



***Big Data
to
Operational
Excellence
Enjoy the
Journey!***

Teena Shouse, RCFM, IFMA Fellow
FM Transitions

Agenda:

- *Thanks for your interest in FM Technology*
- *Why is the Education Committee Making this Topic a Series*
- *Today's Presentation - Overview*
- *Future Presentations - Workshops*

Today's Moderator



Brittany Gamble

Brittany's professional experience spans all stages of a building's life, project needs analysis, architecture, sustainable design, interior design, and space planning, to real estate space planning analysis, space utilization studies, construction documentation and project management for a number of notable clients. Additionally, she has expertise in assisting clients with the evaluation, selection and implementation of CAFM/IWMS (computer aided facility management/integrated workplace management software) systems and on-going facilities and space utilization consulting services.

She served as Associate & Director of Strategic Workplace Planning for nearly two decades at BNIM Architects and now is a Senior Transition Manager with Gilbane Building Company. She joined ifma in 1999 with the intention that if she better understood facility management, she'd be a better architect. She served as Chapter President in 2005 and since has been an active ifmaKC volunteer and member.

Agenda:

Thanks for your interest in FM Technology

- ***Why is the Education Committee Making this Topic a Series***
 - ***Today's Presentation - Overview***
 - ***Future Presentations - Workshops***

Today's Presenter



Teena Shouse

Teena enjoyed 18 years at Sprint Headquarters as GM of Employee Services with responsibilities including retail services management, food service operations, the corporate art collection, housekeeping services, special events and more.

After retiring from Sprint, she became Vice President of Corporate Services at Facility Engineering Associates in the DC area for 8 years. Teena still creates and teaches Facility Management courses and is a guest speaker at numerous North America and International conferences and universities.

From 2005-2007, she was honored to serve as the Chairman of the IFMA Board of Directors. From October 2010 to January 2013, she held the position of Chair of the Global FM Board of Directors, which has enabled her to influence the facility management profession on a global basis.

With over 29 years of experience in service-related fields, predominately in Facility Management, it was time for Teena to semi-retire and utilize her cumulative experience to create FM Transitions as a consulting firm. Her consulting work enables her to deliver creative business solutions within FM advanced services, assisting clients in resolving their FM challenges, and continuous advancement of its programs and personnel.

Teena is also the co-creator of fmDiagnostics, a tool which allows her to effectively evaluate current operations and make significant improvement recommendations in developing a roadmap for successful operations. This work is supported by her book, ***High Performance as a Goal...Achieving Excellence in Facilities Management.***

Agenda:

Thanks for your interest in FM Technology

*Why is the Education Committee Making
this Topic a Series*

- ***Today's Presentation - Overview***
- ***Future Presentations - Workshops***

Agenda:

Thanks for your interest in FM Technology

*Why is the Education Committee Making
this Topic a Series*

Today's Presentation - Overview

- ***Future Presentations - Workshops***

April Technology Workshop Lead Presenter

Intelligent Building Technology



Eric Hall

Eric's work history over the last 30 years in the AEC industry has been diverse. His roles have included: Architect, Construction Superintendent, Machine Control Specialist, Land Surveyor, Material Laboratory Director, BIM Director, Software Designer, Chief Innovation Officer and a few in between. This breadth of experience gives Eric a unique perspective when it comes to designing operational efficiencies through the application of emerging technology.

He currently leads the Intelligent Building Technologies Group for Gilbane Building Company whose charter is the development and deployment of Lifecycle Management Solutions for their clients. He is an associate member of the AIA, and a LEED Accredited Professional who holds an International Patent regarding construction document integration with building operation systems. Eric currently sits on the Gilbane Corporate Innovation Council and chairs a Divisional Council focused on Specialty Construction Services.

July Technology Workshop Lead Presenter

How to “sell” the concept of purchasing and implementing technology to your bosses, employees, colleagues, and customers



Julie Robinson

Julie is starting her 18th year as Program Manager, Corporate Real Estate & Facilities at H&R Block. In 2005-2006 she was responsible for the FF&E budget and relocation of HRB from six locations to one newly constructed HQ building in what had been blighted downtown KC. Julie and her team manage building engineering, data center operations, space & FF&E, leasing, construction projects, dining services, events, mail room, janitorial, landscaping and more.

Prior to H&R Block, she designed commercial office spaces and worked for FaciliTEAM & FMExtension managing multiple corporate relocations in the KC metro area including AlliedSignal Honeywell, U.S. Central Credit Union, City of KCMO, Meadowbrook Insurance and American Century to name a few. Julie has been involved with IFMA for over 20 years. She earned her CFM in 2004, has served as co-chair of the Scholarship Committee, was recently Vice President and is currently the President of the ifmaKC Chapter.



***Big Data
to
Operational
Excellence
Enjoy the
Journey!***

Teena Shouse, RCFM, IFMA Fellow
FM Transitions

Learning objectives for today's program

Evaluate how you can work to achieve HPB/HPO status utilizing data

Better understand how to use data in decision making

How to better communicate accomplishments and future opportunities using benchmark data

Select the right KPIs which make sense for your organization

Connect the dots between gathering data and applying it to your Strategic Plan

High-Performance FM Organizations

- What does HP/world class mean to you?
- How do you get there?
- What role does the FM Team play?
- How do you prove you have achieved becoming an HPO?
Could Data help, perhaps?

High-Performance Organization

What Does it Mean?

“An organization that is so excellent in so many areas that it consistently outperforms most of its competitors [or peers] for extended periods of time.”

Energy Independence and Security Act (EISA) of 2007

- ▶ High Performance Buildings must achieve optimum efficiency on a continuous basis.
- ▶ Integrate and optimize all major performance attributes: energy conservation, environment, safety, security, cost-benefit focused, high productivity, sustainability, functionality and operational considerations.

What is an ideal state for your facilities and what role does data play?



The Internet of THINGS



CONNECT THE WORLD

How to tell your story

- ▶ Gather Data
- ▶ Interpret Data
- ▶ Utilize Data....

*Productivity Enablers
Solution Architects*



Definitions

Big Data

- Extensive amounts of complex data about your organization pulled from many sources

Key Performance Indicators

- Critical metrics that can be measured to determine success of core processes in an organization

Balanced Scorecard

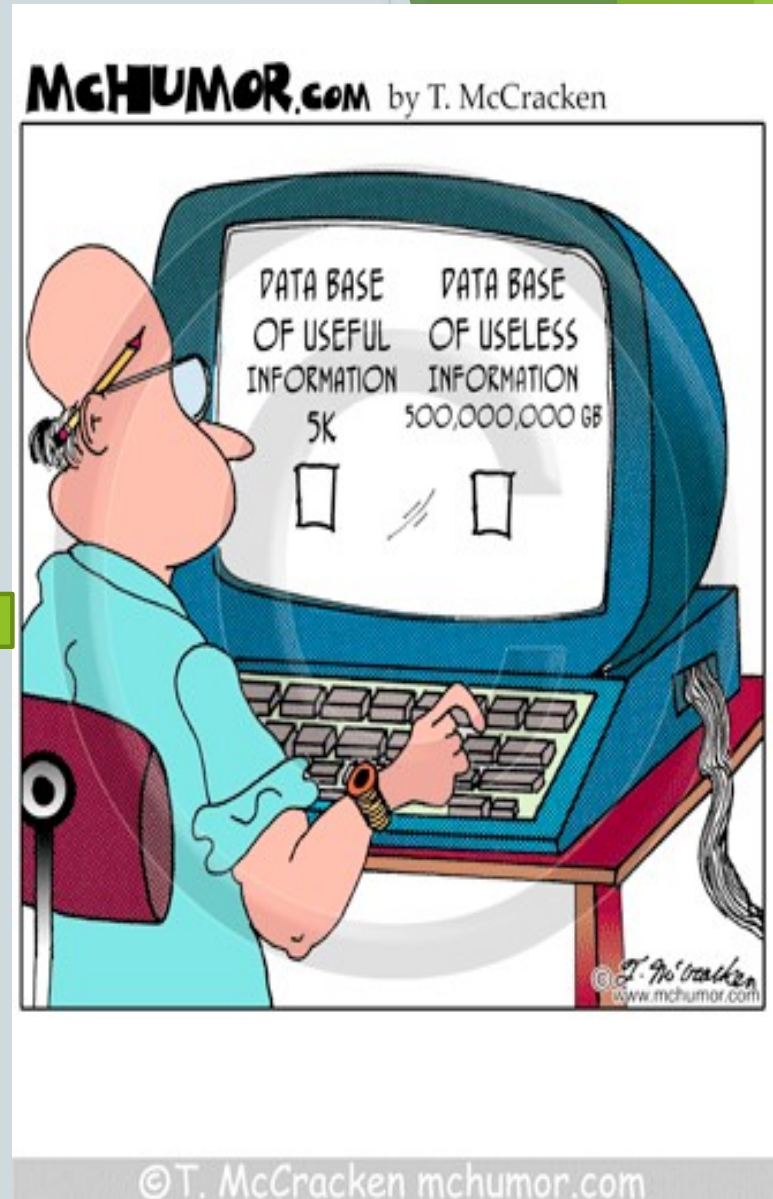
- Aligns and monitors performance in comparison to core business values

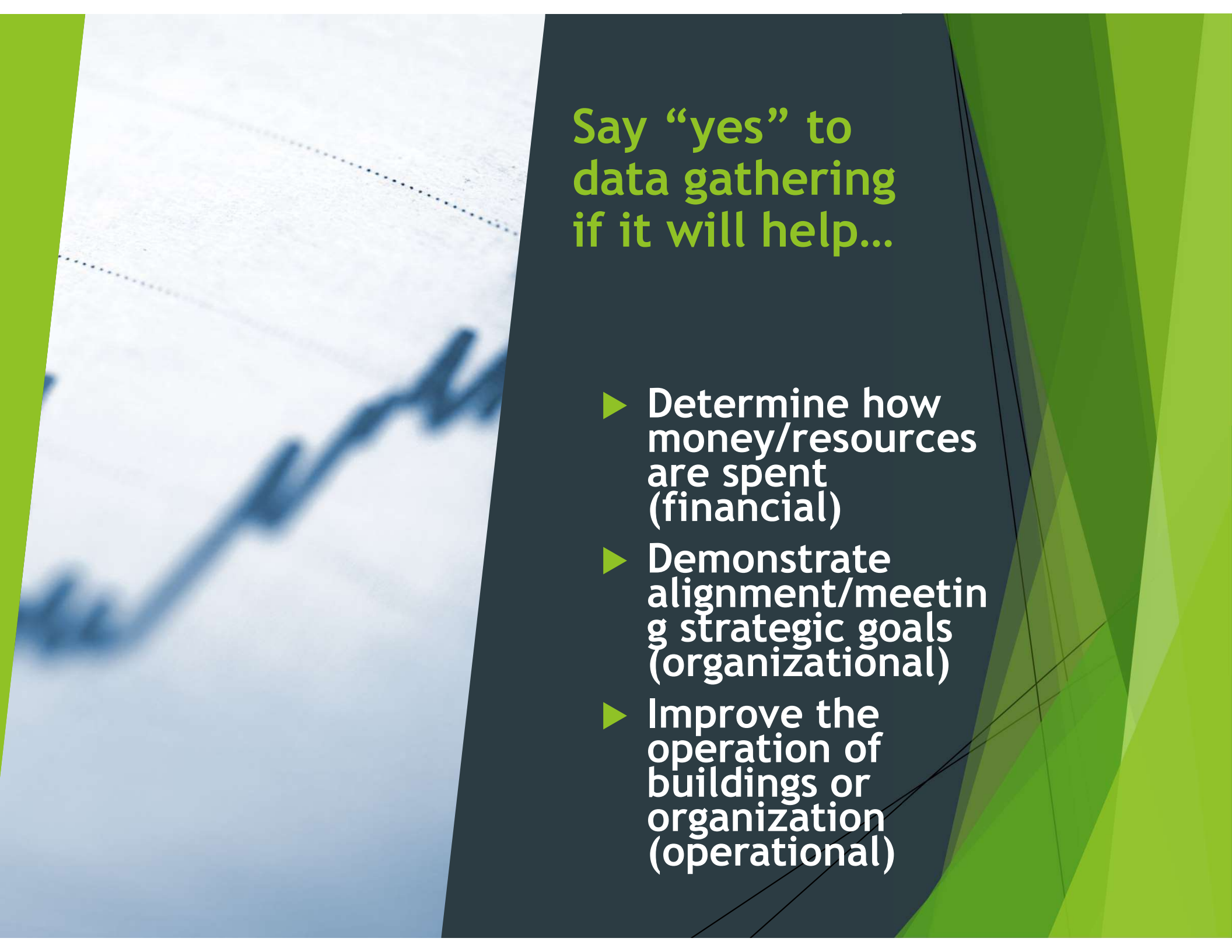
Benchmarking

- Comparison of metrics against “targets”

Gathering Data

- ▶ Surveys
- ▶ Sensors
- ▶ Work Orders-CMMS
- ▶ Alarms-BAS
- ▶ Software-IWMS
- ▶ Customers & Staff

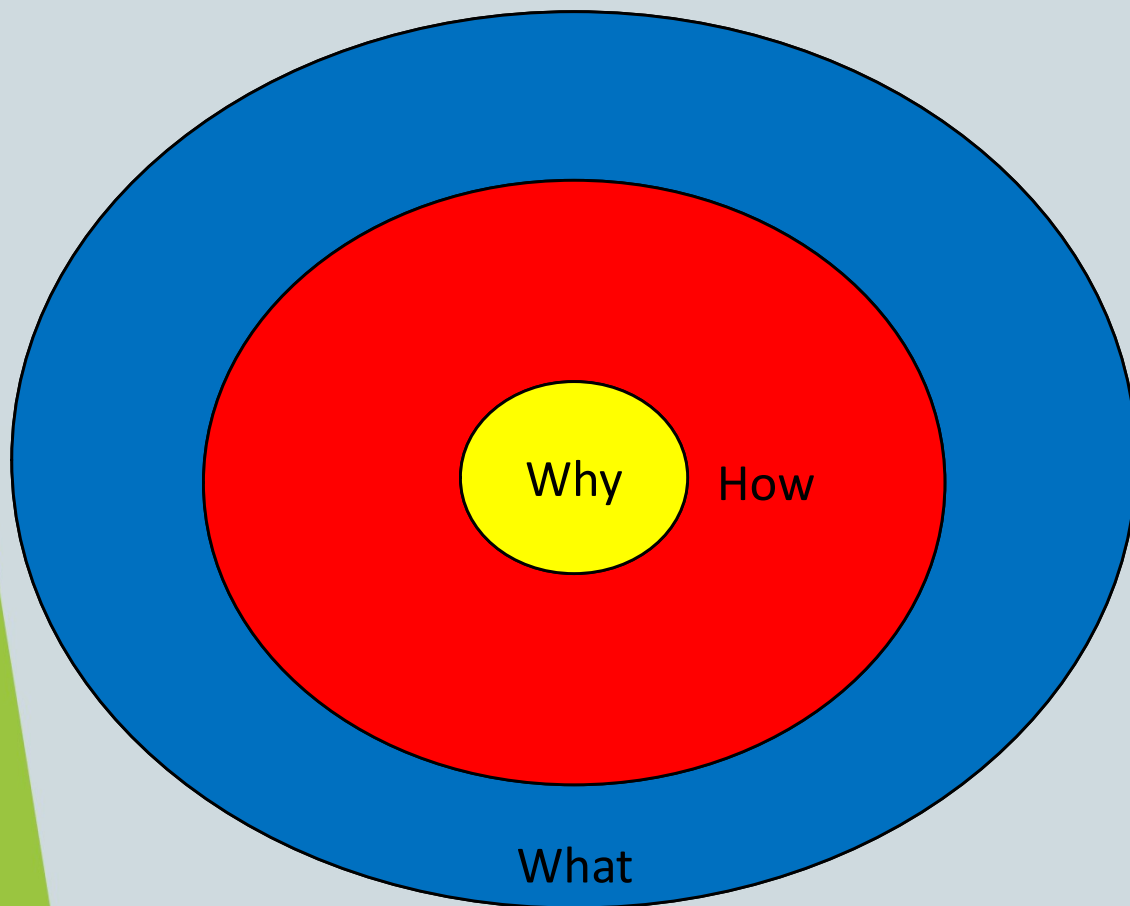




Say “yes” to data gathering if it will help...

- ▶ Determine how money/resources are spent (financial)
- ▶ Demonstrate alignment/meeting strategic goals (organizational)
- ▶ Improve the operation of buildings or organization (operational)


Starting from the Inside Out



1. Why is data needed?
2. How will the data be used?
3. What data is available?



Two Questions:

- ▶ How does your organization make decisions?
 - ▶ How do you currently measure success?
- 

Selecting what data to measure may include selecting meaningful KPIs

- ▶ *Focus*
- ▶ *Validity*
- ▶ *Connectivity*
- ▶ *Integration*

**MEASURE
SUCCESS**



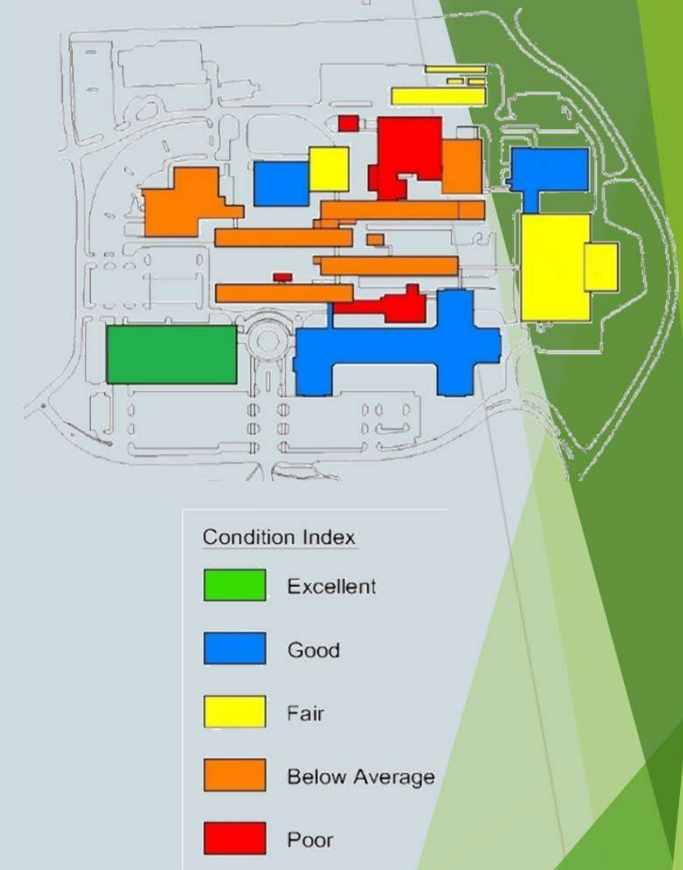
CAFM: Supporting Metrics

Common language for building a strategy for your
Real Estate related metrics

- ▶ Total cost of ownership
- ▶ Space utilization rate
- ▶ Cost per assignable square foot
- ▶ Cost per non-assignable square foot

To understand this:

	Annual Funding Needs	FCI
Site 1	\$9.0M	0.14
Building Group 1	\$5.4M	0.14
Building Group 2	\$3.1M	0.14
Site	\$0.5M	-
Site 2	\$2.3M	0.42
Site 3	\$0.3M	0.45
Site 4	\$0.9M	0.27

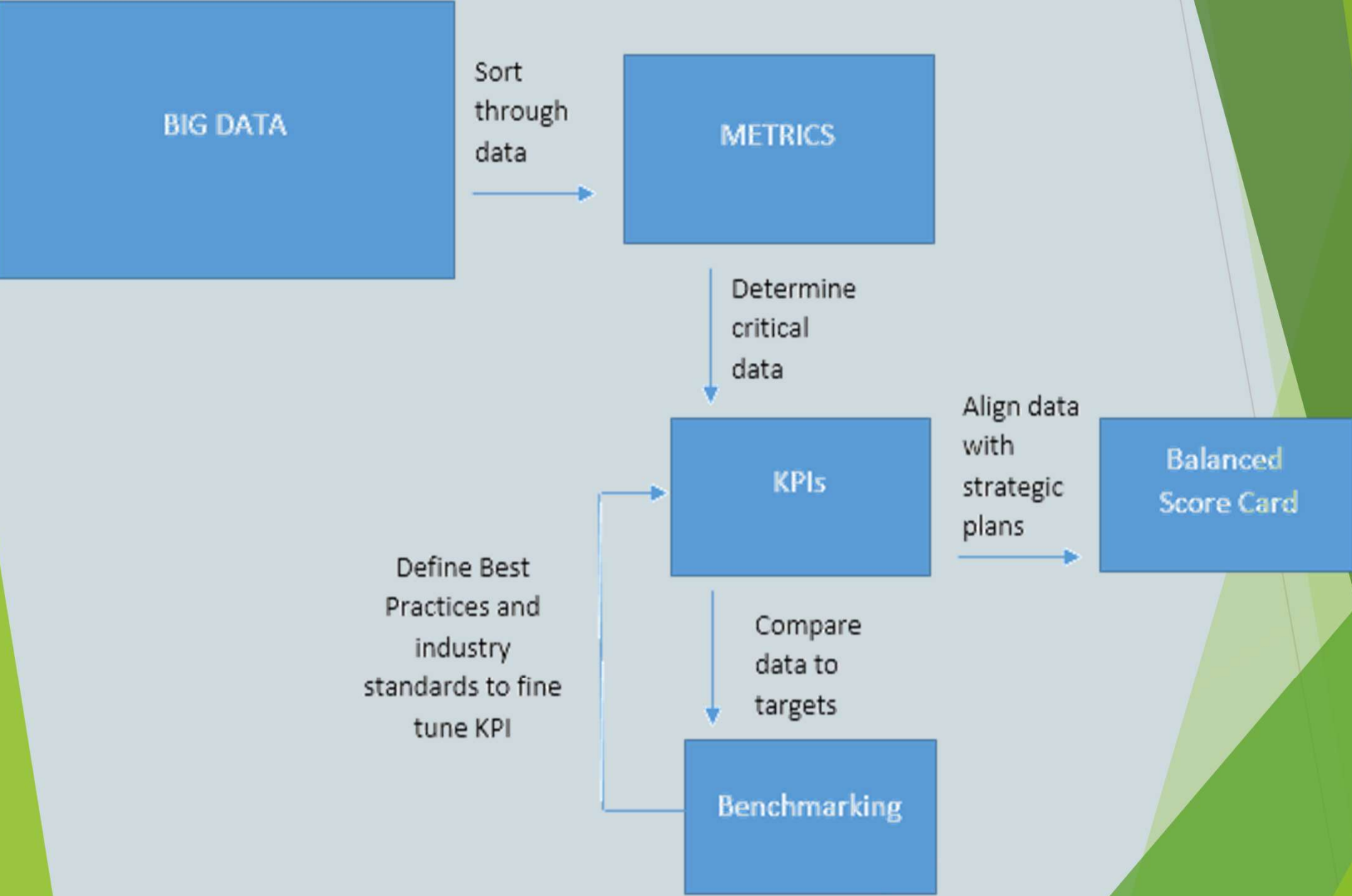


And this:

Expenditures Over 20 Year Study Period



Utilizing Data



“The problem is that most companies collect and report a vast amount of everything that is easy to measure and as a consequence their managers end up drowning in data while thirsting for insights...In order to identify the right KPIs for any business it is important to be clear about the objectives and strategic directions” (Bernard Marr, *The 75 KPIs Every Manager Needs To Know*)

CMMS: Top 10 Supporting Metrics

1. PM-PdM/CM ratio
2. PM-PdM compliance
3. PM-PdM effectiveness
4. Uptime, also called reliability
5. Rework
6. Work order type distribution
7. Work order aging
8. Overall equipment efficiency (OEE)
9. Overall craft effectiveness (OCE)
10. Top 10 problem codes

Tip: Multiple metrics are important

Story: PM compliance is not enough

Benchmarking

“It could be seen as a set of numbers, but the real value of benchmarking comes from how this information is used. It has the most impact when it is used to question concerns or demonstrate the value that good facilities management delivers to the organization” (BIFM, *Benchmarking: Effective performance management for FM*).

Benchmarking



Internal vs. External

Measure against yourself
Measure against other organizations



“Targets”

Best Practices
Industry Standards
Top Organizations

External Benchmarking

- ▶ Look to industry leaders
- ▶ Many benchmarking sources are available
- ▶ Circle back to selected KPIs
- ▶ Not just about costs
- ▶ Compare apples to apples and not oranges!

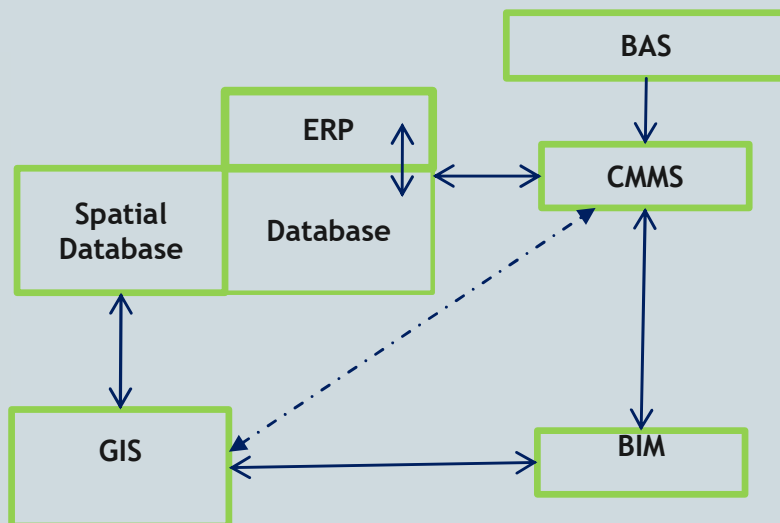


Benefits of Benchmarking

- ▶ Reduce costs
 - ▶ Identify best practices
 - ▶ Improve operations
 - ▶ Achieve operational excellence!
- 

Responsibilities of the FM team

- ▶ Define what data you need and why
- ▶ Determine process changes to realize benefits of increased data availability



Tip : Integration can be expensive, start by defining processes.

Tip : Answer these questions: 1) What data to you need? 2) Why?

Opportunity: The Value of Data

- ▶ Communicate value to a broad audience
 - ▶ **Past accomplishments:** Organizational impact, such as demonstrating success
 - ▶ **Future opportunity:** Potential opportunity to make an impact
 - ▶ Support valid and compelling decisions

Tip: Nearly any metric can be equated to dollars.... Although soft costs can be hard to quantify

Tip: Collecting the right data can be expensive. To optimize your investment, understand why specific data is being collected. Ask: How will the data be used?



Wrap it up.....

- ▶ Start w/ the End in Mind
- ▶ Limit data and focus measurements
- ▶ Technology is a Tool, use it wisely
- ▶ Less is more when it comes to data gathering



Thanks!

Q&A

Teena.shouse@fmtransitions.com