

## Turning Data into Actionable Knowledge

By Alana F. Dunoff

Data is an underutilized and powerful resource. As FM professionals we collect and own a lot of data from our building systems, CAFM or IWMS (Integrated Workplace Management software), surveys, and tracking tools etc. Most of this data sits in our 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 just not our favorite thing to do – what ever the reason, we tend to avoid utilizing our data. Yet with a little strategic planning and forethought we can turn that data into real actionable knowledge. Knowledge that helps you communicate value, allows you to be seen as a more strategic partner and helps your organization make smarter decisions.

As FM professionals, we do a pretty lousy job of communicating our value to our customers, whether those customers are internal or external. Business continues to move at lightening speed, we need short cuts that will help us get our voices heard and I believe that data can help as scream a little louder.

For those who get cross-eyed at the thought of sifting through and making sense of data, don't give up just yet on this idea of using data to your advantage. Read on!

### Good Data Can Sell Your Story

One of the many advantages of having and using data is that it can do a great job at 'selling your story'. What I mean by that is that we spend much of our time trying to convince someone to do something or to see it from our perspective. We are always trying to explain a need, justify a decision or market a service or product, essentially trying to communicate value. I believe if we add good data to our regular vocabulary we will have greater success in getting our voices heard louder and clearer.

### What's in it For Me? (WIFM)

If you need any further convincing as to why you should bother taking the time to cull through the mountains of data you have in attempt to harness the power of data and communicating your value, here are just a few WIFMs for you to consider:

- Greater access to decision makers (e.g. C-Suite, client)
- Want to be a partner in making long-term strategic decisions
- Perceived as part of the solution
- Improve the perception of the value and efficiency you bring
- Increase awareness of services/products
- Introduce new processes or procedures
- Want a sense of satisfaction for the work 'done well'
- Want to improve, grow, change
- Ensure you are using the right internal/external resources
- Want/need to change service levels

In Facility Management, it is our job to fly under the radar if no one is complaining and the building is humming along we are happy and content. Our job is to make the operations seamless and to not rock the boat. So of course we struggle with the notion of communicating our value, of telling others

(particularly senior management) the great job we are doing. We have a lot to say and a lot of information to bring to the table, it is time as FM professionals that we raise our bar and come to the C-Suite with a commanding value proposition.

## **Getting Good Data**

If you've ever stepped on a scale, you know that the scale will give you a piece of data, either good or bad, but information nonetheless. But, if you have ever tried to lose weight you know that the scale may not always indicate progress. For instance, if you are exercising you might gain muscle weight so your clothes might fit differently but the scale hasn't budged. The scale by itself just doesn't give you the full picture, you need more information to stay motivated and keep you on track. That's why in order to get good data you need to create a comprehensive data plan, one that has a complete approach to gathering, understanding and using information.

Creating a Data Plan is not unlike other strategic planning processes. There are essentially six components:

### 1. Develop Goals and Objectives

Like all strategic plans you need to start with goals, asking what is it you really want to know, prove, illustrate, show or solve? To begin with you should have no more than 2-3 simple and focused goals. Consider your first Data Plan goals to be for a particular issue or problem you are trying to resolve, this will give you an incentive and real direction. Your goals and objectives should also relate to your WIFM.

### 2. Define Your Client (s)

We all have a multitude of clients we need to please, our bosses, senior management, staff or employees. It is important in this data planning process to identify who your clients are and for each client ask and answer 3 questions:

1. What are their expectations of our services/products and are they being met?
2. What are their perceptions of the job I/we are doing?
3. Are they aware of all the services, processes and products you provide?

When you go through this exercise, you might be surprised at the answers, but what a great conversation to stop and have with your clients. It lets them know you care and you might learn a ton!

### 3. Define Your Products/Services

A department evaluation is a critical aspect of this process. It is time to dust off your strategic plan binder and do a quick check in to make certain that your data goals align with your department and organizations goals and objectives. Then, try this fun and challenging exercise, make a list of ALL the products and services you provide to your clients. It might sound like a daunting task, but it is a worthwhile one. When you finish making this list of services/products you will probably be shocked at the total number. But what a great piece of data, because if you didn't know how many services your FM department provides how does anyone else in your organization know? Let alone appreciate how much you do to make the building hum so quietly. What a great data point all by itself, one that you should be proud of and communicate loudly!

The final task of this section is to make a list of the type of information you currently collect and how you collect it. You probably currently collect a ton of information between CAFM, IWMS and BMS systems and maintenance work orders and customer service surveys. Your current data is a wealth of information, an untapped gold mine.

#### 4. Define and Create Data

Defining and creating data is a bit of a science by itself, but here are few tips to help you get started.

1. Who are you collecting information about? Do your data goals require collecting data at the organization level, by project, for certain processes or people?
2. What metrics/measures will you collect about the 'who'? For example, you might collect information on usage, productivity, frequency or cost.
3. How will you collect the information? There are many ways to collect data some are invasive like surveys or focus groups, others are non-invasive such as observational mapping or mining existing databases.

One of the most important parts about this process is to keep asking questions and challenge the data and information you are presented with. How was it collected? Does it include everything it should? If you have been administering the same survey to your customers for 3-5 years it is time for a refresh, the responders are probably fatigued and not likely giving you the best answers any more.

#### 5. Data Analysis

The real challenge in all of this is how do we get from the mounds of papers and reports we have to something simple and easy to understand and share? Data analysis can be time intensive and is often at the very bottom of our 'to do' list. There unfortunately is no magic formula to data analysis, it takes practices and patience but here are a few practical tips to make it a little smoother sailing:

- **Keep your scope simple.** Don't try to answer all the ills of your organization at once. Pick one problem and solve it with data. Don't ask 50 mediocre questions ask 5 great ones.
- **Embrace positive and negative results.** We are often afraid of sharing negative results with our clients, afraid they might think we are slacking. I think negative results should be embraced. If according to your data, something isn't working well then you have an opportunity to fix a process or problem; collect new data and come back and show the improvement. This is turning data into actionable knowledge. This is showing you care about your organization by your willingness to find short comings and make the necessary corrections. This is where you communicate your value.
- **Ask lots of questions and challenge the status quo.** We often look at a graph or chart and take all the information presented at face value, but consider questioning how the data was collected making certain it answers the questions you need it to.
- **Use active versus passive data.** Essentially data can be very dynamic or it can be simple. The trick is to take the simple data and turn it into dynamic and informative information. More on this shortly.
- **Stay on message with your goals.** It is very easy with data analysis to get caught up in all the data and forget what it is you were trying to prove or solve. Refer back to your goals and make sure you stay focused on the analysis that meets those objectives. The other data you uncover maybe terrific and you should use it, but not at the expense of getting off message or overwhelming your audience.

## 6. Developing a Communication Plan

The last piece to the plan is developing a communication plan. This is where all the pieces come together. Where you craft the message that will help you sell your stories and communicate your value.

In this process you again need to understand who your audience(s) is, you might need to create a plan with several clients in mind. You should also decide what information you want to communicate, possible goals you want to achieve, services, products or processes you want to disseminate or share. You then need to determine the frequency you will communicate with your clients. And then finally how you will communicate. And there are many methods to communicate information from regular reports (e.g. Annual, Quarterly, Weekly, Daily) to communication tools like websites (intra or extranets), emails and newsletters. There are also terrific dynamic and very actionable quantitative tools such as dashboards, surveys and graphics that can really help you speak the language of your client.

### Passive vs. Active Data

How do we turn passive data into actionable knowledge into something compelling that helps make decisions?

Passive data is information that is presented at surface level, with little context or background. We present a lot of passive data in our reports that really doesn't tell us much in the end.

### 2007 Facility Costs

Facility	Cost
Bldg A	\$500K
Bldg B	\$900K
Bldg C	\$490K
	<b>\$1,890,000</b>
Cost/SF	\$\$
Cost/PP	\$\$

Figure 1

For example, Figure 1 might be a chart pulled together for some budget meeting that illustrates facility costs for 3 buildings. It provides some data and maybe it even includes a cost per square foot or per person, which are both good metrics and a step in the right direction, but in general this is Passive information it doesn't tell you much except you have spent a lot of money.

But what if you took this data and added some trending information your data might tell a very different story (Figure 2). In this case, if you added the same data over the course of a few years you might see that while you may have spent \$1.89 Million in 2007, the real story is that you have been systematically *saving* money over the past few years, not just spending it. The real story is that you have been great stewards of your organization's dollars.

This is active data, it is compelling and powerful.

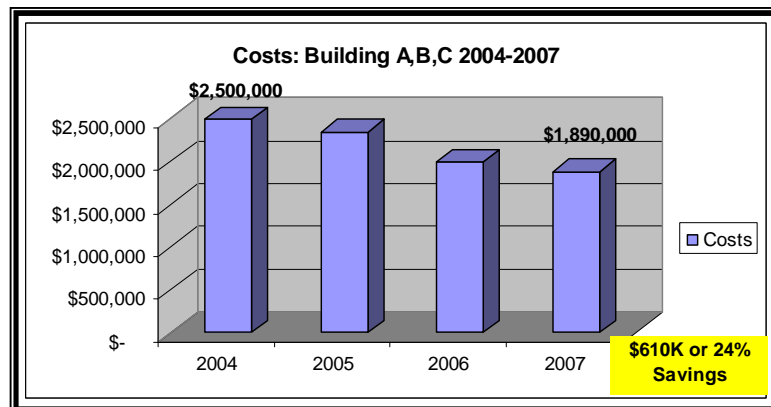


Figure 2

## A Few Examples

Here are a few more case study examples of how to turn data into actionable knowledge.

The first example comes from a Retail Company. The Facility Department was interested in creating more awareness of services their department provided to the organization. They collected fun facts regarding their services and created little posters that they hung around the facility (Figure 3).

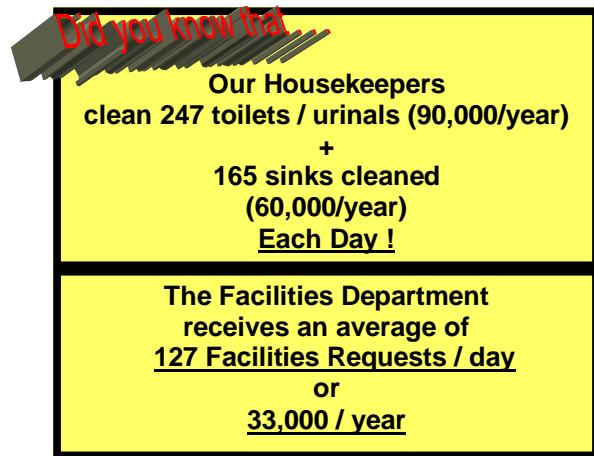
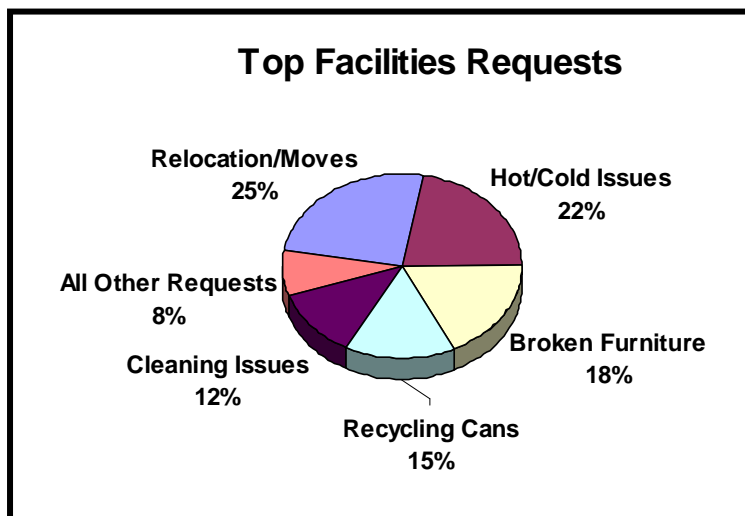


Figure 3

This is great, passive data. It is memorable, provides a chuckle and gives some sense of magnitude or scale for the work the FM department does. But what if they wanted to present this data to senior management? This may not be the language of the C-Suite.



Let's take for example the 127 facilities requests per day or 33,000 per year noted in Figure 3. Since the FM department is already collecting total requests, chances are they also know what type of requests they receive. Wouldn't it be interesting to do a "top 5 or 10 list" of facility requests (Figure 4)? The data could help understand what the big issues are on some regular basis, identify facility problems that could be resolved or mitigated, and it is a great way to get a pulse on what is happening in the organization. By simply taking some passive information and slicing it a little differently the data turns into actionable knowledge.

Figure 4

We could take this information one step further too. When I saw the 33,000 requests per year, the first question I had was is that a lot of requests? Maybe for this organization it is or maybe compared to similar organizations it is low, but answering that question might also be valuable information in understanding the organization.

Adding trend information starts to create a picture as to the number of Facility Requests on an annual basis and doing a quick calculation for average number of requests per employee is also a great metric that help can be a barometer from year to year. In this case, the average number of requests metric is what tells the story that even with requests increasing the average number per person has decreased a sign that the FM department is keeping things in check despite the growing population.

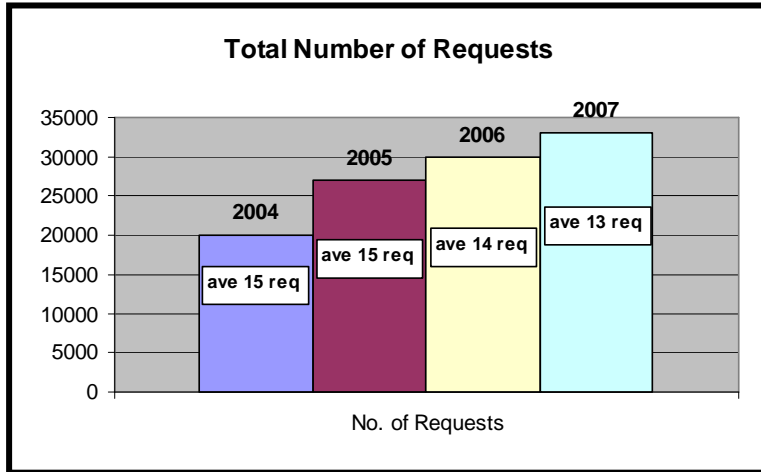
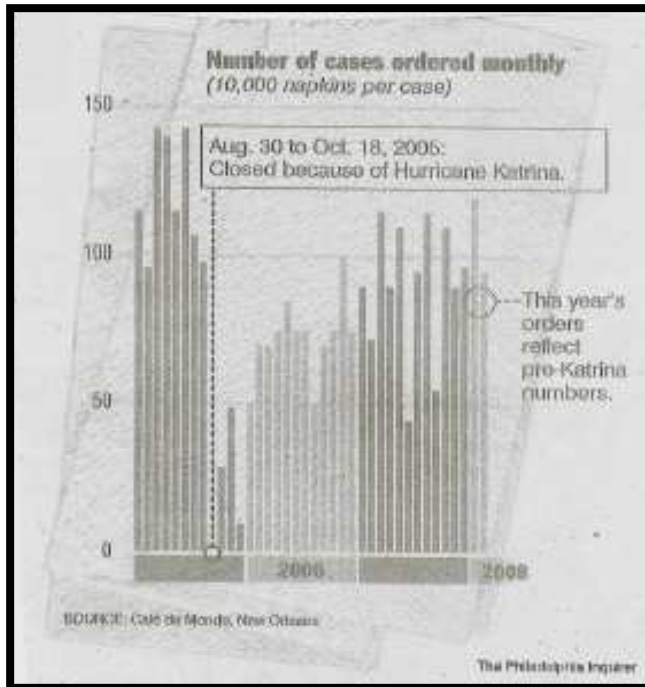


Figure 5

From one small piece of data we were able to build compelling stories that communicated value and provided a new perspective.



The next example I want to share is something from the recent headlines. Café Du Monde in New Orleans is a very famous coffee shop in the French Quarter.

Café Du Monde tracks the number of cases of napkins they order on a monthly basis. The need for napkins is a good metric and indicator for them on how business is doing. What their data suggests (Figure 6) is that current napkin orders for the beginning of 2008 mirror pre-Hurricane Katrina order numbers for the same period of time in 2005. This small piece of unassuming data tells a picture of hope and opportunity. That just maybe, sections of New Orleans are truly on the economic rebound. Again one piece of data tracked over the years tells a very strong story.

Figure 6

These are just a few examples of how data can be turned into decisive actionable knowledge. You can also use data to help change a perception. If you have a customer/client who is convinced they are “right” about a particular issue, see if you can re-educate them using data. Data is a great equalizer and can help open dialogues about issues that seem to be at an impasse. In the end your client will appreciate the candor and you might be seen as a more strategic partner.

Another great actionable data tool is a Work Place Dashboard (Figure 7). Like the dashboard on your car that gives you all the information you need at a glance to make quick decisions (speed, gas, mileage etc.). A work place dashboard is a spreadsheet that succinctly collects data regarding your department goals, metrics, and targets. And then it includes a “status” a red, yellow, or green to indicate how well the goals are being achieved. The beauty of this type of dynamic tool is that when you are meeting with senior management or a client all your information is at your fingertips. It allows you to focus on the real issues, the ones flagged red. These are the areas you need discussion around, these “negative” issues are the heads up your organization needs, these are the areas you really need focus or direction. These are the types of conversations you should be having with senior management, the types of dialogue that demonstrate your commanding value proposition.

DASHBOARD EXAMPLE - work in progress								
Perspective	Status	Key Metrics	Target	First Quarter	2007	Percentage	Prior Year	Comments
Goal/Objective				2007	YTD	of Prior Year or Target	2006	
<b>ACTIVITY</b>								
<b>1. Efficient Processes</b>	●	Warehouse		\$ 69,133.32	\$ 69,133.32	21%	\$ 332,000.00	
	●	Signage		\$ 2,180.50	\$ 2,180.50	28%	\$ 7,800.00	
	●	Installation		\$ 356,098.22	\$ 356,098.22	31%	\$ 1,153,000.00	
	●	Project Management		\$ 14,034.00	\$ 14,034.00	64%	\$ 22,000.00	
	●	<b>Total Project</b>		<b>\$ 428,185.55</b>	<b>\$ 428,185.55</b>	<b>27%</b>	<b>\$ 1,575,000.00</b>	
	●	Churn rate		42%	42%	na	67%	
	●	Reconfiguration rate (Workstation Reconfigurations only)		1.6%	1.6%	na	9%	
<b>2. Efficient Resources</b>	●	Average monthly cost for workstation reconfiguration		\$ 1,172.25	\$ 1,172.25	\$ (50.75)	\$ 1,223.00	
	●	Cost savings for regular time work		\$ 22,478.49	\$ 22,478.49	14%	\$ 157,000.00	
	●	Cost savings for shift time work		\$ 22,026.83	\$ 22,026.83	49%	\$ 45,000.00	

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Figure 7

## Final Thoughts

There are clearly a multitude of applications for using and providing data and information. Data can be an unsung hero and you can reap the benefits of making it work a little harder for you.

Here are some final thoughts:

- **Commit to communicating your value.** It is time we raise the bar, time we as FM professionals do a better job speaking the language of the C-Suite and communicate the true value we bring to our organizations.
- **Know your client.** Take the time to know your clients, your business units, your staff, your customers, whoever it is you provide services to.
- **Embrace data** (mine what you have). I am not suggesting you have to start collecting new data, just commit to understanding what you currently have. You spent all that money putting those data collection systems in place – use them!
- **Take baby steps.** Don't ask 25 questions when 5 will do. 5 is more manageable, 5 answers you have time to deal with. And like the Café Du Monde example, only one piece of information maybe necessary to tell a compelling story.
- **Ask questions; challenge status quo.** It is good to challenge how your data is collected, your first step might be to revamp a current data collection process to ensure you are getting true valid information.
- **Quantify, Quantify, Quantify.** You don't need to be a statistical whiz to quantify information and create valuable metrics and measures. You just need to be committed to wanting to understand the data.
- **Turn passive data into actionable knowledge.** If you are producing/presenting/giving regular reports that are over 10-12 slides or pages it is time to pair down and translate your passive data into decisive actionable information. You will get more attention with 10 great slides than 40 pages of graphs and charts that only rehash 'known' information.
- **Don't be afraid to 'Sell your story'.** We have compelling stories to tell and we have the data that is often the pulse of our organization, it is time we share it.

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