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Sustainable Facility Management Reporting — Choosing the Right Things to Measure

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Facility management and building technologies have given us the ability to manage the smallest details of our work practices and to see into the most remote corners of our buildings. Work management metrics, energy consumption, water management, thermal comfort, and a broad range of building performance metrics are at our fingertips; often in real time. One of the biggest challenges facing facility managers is distinguishing what data is important, and what to do with it once we've determined which metrics bring value. It's easy to get wrapped up in data. After all, we've been conditioned over the past decade or two to monitor and measure our progress in almost everything we do. The need for more sustainable facilities, the need to manage them efficiently, and the ability to collect vast amounts of performance data have converged so that we are often faced with far more data than we need. Data is everywhere; but we've been so captivated by our ability to collect vast quantities of the stuff that we often lose sight of what we've set out to accomplish — improve performance.

Reporting of the FM function has become an important tool for enhancing the visibility and demonstrating the importance of good facility management practice. It also allows us to demonstrate our organizational commitment to environmental stewardship. Facility management reports have evolved to include sustainable facility management metrics. These reports are often used to demonstrate Corporate Social Responsibility (CSR) by detailing the use of energy, water, materials and resources, responsible site management and sustainable workplace management.

There is a growing desire to elevate facility management to improve the recognition and perceived value of the profession within the corporate hierarchy. Many have achieved success in this arena through careful alignment with their organization's mission and by emphasizing facility professionals' role as managers of significant assets and enablers of the organization's mission, vision and values.

A great report is a mix of science and art. Traditional metrics and Key Performance Indicators (KPIs) show that we've fulfilled our stewardship role by being fiscally responsible. However, compelling stories also address the human element of facility management — the integration of people and place, and the importance of sustainable facility management practice. A good story has a strong human element. Facility management reports are a great opportunity to show the impact of the facility management profession by telling the story of "why" we do our jobs.

This article focuses on the "science" piece by looking at how we measure, monitor and report performance metrics. A facility management report should show balance between reporting the metrics and telling the story of the facility manager's contribution to safer, more productive facilities, and the environmental stewardship that supports the organization's commitment to the triple bottom line.

As we struggle to determine which performance metrics to measure and monitor, it often helps to start at the organizational level and look at the drivers of facility management and building performance. Facility managers are charged with ensuring that facilities operate to support the business mission, balance the expectations of occupants and stakeholders, and meet the challenges of the triple bottom line. This creates the massive challenge of managing for high-performance and environmental stewardship while minimizing cost. The facility management function is typically viewed by the organization as a cost, and facility managers are competing within their organizations for investment dollars. Operating efficient and sustainable facilities, while challenging, offers a unique opportunity to meet CSR (softer) goals while creating the maximum return on investment (financial goals).

Measuring Performance

In facility management, work management systems (FM technology systems) are designed to tell us how well we are managing the FM function, how much work we've accomplished, how many projects we've undertaken, and how efficient we are at performing those functions. Building management systems are designed to tell us how much energy and water we use, how we're consuming our resources, and how well we are managing comfort and safety in the workplace. Both systems should be well enough integrated to capture how efficient we are at spending our organization's money.

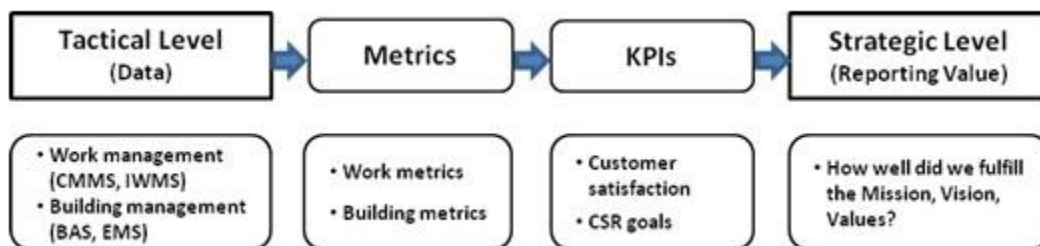


Figure 1 — From Data to Reporting; Integrating FM function and Building function

Measuring and monitoring performance starts at a very tactical level. The starting point for a facility management report is the work management data (from Computerized Maintenance Management and Integrated Work Management Systems—CMMS and IWMS, respectively) and building performance data (from Building Automation Systems and Energy Management Systems). The desired goal of work management in the FM function is efficient work practices that produce high levels of customer satisfaction while making efficient use of the resources and money used to operate facilities. In order to prove the business case that we are using our resources properly, we need to monitor both work management and building management metrics. The term most often used to describe the importance of facility management and building performance data is the KPI (key performance indicator). Although KPI is a generally well-understood term used to describe important metrics, it is often miss-used when it refers to all metrics used to determine facility performance.

The development of KPIs is the result of an alignment of the metrics reported with the organizational priorities. In facility management, these are normally where we link our metrics with organizational drivers like customer satisfaction and CSR. Ultimately, a good facility management report creates a link between data, metrics, KPIs and production of a facility management report that links what we do on a daily basis with the desired organizational goals. *Figure 1* shows the pathway from measuring to reporting.

Developing the Story — linking metrics with KPIs and the challenges of reporting

In order to find the proper balance between routine operational practices, sustainable practices, and fiscal responsibility, we rely on facility (work) management practices and building performance data to give us the information we need to make informed decisions. The facility management report is a representation of how we demonstrate balance in making those decisions.

The facility management report is usually filled with details and metrics; KPIs that are chosen carefully to paint a picture of our diligent stewardship of facilities. By definition, a KPI is an indicator of the most important performance criteria that an organization deems critical to achieving its mission. That may well have a performance metric attached to it. A good performance management system links organizational priorities with those measurements that support whether those priorities are being met.

However, many organizations look to implement a number of metrics that they deem to be KPIs without linking back to organizational priorities. This leads to "lots of KPIs", creating a massive amount of data and complex data management systems.

KPIs form the bridge between the tactical level at which most metrics are gathered, and the strategic level where the most important performance indicators are defined.

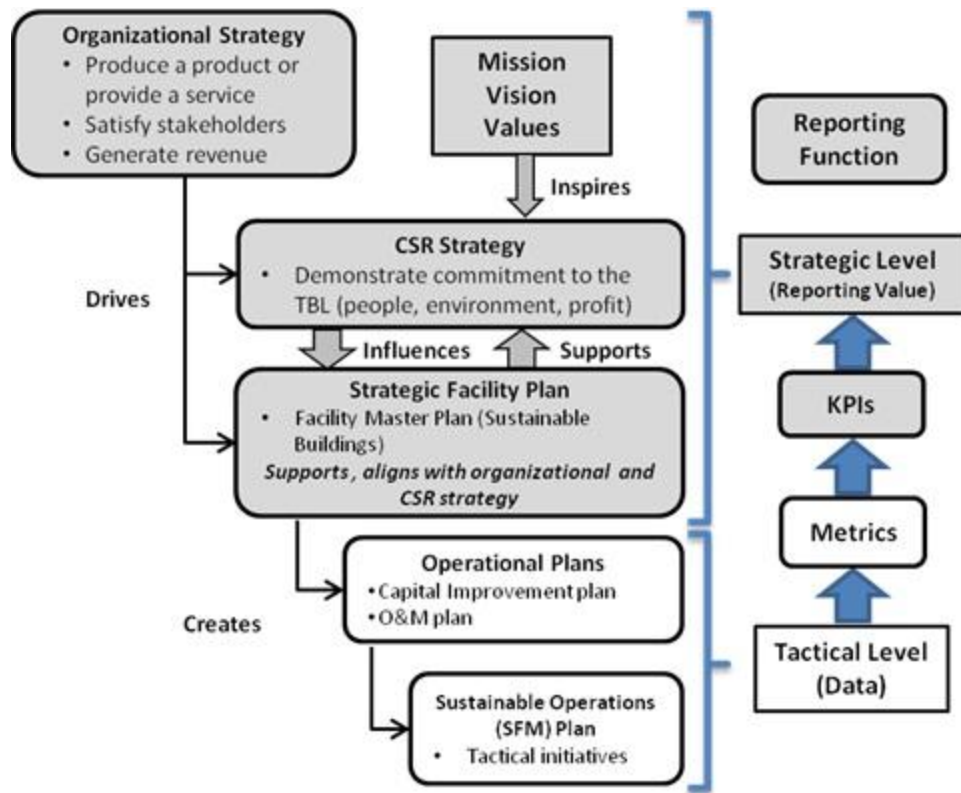


Figure 2 — Mapping the Reporting Process; from data to KPIs to organizational strategy

If we were to look at an idealized map of the FM function within an organization, it might look like *Figure 2*. This map represents an organization that recognizes the contribution of facility management to organizational strategies and CSR. The right-hand side of *Figure 2* shows how we derive facility performance data in a typical organization. Facility management technologies and building management technologies provide the building blocks (data) that allow us to develop measures (metrics), which in turn allow us to evaluate which measures are most important to our organizational goals and strategies (KPIs).

One metric that most organizations use is energy consumption. Although this is an excellent metric and should be measured in almost all cases, it may not represent one of the organization's KPIs. For example, in data center management, it may not be as critical to measure energy consumption as it is to manage uptime (minimize downtime) for critical systems. For a data center, the KPI would most likely be uptime (to as close to 100% as possible, with backup systems in case of failure). Although energy consumption is important, the KPI in this case is uptime. In reality, the optimum approach to managing facilities in the data center environment is to balance the goals of (100%) uptime with (efficient enough) energy consumption.

Summary

In order to secure funding for ongoing operations and maintenance, sustainability initiatives, and capital funding, facility managers must be able to craft and present compelling reports in order to win funding for our investments in facilities. How our reports are received by others is just as much about the subtleties of how the data is presented as it is about the data itself. A well-crafted

facility report includes the essential hard data on work management, building performance, meeting sustainability goals, and the financial impact of facilities. The report should also consider how the story is told. In this article, we've concentrated on the path from data to KPIs. However, that's only part of the story. A good story also brings the human element into readers' minds, and facility management and sustainability reports are no exception. While we could write volumes about performance management metrics for facility management organizations and for buildings, we could write even more about the human element of reporting. We'll address the human element in the next part of this Sustainability series on FMLink.



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Facility Engineering Associates is an engineering and facility management consulting firm specializing in existing facilities. Our mission is to make facilities last by implementing practical and cost-effective strategies to achieve operational excellence. Our areas of expertise include: Facility Asset Management, Facility Diagnostics, Condition Assessment, Repair and Restoration, Energy Management, Environmental Assessment, Sustainability. Office locations: Washington DC Dallas, TX Denver, CO San Francisco, CA

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