

Facility Asset Management

Asset Management Performance Measures

by James P. Whittaker, P.E.

Just about anybody reading this article is most likely familiar with APPA's Strategic Assessment Model (SAM), developed to help institutions achieve organizational excellence. I would also hazard to bet that most readers understand the balanced scorecard approach of integrating financial and non-financial performance measures to show a clear linkage between the institution's goals and strategies. The framework set by SAM and the balanced scorecard approach provide an excellent methodology to measure our overall performance as facilities managers. Yet, when we try to understand measures of performance for asset management, confusion abounds, fingers are pointed, and eyes tend to glaze over out of frustration or confusion.

Facilities missions and visions have almost universally been clearly articulated in statements such as, "To provide an environment that is safe, secure, functional, and attractive"... "to sustain the integrity and appearance of the campus environment"... "to enhance the learning environment through high-quality services and wise stewardship of its physical assets." There are even sound guiding principles, value statements, strategic goals, and tactical objectives to support the mission/vision statements. Yet, we continually stop short of truly measuring performance related to managing our institution's assets. This is critical to our credibility as facilities managers.

Jim Whittaker is president of Facility Engineering Associates P.C. He can be reached at jim.whittaker@feapc.com.



Why can't we effectively translate the methods of SAM and the balanced scorecard to specifically measure how effective we are at managing our assets? The problem lies not in a lack of understanding of the models; in my experience, the difficulty resides in a number of contributing factors. These factors include: a lack of focus on measuring what is needed instead of what is easy to measure, measuring too many activities and not focusing on the outcomes, the sheer number of inter-related variables that affect performance, not effectively using complex FM technologies (i.e., CMMS/CAFM, BAS, and CPS) to capture the right information, getting commitment from facilities stakeholders and staff to capture the right data, and finally overcoming the fear of consequences of measuring performance.

These are some fairly daunting obstacles to measuring our performance as stewards of our institution's assets. How

can we overcome these obstacles and improve our credibility by developing the right asset management key performance indicators (KPIs)?

Successful institutions have shown that the best way is to implement a systematic approach starting with the end in mind. We generally know where we want to go. Our mission and vision statements tell us that. We even have a pretty good understanding of how to get there through our tactical plans. Even SAM provides recommended performance indicators in the "SAM Matrix". But what is the pinnacle of facilities asset management?

Is the desired outcome managing our assets to meet the needs and desired level of service to our customers? Extending the service life of our facilities? Minimizing the total cost of ownership of our facilities? Or is the right answer a combination of all of these? The answer may vary from institution to institution, but the common thread is that a balanced scorecard approach can be used to best measure the outcomes of our efforts to manage facility assets.



First, let's overcome those obstacles. We need to focus on what is needed, not easiest to measure, and measure the desired outcomes, not just the activities. The typical off-the-shelf CMMS/CAFM system comes with over 200 standard reports under the broad heading of asset management. While these technologies have become tremendous tools to help manage our work, provide information for decision making, and measure our performance, they need to be carefully managed. Use the balanced scorecard approach to determine what outcomes you need to measure and focus on relevant KPIs. As an example, each perspective of the balanced scorecard may include such KPIs as: **Financial**—FCI, FOI and FRI, **Processes**—PM vs. CM and system reliability, **Employee**—training and productivity, and **Customer**—response time and qualitative impressions of facilities.

We also need to understand the effect of the inter-relationships between O&M processes and capital asset management. Proper maintenance will positively impact the long-term capital requirements of a facility. We can measure our success or failure with our preventive, predictive, or reliability-centered maintenance programs until we are blue in the face. Yet, until we relate that performance to extending the service life of our assets and/or minimizing the total cost of ownership of our facilities, it is all for naught.

Too narrow a focus on KPIs can lead to games on how to capture data and report results. This is where the balanced scorecard is so valuable. We can cut back on staff to complete PM and show improvement in operating costs in the short term. This will come

at the expense of building system service life, system reliability, and customer satisfaction when the air conditioning fails in August. Similarly, continually deferring capital projects will impact the cost of operations through increased maintenance requirements and loss of energy efficiency.

This is also where it becomes difficult to get information out of a number of complex and usually stove-piped technologies. Most CMMS/CAFM systems provide information on the O&M side of the equation, but not the capital side. Facility condition analyses in combination with life cycle cost methods will generally be used to develop the capital requirements stored in some type of capital planning system.

Separate or integrated, the data in these technologies need to be combined to evaluate the total cost of ownership, including O&M and capi-

tal costs. Have you ever managed this data to determine just how maintenance has extended the life of facility assets, and what was the return on investment of that maintenance? Facilities that have can show that extending the service life of facility assets by 10 to 20 percent can yield significant cost savings.

Finally, it is imperative to determine desired level of service so you can justify resources or at least manage expectations. APPA has some great tools to identify performance measures related to level of service¹. Consider linking these to your asset management KPIs. The key is to simplify the results in a clear and credible fashion for reporting your success to business officers and other senior administrators. 🏢

¹APPA Maintenance Staffing Guidelines for Educational Facilities. 2002. Chapter 5 Levels of Maintenance, Figure 7 - Maintenance Level Matrix, pg.48-49.



GALE

Consulting Engineers

Engineered Solutions for Roofs, Walls, Windows, and Waterproofing.

Our Services Include:

- Condition Assessments
- Forensic Investigations
- Maintenance Plans and Budgeting
- Design Consultations
- Preparation of Design Documents
- Construction Period Services
- Construction Inspections
- Expert Testimony

Specialized Building Envelope Engineering Services for Educational Facilities Since 1964

Gale Associates, Inc.

1-800-366-1714
ejm@gainc.com

www.galeassociates.com