

**Metric Lifecycle Model:  
Sustaining the Value of the  
Metrics Portfolio**

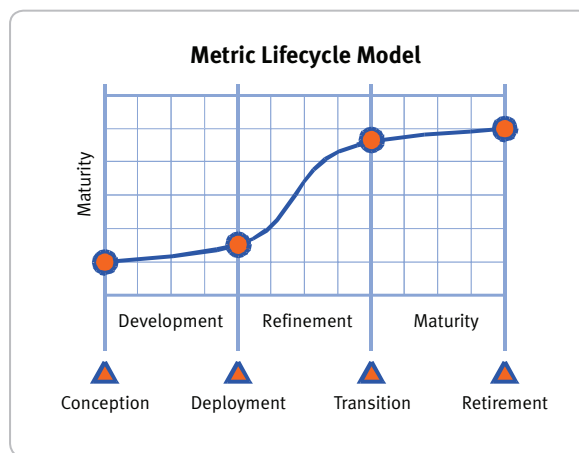


Many business objects and phenomena—projects, products, technologies, employees, assets, contracts, and whole industries, to name a few—tend to follow their own special developmental rhythms as they come into being, mature, and eventually are retired. This notion of a lifecycle is a valuable tool that helps managers anticipate, plan, and manage more effectively. For example, if you believe a new technology, such as compact fluorescent or LED lighting, still early in its lifecycle, has market promise, you might be more inclined to invest in further R&D than you would a more mature technology that it competes with, such as incandescent. If you are heavily invested in a mature declining technology, you might study ways to reduce costs and sustain its viability. Or even look for ways to divest.

When approached from this perspective, it is not particularly surprising that metrics have their own unique lifecycles. An understanding of the metric lifecycle model provides insights that are helpful for driving business value from a metrics program and the metrics that comprise it.

### Reader ROI

- The metric lifecycle describes how a typical metric develops over time.
- The lifecycle comprises three main stages of maturation:
  - **Development:** definition of a metric to meet a business need.
  - **Refinement:** refinement of the concept in real-world conditions.
  - **Maturity:** continued operation and institutionalization of the metric.
- A metric must be terminated if at any time in its lifecycle it no longer has a compelling business justification.



### Conception

Effective metrics begin with a business need:

- “The performance bonus depends on the team as a whole making their top-three sales commitments.”
- “The customer collaboration initiative has to remain on track to make its business case. There’s no wiggle room.”
- “Why is it that staff are using less and less of their earned vacation time each year?”
- “My theory is that management pays lip service to training and underspends. But to make the case, I need facts.”

Business metrics are conceived to fill information vacuums. They come into being when a business need is seen as important enough to warrant measurement, and available metrics fail to provide needed facts.

The question, “Will we have the cutting-edge, innovative R&D skills we need to dominate the PDA sector by 2010?” requires a judgment about the future. The judgment will be more plausible if it is based on facts. The facts we need are driven by the questions we need to answer:

**How do we define cutting edge, innovative R&D skills?** This definition is not a metric per se, but it is essential for understanding the commodity that will be measured.

**By these criteria, how do staff currently measure up, and how have they measured up over time?** Possible metric: percentage of staff with desired skill profiles, captured over time.

**What exactly do we mean by dominate the PDA sector by 2010?** Possible metric: market share.

**What target proportion of our skill base must be aligned with these criteria to dominate the PDA sector by 2010?** Goal: target percentage of staff with desired skill profiles.

**Are we on track to deliver the skills we need in time to meet the goal?** Possible metrics: rate of change of percentage of staff with desired skill profiles; expected date when goal will be met.

## Development

Before they are deployed, metrics usually go through an iterative phase of concept development. For example:

**Who are the audiences?** One audience's useful information is another's meaningless noise. This is equally true whether in terms of the central questions being addressed or the way the data is presented. A good understanding of audiences and their needs is a critical required step for any successful metric.

**How is the metric defined and what exactly does it mean?** In "cutting edge" areas, it is not uncommon to go through several hypotheses before arriving at a solid one to work with.

**What should be measured?** This question can only be answered definitively by the stakeholders who will be wedded to the metric. But others often will be involved in developing and refining concepts for review and discussion.

**Is the metric feasible?** Do sources of data exist, or can data be acquired in some feasible and practical manner? Is the data reliable enough?

**How should the information be displayed?** There are always alternative ways to display information. To be effective, the display must be meaningful and effective for the audiences it is targeted at. And in the end, it is the audience, not theory or conjecture, that should have the final say.

There are, of course, other issues such as scope of measurement, metric distribution, and underlying technology. What is important about this phase of development is that it establishes the initial strategy for the metric and builds needed buy-in and support for piloting or deployment.

## Deployment

Deployment should occur only when the metric concept is sufficiently developed and there is a compelling business justification for moving forward. As has been famously said, "You only have one chance to make a first impression." This observation applies as readily to metrics as it does people. If the metric concept is "half baked," it is unlikely to succeed and will reflect poorly on the program. And if there is no convincing business justification for the metric, rolling it out is wasteful.

Deployment can take different forms depending upon the nature of the metric and its scope of coverage.

A common strategy for a complex or sensitive metric is to pilot it within a limited scope before committing to full-scale deployment. The pilot process provides an opportunity to obtain feedback and refine the metric before it is deployed more generally.

For metrics that are broad in scope and logistically complicated, one effective strategy is to deploy in logical phases; say by geography or organizational unit.

## Refinement

In the refinement phase, metrics are implemented and produced in a pilot or full-scale environment. Stakeholder audiences have an opportunity to grapple with the metric and its information message directly, rather than as an abstract idea. Feedback is critical in this phase because the realization of the metric as a tangible entity (as opposed to a concept) may suggest a number of refinements.

This is the time in the metric's lifecycle when it is likely to experience the most change. A useful strategy during this period of relative instability is to support the metric using a flexible approach that can accommodate changes in direction easily, with rapid turnaround.

## Transition And Maturity

Eventually, for those metrics that survive (not all necessarily will), stability is achieved and changes become less frequent. At this point in the lifecycle the metric has become somewhat institutionalized among its stakeholder audiences. They recognize the metric and know how to use it. Questions of how the metric is defined and displayed, and what it means, have been put to rest—at least for the time being.

The term “mature” is not meant to suggest that the metric is immune to future change—rather, that changes will be less frequent. Having established a degree of acceptance for the metric, there should be a reluctance to change it unless there is a good reason. Sometimes these good reasons take the form of new information (such as a change in strategy that affects the metric) or learning curve effects as the audience becomes more sophisticated in its information needs.

## Retirement

In this paper we have used terms like “business need is seen as important” to hint at the fact that underlying any successful metric is a persuasive business argument—whether financial or otherwise.

A metric can be retired at any stage of its lifecycle for any number of reasons. But the business rationale underlying all of these reasons is that the cost/benefit profile is no longer sufficiently attractive.

Having said this, it is usually not the case that each metric is justified by its own special financial business case (even if this might be desirable sometimes). Instead, metrics are more frequently justified by a less formal argument such as:

“If we are unaware that we have lost control of a project’s schedule, we may be at risk for millions of dollars by the time the problem is identified and rectified. As a way to control our risk, we must measure project schedule compliance and hold managers accountable for keeping projects on schedule.”

When the metric is no longer an efficient or effective means for addressing the underlying business problem (in the case above, minimizing the risk of an out-of-control project schedule), it should be modified or retired.

Often, metrics are retired (or should be retired) because the business issues they were designed to address no longer are of interest. For example, if a company has successfully implemented a business continuity planning program, there is probably no longer any compelling business reason to measure the program’s deployment. It would be more productive, for example, to deploy new metrics designed to monitor the program’s ongoing readiness and effectiveness.

Another good reason to retire a metric is that an alternative metric exists that fulfills the measurement need better than the original.

Either way, the operation of a metric always involves cost. Smart management of the metrics portfolio involves weeding out metrics that no longer pay for themselves.

## Bottom Line

The metric lifecycle is a model and a tool. Certainly, there will be instances where the model will be imperfect. For example:

- A metric goes through more than one refinement and maturity cycle before it eventually settles down.
- The underlying metric concept is crystal clear from the onset and the refinement phase is skipped, as when, for example, it is a pre-defined KPI (key performance indicator) related to a best-practices business process.

However, despite its imperfections, knowledge of the lifecycle and the kinds of activities and decisions that are involved at each stage provides a good basis for managing the metrics program and ensuring that it tracks and remains responsive to business needs.



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