Smart Data, Smarter Decisions

By Alana F. Dunoff

Data is an underutilized and powerful resource. Facility management professionals tend to collect and own a lot of data. Most of this data sits in computers or in mounds of paper reports just waiting to be understood and shared. Maybe it is a lack of time or fear of all those numbers or it is just not our favorite thing to do—whatever the reason, FMs often utilize a small portion of the data available—one report out of a mountain of data.

There is hope though, with proper planning and a few simple tools, your data can work harder and smarter. Your underutilized passive data can turn into real actionable knowledge. Knowledge that communicates value, explains a need, and ultimately allows you to make smarter decisions.
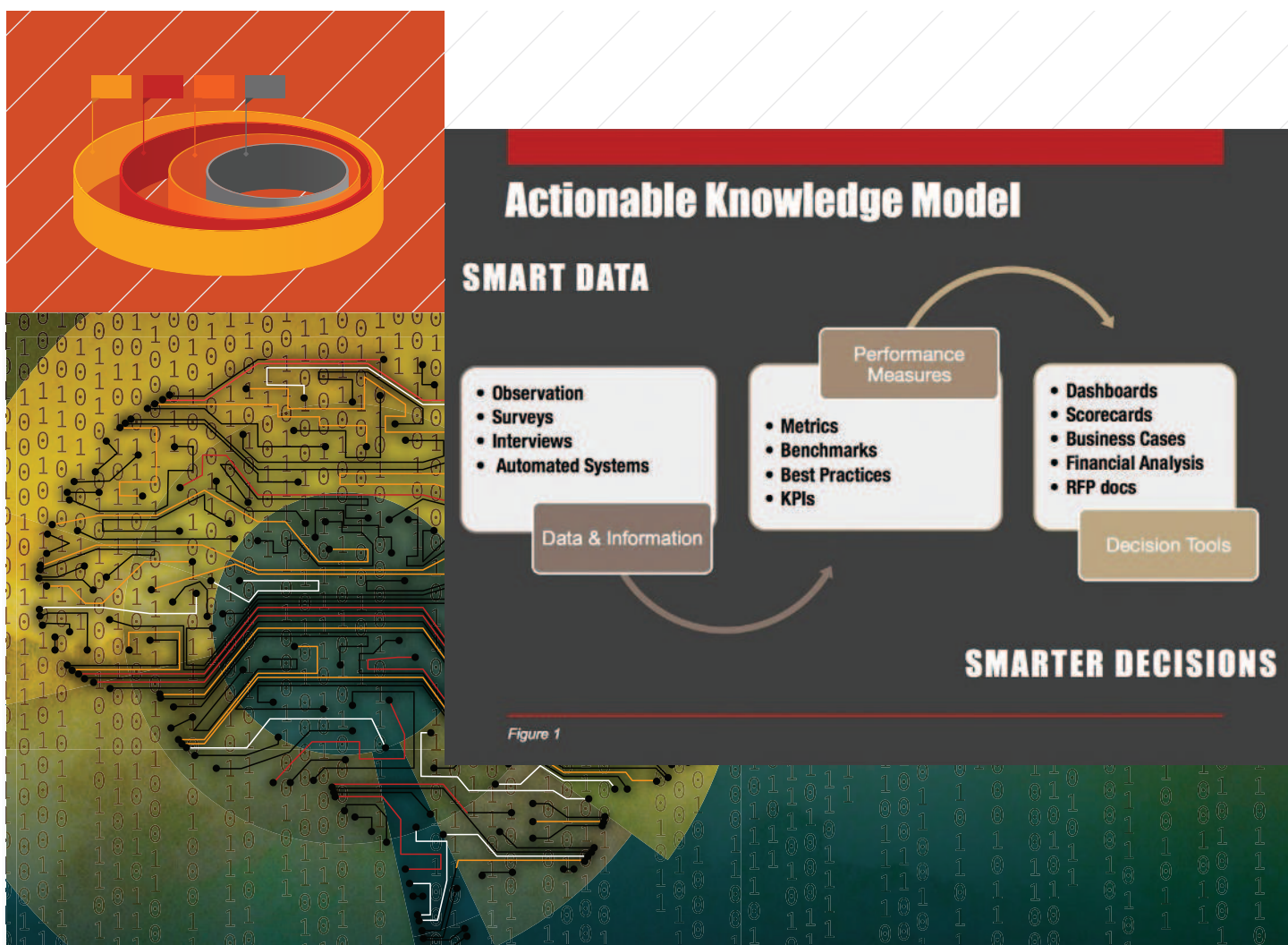
Garbage in, garbage out

Most FM professionals make daily tactical and strategic decisions based on data, but how can you be certain your data is smart? The adage "garbage in, garbage out" holds true for data. If you have bad information, from inconsistent or old sources, that bad data can influence your decision making.

You might be thinking data is just numbers, how can it be smart? Smart data starts with collecting information that is consistent, valid and reliable. Good information is accurate, usable and comparable. Having smart data is the first building block. These simple numbers from a report become the critical data that feeds directly into our performance measures.

Performance measures are the metrics, key performance indications (KPIs), best practices and benchmarks utilized to measure and demonstrate our successes and challenges. Performance measures are now a vital aspect of our accountability to our organizations. These measures are the goals we work toward on a daily basis that also directly support our decision tools.

Decision tools are the documents and reports you and your entire organization rely on to make effective strategic decisions.

Actionable Knowledge Model

SMART DATA

- Observation
- Surveys
- Interviews
- Automated Systems

Data & Information

- Metrics
- Benchmarks
- Best Practices
- KPIs

Performance Measures

- Dashboards
- Scorecards
- Business Cases
- Financial Analysis
- RFP docs

Decision Tools

SMARTER DECISIONS

Figure 1

Tools like dashboards, a balanced scorecard, financial analyses and business case scenarios are all processes that rely heavily on data to make decisions. Even the request for proposal (RFP) document and process is essentially a decision tool that helps you to decide on which service providers you will utilize to support your facilities.

Figure 1 illustrates this dynamic process of ensuring you have smart reliable data at the beginning so at the end you can have confidence in your decisions. If you want to make informed decisions, you need smart data—information that is actionable and tells a story.

What is actionable data?

As a facility manager, you might find yourself trying to explain a need, justify a decision, implement a new service or process, or even ask for more financial resources. Your job is to be the voice of the building and the people inside. It is a big task to figure out how to convince senior management or other stakeholders to see it from your perspective. Having good data as part of your regular vocabulary creates a solid platform for getting your voice heard louder and more clearly.

Good actionable data is strategic; it can illustrate trends and provide context. It can help you speak the language of the C-suite allowing you to better influence decision makers. Good data can help you improve the perception of the value and efficiency your facility management department brings to the organization or it can help to increase awareness or introduce new processes, procedures or service levels. Smart data highlights processes to improve, grow and change, as well as when you should pat yourself on the back for a job well done.

Actionable data has depth and provides insights into your organization. When you have a deeper knowledge of your organization you can make smarter decisions.

Where do you get good data?

We are surrounded by data. Just take a look at your desktop to see all of the icons for the automated systems you have; building management systems (BMS), energy management systems (EMS), integrated work management systems (IWMS), computer aided facility management systems (CAFM), work order systems, personnel data systems, financial and budget systems, and the list goes on. Each of these resources provides reports and information. Chances are you print out one or two reports from these systems ignoring the rest of the data.

Other data may come from customer survey tools, perhaps your organization does work order satisfaction surveys or annual how we are doing surveys. You can also collect data by walking around your facility and observing or by meeting with senior management to collect space programming or planning information.

The data is there, right at your fingertips. And you can make the data more manageable and usable, but for some there are major challenges to overcome.

Challenges and solutions

1. There is so much data, how do you know what to use?

You can't spend your days manipulating data and creating reports. Where do you start? It can be overwhelming. Start with taking a deeper look at the data that is most important to your organization, clients, stakeholders, senior management and staff. How do you know what is important to them? Ask them. Ask them how they perceive the FM organization or if you are meeting their expectations. The answers might tell you where to focus your efforts first.

Another approach is to take a look at your organization's mission, objectives or corporate responsibility statements. If your FM department is aligned with the organization you should quickly be able to identify data that supports these efforts. If your company is all about sustainable initiatives then focus on the data from your EMS system. If your company is in a cost reduction mode then focus on the areas where you know you have contributed to the bottom line.

The trick is to stay focused and not take on too much. Don't try to answer all the ills of your organization at once. With surveys for example, there is the tendency to ask a lot of questions since you are already asking, what's wrong with a few more questions? But then the results come back and you are faced with hundreds of pieces of data to sort through. It is better to pick one problem and solve it with data. Don't ask 50 mediocre questions on an annual survey, ask five great ones. Then the data analysis is streamlined, manageable and the results are more self-evident.

You don't need a lot of data; you just need the right data. One piece of data, one metric, on a regular basis might give you all the information you need.

Café Du Monde, a coffee shop in the French Quarter of New Orleans, La., USA, is famous for serving delicious powdery and messy beignets (a type of fried dough). The folks at Café Du Monde track an interesting piece of data, the number of cases of napkins they order on a monthly basis. The need for

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napkins is a good metric and indicator for them of how business is doing. In 2005, after Hurricane Katrina, Café Du Monde like hundreds of businesses suffered from the devastation. The café reopened for business and orders for napkins were a lot lower.

But in early 2008, the data revealed that the number of cases of napkins they were ordering mirrored pre-Hurricane Katrina levels. This small piece of unassuming data told a story of hope and opportunity, New Orleans was on the rebound. One piece of data tracked year after year told a compelling story.

2. How do you know your data is good data?
Good data means that the information is reliable, valid and tells us what we think it tells us. If you go into your CAFM system to print a report on the current location of the finance department, you have to be confident that the most recent moves, adds and changes are reflected in the system, otherwise the report will be flawed. Similarly, if you have been administering the same survey to your customers for the last three years, chances are the responders are fatigued and not providing the best answers anymore, which also has the potential to skew results.

It is important to not take the source of your data for granted. Consider doing some random quality checks of your data, one wrong parameter, inconsistencies in data input or a poorly defined field can result in a bad report. A facility manager had a big argument with a vendor about some furniture costs; turns out they were both referring to slightly different data in a report causing a lot of misunderstanding. Bad data is worse than having no data, because you can make a bad decision on bad information believing the data is actually good.

You should also consider taking time to re-invigorate your customer surveys with fresh questions or focus on new metrics or issues you are interested in tackling. Just wording a question better can yield more insightful results.

3. What is passive data, how can data work harder or be smarter?
Passive data is information that is presented at the surface level, with little context or background. It might be a simple fact or number, but without proper context it actually tells you very little. A lot of passive data gets presented in reports and lots of useless charts and graphs are put into PowerPoint slides. Passive data might be relevant, but it just doesn't tell you that much.
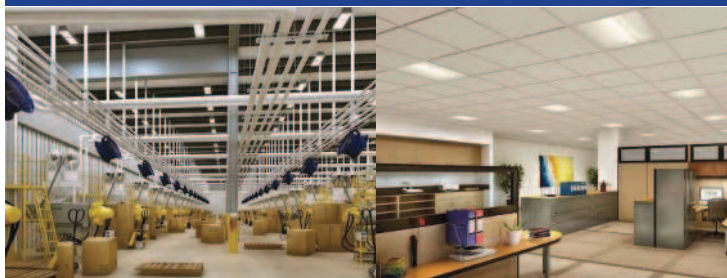
Let's say you are putting together a chart for a budget meeting to illustrate annual facility costs for several buildings on your campus (Figure 2). Your graphic provides the cost for each building and perhaps a metric such as cost per square foot or per person. This is a good start but this is really passive information, it doesn't tell you much other than that you spent a lot of money, in this case US$1.79 million.

Facility	Annual Budget
Building A	$500,000
Building B	$700,000
Building C	$490,000
TOTAL	$1,790,000
Cost/SF	$4.50/SF

Figure 2 (In U.S. dollars)

But if you took this graphic and added historical information your data might tell a different story (Figure 3). By adding several years of history you will start to see trends. Trends are strategic; they provide context, and a different perspective. So while you may have spent US$1.79 million, the real story is that you have been systematically saving money during the past few years, not just spending it. The great story is that you

have been great stewards of your organization's dollars. That is the story you should be telling.

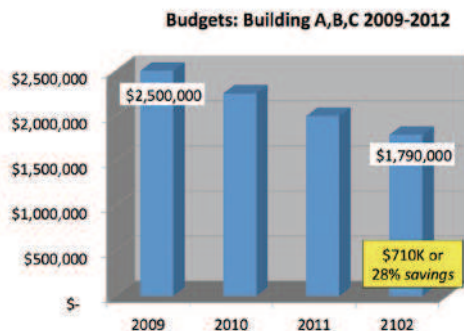**Budgets: Building A,B,C 2009-2012**

Figure 3 (In U.S. dollars)

This is active smart data, it is compelling and powerful and relatively simple to create, it may only require pulling historical data from previous reports. If you don't have historical data then start collecting it, illustrating strategic trends turns the passive data into smart actionable knowledge.

Benchmarking, metrics and best practices are also terrific tools to make passive data more meaningful. When you can compare your organization's data to your facility peers you learn a lot about your own organization. Is an annual budget of US$1.8 million dollars a lot or a little? Are you efficient or wasteful? You may not get a complete answer, but there are plenty of benchmarking resources available today to at least inform you as to where you stand and help you better plan for the future.

4. The data might be bad news.
Some people have the philosophy that if you don't ask, you don't have to worry about getting bad news. In facility management you always hear the bad news whether you ask or not. Negative feedback or poor customer survey ratings are part of the job and are not the end of the world. As a matter a fact, negative results should be embraced.

If according to your data, something isn't performing to the expected standard, consider it an opportunity and not a cause for concern. If you know about a problem you can fix it, then collect new data and come back and show the improvement. This type of continuous improvement and evaluation is a critical part of being successful. Your ability to be flexible, adaptable and

make changes shows you care about your organization. This is the type of information that allows you to take smart data and use it to your advantage.

Some organizations utilize dynamic tools such as workplace dashboards or balanced scorecards to visually highlight their achievements toward reaching targets and goals. These tools allow you to cull your critical metrics or performance measures into a single spreadsheet and then graphically illustrate how you are performing. Targets or metrics that are performing poorly are noted in red or "flagged." These negative indicators are so valuable because they help you focus your time and resources where they are actually needed. Talking about poor performance is not easy, but it is how you ultimately make positive change. Even bad news data, can actually be smart data.

Smarter strategic decisions
Data is an unsung hero, with a little bit of effort and forethought you can reap the benefits of making it work a lot harder and smarter for you. Data can be a great equalizer and can change the dialogue about issues that seem to be at an impasse. You can use data to help change a perception, solve a problem or take decisive action.

If you can think critically about your data, how you collect it and how you present it, you will see how dynamic it can be. Taking passive data and adding historical information can highlight strategic trends, incorporating metrics or benchmarks can provide focused targets for process improvement.

When you focus on ensuring your foundational data is solid, then your metrics and performance measures can be stronger, and if your metrics are stronger, then your decision tools such as dashboards or balanced score cards become more robust allowing you to have greater confidence in making smarter strategic decisions. **FMJ**

Alana F. Dunoff has more than 20 years experience as a strategic facility planner. She is president of AFD Facility Planning, a consulting firm offering a full array of strategic facility planning services, programming, occupancy analysis, dashboards and metric development and relocation management. AFD is dedicated to helping facility practitioners achieve their goals.

Dunoff served as a director on the IFMA Board of Directors and as president of the Greater Philadelphia Chapter of IFMA.

She is an adjunct instructor in the Facility Management Program at Temple University's School of Architecture and at Villanova University's Continuing Education Department, teaching the FMP® credential course. She has presented at IFMA's World Workplace Conference for more than seven years, guest lectured at numerous colleges and universities and has been invited to speak at various organizations around the country.