

Challenges of KPI Selection

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In the IAM's foundational publication, *Asset Management – An Anatomy*, it states that “a robust measurement framework includes measures and indicators that relate to the performance and health of assets and asset systems”. It further notes that it is important that measures, and associated targets, align to the organization's asset management objectives and strategy (SAMP) as well as providing feedback on, and understanding of, the assets. The feedback organizations get through measuring KPIs (key performance indicators) is an important input to the asset management decision-making processes. But how do you choose KPIs?

It all starts with understanding the decisions your organization makes. Decision-making is the process of identifying, selecting, and implementing alternatives. The right information, in the right form, at the right time is necessary to make effective decisions. Understanding the types of decisions that must be made today and in 5, 10, and 20 years' time, defines the data that needs to be collected and measured using KPIs, so that the organization has the information necessary to support those future decisions.

Making decisions for individual assets can be relatively simple given the right information, but how they are collectively managed to serve organizational goals gets more complicated. This may involve grouping assets together into an asset system (such as an electric transmission line, a water pumping station, a vehicle, a building etc.) or into an asset portfolio. The types of decisions also vary at each level of the organization. The KPIs supporting operational decision making may be different than those necessary at the executive level. Regardless of which asset group or level of the organization the KPI is measuring, all KPIs should drive behavior that aligns with organizational goals.

Start your approach to selecting KPIs with first understanding what your organization wants from each asset class (i.e., service levels). Then, design an asset information framework that includes the KPIs that support key operational and strategic decisions. This framework becomes a key element of your asset management plans (AMP) that are integrated with your strategic asset management plan (SAMP) and your strategic business plans. The alignment of these plans provides the roadmap to deliver the activities necessary for success.

We use metrics for tracking many aspects of how organizations work; so how many KPIs do you need? Not many. You may need lots of metrics/measures but there should not be many that are key to providing a good overall picture of how well things are working. When deciding which KPIs to use, keep in mind that KPIs are intended to help organizations focus attention on what matters most. This will vary from one organization to another. Some may be process focused, some may be asset health focused, some may be focused on process inputs or outputs, or on costs or quality. Whatever the specific focus of your organization, KPIs should provide objective evidence of progress (or lack thereof) towards achieving a desired result. It is also good to have a view of KPI changes over time and should be balanced between leading and lagging indicators, but the one thing they should all do is to help inform better decision making.