



**Procertis**

# What should a capability measurement model look like?

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**A sound measurement model that links business performance with IT capability is an extremely valuable management tool - and a means for organisations to move forward with much greater confidence. But what would such a model look like?**

We describe here the model that we've developed in projects with a range of organisations over the last few years. The model has proven to be robust across different types of organisation, and remarkably stable.

The model is described in terms that can be understood by all its users, so that it acts as a common communication tool. It is structured for traceability from business goals through to technical actions, a strategy which creates an integrated and controlled change agenda. Measurability removes the chaos that too many leaders have come to expect from IT services, and enables IT people to take their place in the forefront of the business on a footing equal with their peers.

## Internal and external views

The model we use is composed of two *views*, each containing a set of *facets*. We call the two views *internal* and *external*.

The internal view is a description of the sophistication, development level or capability of IT service provision from the point of view of the providers. The focus in this view is on service content, deliverability, value for money, technical credibility, skills support and engineering

excellence. The external view represents the services as seen by their recipients.

Traditional measurement models don't use this crucial distinction. They assume that the value and impact of IT are constant across different populations, thereby ignoring the very different meanings that deliverers and recipients put on IT's contribution, and denying both groups the opportunity to debate or negotiate their differences.

These two views apply to all IT service situations, whether or not outsourcing arrangements are involved. Even in organisations where there is no formalisation of the supplier/consumer relationship, these two roles exist. And, sometimes, rhetoric about "business and IT being on the same side" can obscure the need to acknowledge the natural differences between the views of deliverers and recipients. These parties must view the world according to their own goals and skills; equally, they must attempt to appreciate each other's viewpoints. A model that respects and integrates both views enables the organisation to surface and understand its issues and its opportunities, and to create plans of action that meet the combined needs of all parties.



## Facets of the model

The model is made up of items that you wish to measure, which we call facets. The facets are organised in sets designed to provide a complete metric kit for the qualities you're interested in exploring. So, for example, you might use a facet set called a *cost model*, or another designed to articulate *agility*, or one that reflects *business knowledge*.

The external and internal facets are related in specific ways. So, for example, if you wish to deliver improvements in one or more external facets, you can see which internal facets you need to invest in to achieve the desired change. This is the same as knowing exactly which technical improvements are necessary to support specific business changes.

In the example shown in Figure 1, the external facet 1 is related to internal facets 2 and 4. Therefore, in order to improve the measured capability of external facet 1, actions need to be taken to impact one or both of internal facets 2 and 4.

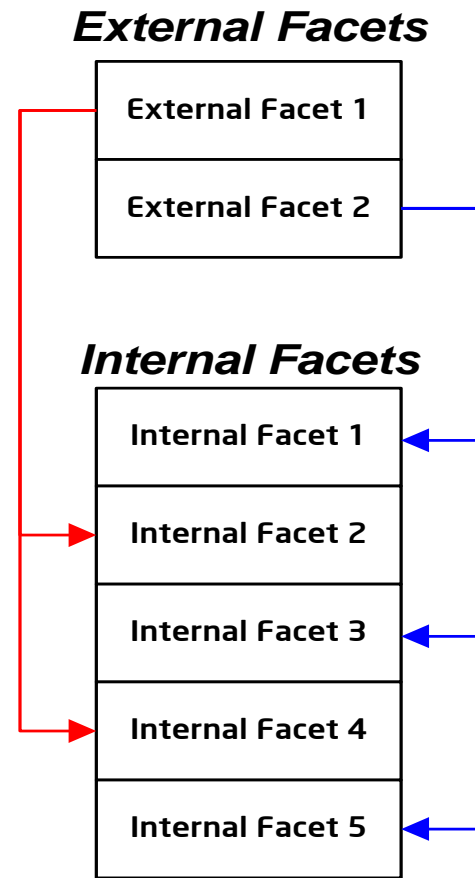


Figure 1

## Bringing science to IT management

The use of standardised and controlled facets adds a degree of management science that has so far eluded good IT practice. We know that great effort is put into improving IT service, and we recognise that some of that effort pays off. But we also know that leaders who don't use an explicit measurement model are relying on a mixture of experience, intuition and luck. A faceted model takes the experience of many skilled individuals and teams, codifies it, and makes it available to the whole community. The role of intuition is reduced, because the model makes its interrelationships and its indicated outcomes explicit: anyone using the model will generate plenty of what could be called insight. But there's no role for luck with this approach. It's a risk-reduced method for managing IT, and a transparent management tool aimed at creating demonstrable business benefit.

Even brief exposure to working with this kind of model tends to make people adjust their attitude to traditional IT management interventions - in particular, to the haphazard nature of the typical consulting approach. Most consultants are experienced, thoughtful, articulate and committed to the improvement of their clients' business. But their practice is marked by randomness. "Consulting" means, amongst other things, asking questions. Consultants ask questions that they hope will reveal underlying causes of problems, and that will help their clients take ownership of those problems and their potential solutions. However, with this kind of approach, any entry point is as good as any other - as long as a series of questions uncovers areas of deficiency, it's "successful".



We believe that the traditional “ask lots of questions” consultancy approach is deeply flawed, because it is essentially a partial search strategy. Our imaginary consultant shines his torch randomly in the gloom, finds a fault, and follows the trail leading to the cause. He hopes, in this way, to cover all the territory. Even better, he trusts that this method will bring his clients with him, since they will be co-creators of the discoveries made. The big problem here, however, is that our consultant has no way of demonstrating whether he has explored every area and aspect of the situation. He may have racked up an impressive pile of problems or opportunities, but how do we know that he hasn’t missed something of even greater magnitude?

Completeness is often dismissed by consultants as an unattainable goal - an urge for perfection that stops organisations taking remedial action. And while it’s true that the perfect can be the enemy of the good, it doesn’t follow that a random stream of questions will produce a “good” that couldn’t be bettered with a more rational approach. To bring this discussion down to the simplest terms, organisations need to ask themselves one question when they survey a list of improvement recommendations, whichever method is used to arrive at that list. And that question is: Can we verify this list? Notice we’re not asking whether or not we *believe* in this list; we’re asking to see the evidence of a thorough investigation.

It’s not just consultants who drive decision making from unstructured lists. Vendors do it too. Vendor questioning is a type of discovery process, but one that inevitably has an agenda. Anyone working for a vendor organisation is first and foremost an advocate of the products and services sold by the vendor. The questions that vendor representatives pose are therefore skewed towards suggesting a prescribed set of answers. Certainly, it’s a rare vendor whose mode of enquiry includes testing the thesis that IT provision should be *reduced*. A rational approach based on explicit facets can be completely objective in this regard.

Options for technological change should flow from an appreciation of the organisation’s external and internal facet values, and the linkages between them, rather than being generated from unstructured query lists. So, for example, in order to improve an external facet of the cost model, you may need to improve internal facets around monitoring and controlling your IT infrastructure. You can then offer that opportunity to your IT supplier and ask how it could help. The supplier may then be able to specify how its products or services meet those needs. In this way, you’ll be matching what the market has to offer against what the business really needs, rather than assessing the fit of your business to the available products. You’ll also be creating the basis for a business case for change.

## Repeating Patterns

Repeatedly using the model in real-world situations reveals a number of patterns that often agree with managers’ instinctive appreciation of the mismatch in their IT capability - or that alert them to mismatches that they haven’t noticed. The three patterns we find are:

- **Under-delivery** - where the internal view is rated higher than the external view. Here, IT service delivery is failing to deliver to its full potential. There is opportunity for rapid service improvement at low cost. Conversely there may be opportunity to reduce IT service spend.
- **Over-promise** - where the external view is rated higher than the internal view. In this case, IT is appearing to deliver beyond its actual capability. This is an unstable situation prone to “crisis and crash”
- **Balanced** - where external and internal views have equivalent ratings. Here the service experience is matched by the delivery capability - a stable situation where service delivery is aligned with business need.



## Tracking the business benefits

External facets can be readily attached to business goals. This means that by taking measurements and setting targets using the capability model, decision makers can generate solid business cases for improvement programmes or other IT changes. The model provides a framework for the calculation of business value. It also offers a means of tracing the effects of investment, accounting for decisions, and assessing the effectiveness of interventions.

Over time, if you make repeated measurements using the same model, you can quickly tell whether your interventions are having their intended effects. The model therefore closes the management loop by providing trustworthy feedback on actions taken. IT teams typically struggle to evaluate the results of their labours because they have no stable measurement framework to score against. This lack contrasts with many organisations' fervid interest in external benchmarking. We believe that many managers have a blind spot when it comes to assessing their own progress, and are dazzled by current comparisons with other organisations - organisations that may share some characteristics, but which have different histories, constraints and goals. The measurement model keeps decision makers true to the context of the business.

The model therefore offers accountability - and defensibility. Decision makers can be confident that they not only have detailed information about the actions that they took, but also the reasons for taking those actions. Repeated visits to the model for assessment of outcomes helps to build confidence in the organisation's ability to deliver IT capability that meets business goals by presenting objective, verifiable results that don't require difficult interpretation - or distracting spin.

We recognise that technology can inspire business change, and we don't subscribe to the

idea that technologists should shrink from making suggestions about how IT could enhance the business. In fact, we notice much frustration in boardrooms around the IT team's lack of proactivity in explaining the potential business applications of new technology. A good measurement model provides a way for technology-led initiatives to meet business needs and become integrated with the organisation's direction of travel. Assessed within a strict business framework, the generic benefits claimed by the vendor can be "reality-checked" against the organisation's own context. This exercise will reveal which, if any, benefits can be realised within the business, while describing the exact linkage between internal and external facets which is expected to deliver the value.

## What do you care about?

Most IT service interventions define services in technology terms, with scant reference to business meaning. For example, we have experienced IT reviews that focus on "printers" as a service, while completely ignoring why printing as an activity is required in the business. This is important because if "printers" remains the only topic of investigation, then the business may decide to buy cheaper printers or outsource its printers in pursuit of a saving. But it may be that the organisation would be better served by concentrating on the way it manages its documents, with printing being just one aspect of this more strategic service definition. If decision makers don't take "document management" into account as a business concern, the simple technology component can easily poison performance.

A sound measurement model with external and internal views, articulated in facets, would not allow this mistake to be made. Decisions about printer numbers and placement would be taken in context, and the outcomes of those decisions would be comprehensible in the light of subsequent experience.



## Authors

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Richard gained a B.Sc. (Hons) degree from Birmingham University in Biological Sciences, a M.Sc. degree from Reading University in Pure and Applied Systematics and a Ph.D. from Warwick University in Molecular Biology. He is a Fellow of the Linnean Society of London and a member of the Royal Institution. Over a period of 20 years in the IT Industry Dr. Williams has successfully started, built and managed his own IT companies gaining first hand experience of almost every aspect of IT design, sourcing, delivery and management.

### **Gordon Miller - Principal Business Architect**

Gordon has 20 years in IT after gaining a degree in Computer Science and Pure Mathematics from the University of Liverpool. He has vast experience as a business architect, with in-depth business modelling and system specification skills. Using a wide range of capturing and presentation techniques, he has undertaken consultancy engagements for government and large organisations, mentoring key staff within client organisations on the use of best practice methodologies and tools for large project delivery.

### **About Procertis**

Procertis is an independent Consultancy and Intellectual Property development company focussed on IT and business inter-relationships. We develop rational frameworks which help organisations define and implement major integrated business/IT change agendas, and measure the resulting benefits. We work with single organisations and with large initiatives involving multiple parties, where our longer term role is to keep all stakeholders focused on and honest to the developed vision.

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