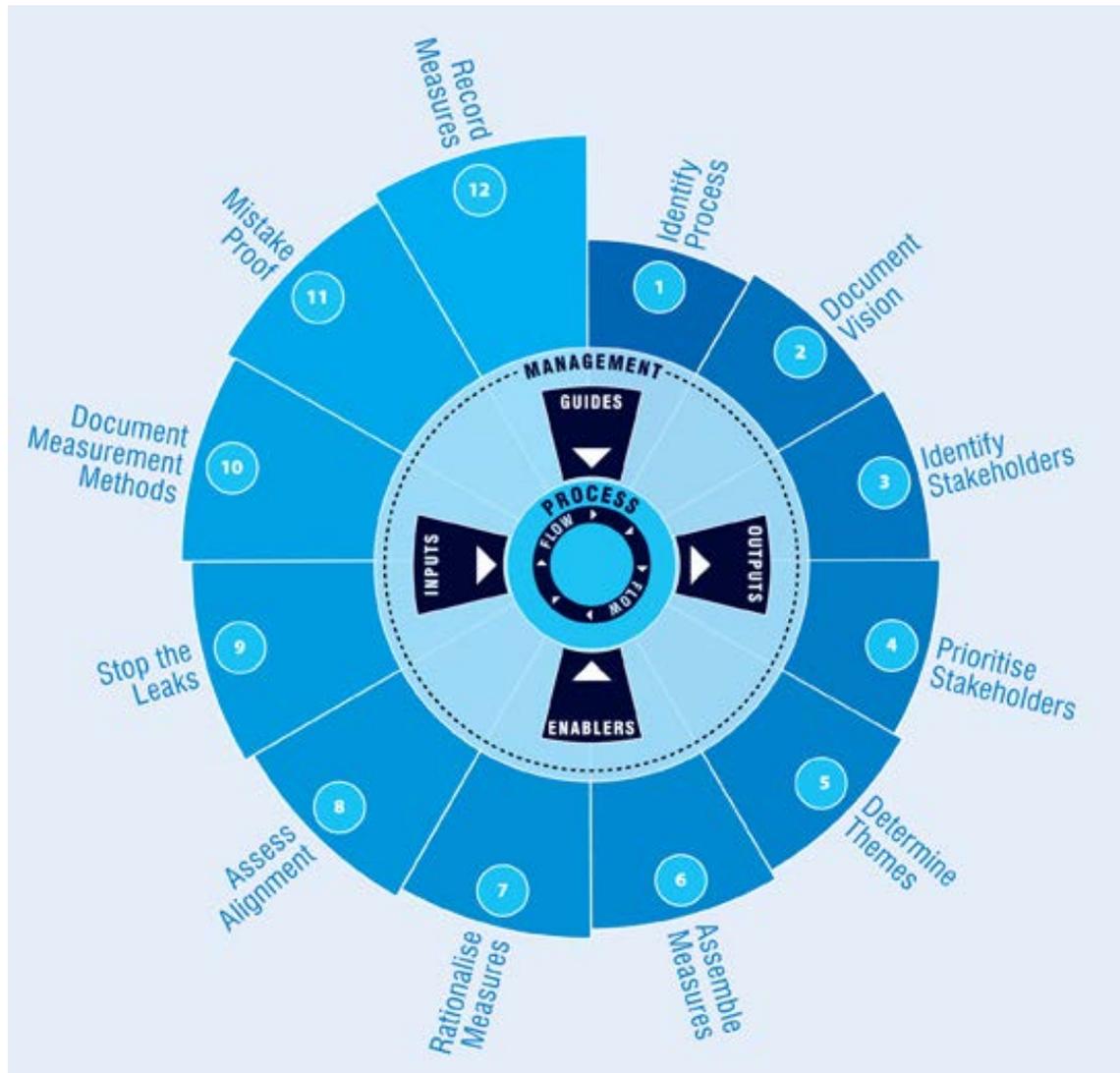


Figure 2: Leonardo ProMeasure Methodology

Which process?

It may seem trivial to say that the first step is to identify the process. Of course, we know what process we are analyzing, don't we? Sometimes it's not that easy. In any case, we should make sure that everyone involved has a *shared* understanding of the boundaries of the process in question as this will have a significant impact on the performance measures we ultimately assign. Obviously, we also need to understand what the process is generally trying to accomplish.

Any time we discover a process that is not directly or indirectly contributing to the achievement of the organization's strategic goals, we should delete it – or, at least, study it more carefully to understand what, if anything, it is doing to add value.

We must identify the process and its purpose. These steps need not take long, especially for a process that is already well understood. Neglecting to assure this firm foundation, however, will make it impossible to determine the best set of performance measures.

Who cares?

Stakeholders are fundamental to process measurement and improvement. It is they who determine good performance and whether it is being delivered. Processes 'perform' for stakeholders, so stakeholder performance aspirations must be our starting point.

We must clearly understand who the process stakeholders are, and what they want from it. This is not just a simple, vague list of stakeholder types, but a detailed analysis of all stakeholders and their relationship to the process. Many of these will be deeply involved in the definition of process performance measures facilitated by this methodology.

Not all stakeholders are equal. It is often difficult to meet the performance aspirations of each stakeholder; there may even be diametrically opposed requirements. Some stakeholders are more engaged with the process than others; some have more power and influence over the design and operation of the process.

In discussion with the stakeholders, it is useful to take a top-down approach to determining the process performance measures. A discussion about what sort of performance is most important will identify key measurement themes and an important outcome of such discussions is an early prioritization of what is most important. We can't, and don't want to, measure everything.

What measures?

We began by creating a shared understanding of the process and agreeing on its purpose and boundaries. Then we developed a deep insight into the process stakeholders and their performance needs. Next, we build on that sound foundation and make an initial long list of potential measures.

Possible process measures can be collected and sorted by key stakeholders against the six perspectives of process performance identified earlier. At this stage, it is useful to capture as many reasonable measures as possible. The list can be rationalized later. For now, we want to capture every measure that could be important to the stakeholders we have determined should, if possible, be satisfied.

An impressive sequence of thought leaders have travelled before us in seeking to understand what is really important about performance measurements - Pareto, Juran, Deming, Ishikawa and many more. Pareto's 80/20 'rule' was more generally interpreted by Juran, giving rise to the concept of the 'vital few and the trivial many'. Having previously created a long list of candidate measures, we now need to rationalize them, to determine the vital few. This is not just a matter of neatness or simplification for its own sake. The more measures we ultimately assign to our process, the more data must be collected and assessed - the Goldilocks theory applies: - we want not too few, not too many, but just the right number of measures.

We can rationalize our long list of candidate measures by testing them for redundancy, importance, practicality, completeness, clarity and fitness for purpose.

Keep in mind that measures may also change over time. What is appropriate to measure now - perhaps immediately following a change - may not be the best measure in 12 months' time.

Ultimately we must ask whether we have a viable set of the *minimum* number of *important* measures of actual *process performance* about which we have key stakeholder *agreement*, and for which we have a *measurement method* that can cost-effectively gather objective, *accurate enough* data against a well-defined *target*.

Mind the gap

No process exists in isolation; no process performance measure exists in isolation. Every process can be decomposed into component processes. It follows that every process is part of one at a higher level - at least up to the highest process architecture level. Although we may not actively do so, all those processes at every level can be measured. Therefore, in parallel with the hierarchy of processes, we have a hierarchy of process measures.

The analysis issue at this point is to determine if there are any important *misalignments* between process measures at the same or higher levels. The key questions to be addressed are:

- Does the set of process measures align with the next highest process level?
- Are there gaps in the set of process measures compared to the next highest level?

We often come across examples where personal performance KPIs are seriously misaligned. A staff member with the process-centric objective to improve customer service and reduce cycle time, might be in futile conflict with a supervisor whose main goal has been defined as a purely functional cost reduction.

Stop the leaks

Performance Leakage Points (PLPs) are places and circumstances in the process where problems are more likely to develop. There is no certainty about this for a particular process in its unique circumstance, but experience shows that any process may have a problem at:

- handover points
- queuing points
- places that create rework
- customer touch points
- points of complexity
- time-critical activities.

Having identified proven or potential PLPs such as these, it is useful to consider whether the candidate process measures would effectively alert us to performance issues at those points. If we imagine where performance problems might develop, do we have the measures that will provide an early warning?

Imagine a commercial laundry where customers bring in clothes for washing or dry cleaning for same-day service. Where could that go wrong? Are there any measures that could act as an early warning of potential problems? The genesis of many problems might be found at the front counter. Should staff just keep taking in more and more clothes, pleased that 'business is great today'? Perhaps it might be useful to continuously measure capacity, looking to forecast the point at which the same-day service promise cannot be met. The process Clean Clothes has a finite capacity. If the customer is thinking *I'll pick this up at 5:15* and front counter staff are thinking *we'll do our best*, that's probably not going to end well.

Measurement methods

In assigning measures to our processes, we must be careful that, for each measure, there is an effective *measurement method*. It is too easy to create a measure for which the data gathering is very difficult or costly, or perhaps just not practical. Where will the data come from? Does it already exist, or will we have to create a new process to collect, collate, and analyze it? Is our measure even quantified enough to allow effective data collection? If we said that our laundry service was going to be 'the best in town' what do we really mean? Perhaps we mean that '98%

of our customers will rate us at least 8.5 out of 10'. Where will that data come from? How much? How often? At what cost?

For every process whose performance we are going to actively measure, we need a practical, reliable, accurate (enough), cost-effective measurement method for each measure.

Mistake proof

A process that has been made 'mistake-proof' does not need to be measured. If a process cannot fail to meet its performance targets, we don't need to measure anything. Unfortunately, that happy circumstance is not to be found in this world.

However, there are things we can do to most processes that reduce the likelihood of poor performance. To the extent that we can mistake-proof a process, even in a small way, we may remove the need to measure some aspects of performance. We can't measure good performance *into* a process. Measurement for its own sake is waste, so we should do whatever can to remove the need for measurement.

For example, we might develop a better understanding, and ability to measure and forecast, process capacity utilization so as to avoid over-stressing the process. Automated responses might be triggered as a process nears a capacity limit, beyond which performance problems would be inevitable. Other software or mechanical controls such as calendar reminders, approval limits, checklists, pop-up information screens - may help reduce the possibility of errors.

Record measures

The importance of the final step is often underestimated. There is a need to collect all of the analyses in a form that makes them available to all who study, manage and execute the process. Some form of enduring record must be created in a standard, accessible form. This data may be kept in simple tabular form, or may be part of the repository associated with an appropriate modeling tool. The important requirement is that it is complete and available.

Common Failure Modes

Most organizations do not do effective process performance measurement. Many don't do it at all. If you are not measuring process performance then you are not doing process management, and you cannot know if you are doing process improvement.

There are many barriers to effective process measurement. Some are described below along with countermeasures. The approach described above delivers such countermeasures.

Barriers	Countermeasures
Inappropriate measures	<ul style="list-style-type: none"> • use a consistent methodology for the definition and management of process measures • avoid having too many, or too few, measures • control data collection, analyses and publication costs • connect process performance to strategic and operational management • avoid a process measurement focus that is too narrow
Disconnection from value	<ul style="list-style-type: none"> • carefully design process measures to reflect the real needs of key shareholders

	<ul style="list-style-type: none"> regularly review process measures to ensure they continue to reflect stakeholder needs build process measures into management decision-making
Lack of accountability	<ul style="list-style-type: none"> ensure that nominated roles/people are accountable for responding to performance data (i.e. maintain an effective system of process ownership) publish regular reports of process performance (good, bad or indifferent)
Lack of confidence in performance measures	<ul style="list-style-type: none"> ensure that process measures, targets and measurement methods are well understood clearly define and publish the details of the 'process of process measurement' regularly test the reliability of data sources continue to consult with key stakeholders
Fear of measurement	<ul style="list-style-type: none"> develop a measurement-friendly culture focus on the performance of the process, not the people give positive acknowledgement to the discovery of problems publish 'success stories' around improvements generated via process performance measurement and response

In Conclusion

Organizational performance improvement means increasing the value exchanged with customers and other stakeholders. Process-based management offers the potential for significant, sustained and controlled improvement in areas that really matter.

Organizations, and the people who work in them, must embrace the search for improvement that can only come from *measured underperformance*. Improvement and management of business processes demand that we determine performance targets, collect performance data, and make decisions based on process performance outcomes.

Measurement of process performance is the Achilles' heel of many initiatives to develop a process-centric enterprise. It must be the cornerstone.

To deliver on the promise of BPM, we must be measuring processes.

Let's continue the discussion at the BPTrends Discussion group on LinkedIn or to contact me direct, use r.tregear@leonardo.com.au.

BPTrends LinkedIn Discussion Group

We created a BPTrends Discussion Group on LinkedIn to allow our members, readers and friends to freely exchange ideas on a wide variety of BPM related topics. We encourage you to initiate a new discussion on this publication, or on other BPM related topics of interest to you, or to contribute to existing discussions. Go to LinkedIn and join the [BPTrends Discussion Group](#).