

DATA



SORTED



ARRANGED



PRESENTED VISUALLY



EXPLAINED WITH A STORY



THE EVOLUTION OF FCA DATA

THE 1990s TO THE PRESENT



INTRODUCTION



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AGENDA



Setting the Table

The Before Times

The Early Days

The In-Between Times

The Modern Times

Q&A



SETTING THE TABLE

QUESTION #1



How are you storing your FCA data

- We don't have it
- Hard copy or PDF reports
- Excel Spreadsheets
- Capital Asset Management Software
- Computerized Maintenance Management System

QUESTION #2



How are you using your Facility Condition data currently?

- We don't have it
- We have it but don't use it
- We use it to build our prioritized capital plans
- We are trying to use it to get additional funding
- We have been successful in using it to get additional funding

WHAT IS INTEGRATED ASSET MANAGEMENT?





WHERE ARE WE FOCUSED TODAY?



THE BEFORE TIMES

HOW IT WAS DONE

- No Facility Condition Assessments (FCAs) completed
- Building by building outlook
- Fix something when it broke
- Planning was based on feelings and opinions



THE EARLY DAYS

THE 1990s!!!

WHAT WAS DRIVING IT?

- Boom of buildings built in the 1960s and 1970s
 - Starting to need major renewal – 25 to 35 years
- Reserves had not been set aside and funding levels were too low to match the need
- Unexpected failures lead to facility closures and program interruptions
- Federal, State and Local Governments started to ask questions about their buildings

GIMME A REPORT

- The Facility Condition Assessment REPORT was born
 - Generally, time-limited (focused on 5 years)
 - Uniformat Level 2/3 (High level element breakdown of buildings)
 - HVAC instead of Boilers, etc.
 - High-level lifecycle modeling was common
 - Most reports prepared by a 3rd Party
 - List of Needs rather than a Capital Plan

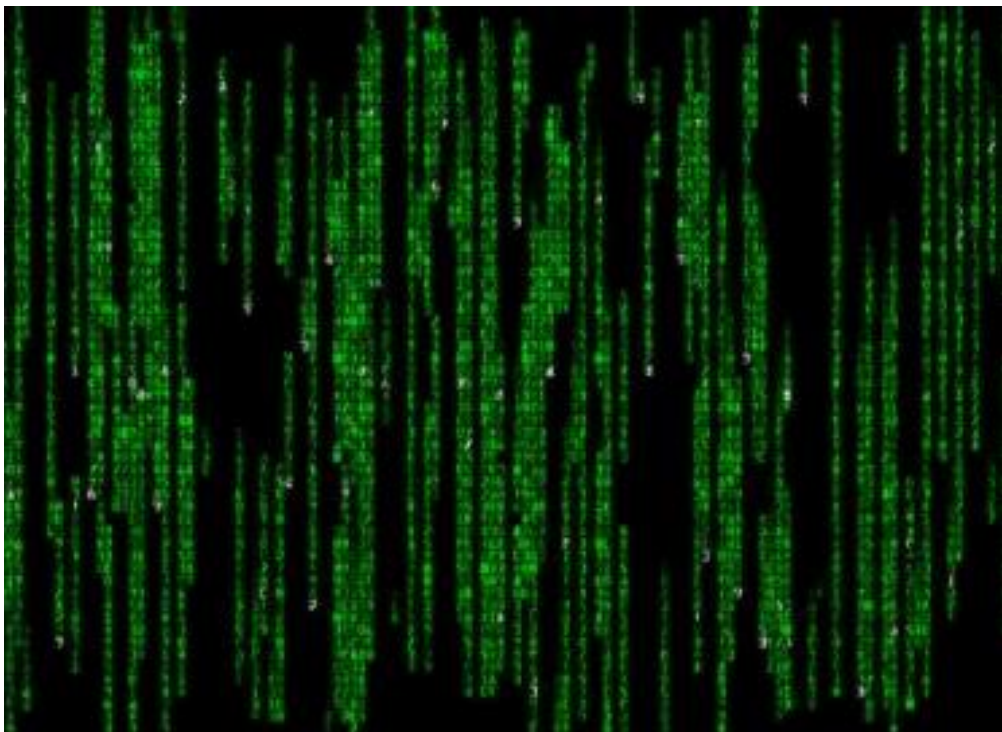
BIGGEST BENEFITS

- 3rd Party Independence
- Owners and Managers were able to speak at a high-level to
 - Deferred Maintenance (DM)
 - More to come on this later.....
 - Facility Condition Index (FCI)
- Help in making decisions on Capital Plans



QUICK SHOW OF HANDS

How many of you are still mainly using reports to support your capital planning?



THE IN-BETWEEN TIMES

EARLY 2000s TO 2020



WHY WE NEEDED TO EVOLVE



WHY WE NEEDED TO EVOLVE

- Reports were gathering dust and rarely used
- Static information was not very useful
- Buildings continued to age
- Underfunding continued on
- First and subsequent rounds of reassessments were being completed creating more data and a historical audit trail

WHAT CHANGED

- Assessments typically done to Uniformat Level 3/4
 - More detailed breakdown
 - More data to store, manage and report on
- Some organizations started to use in-house resources to do FCAs
- Hard copy reports were no longer necessary
 - Primarily PDF/soft copies
 - Data was the true deliverable

WHERE DO I PUT MY DATA?

- Mostly Spreadsheets
- IWMS/CMMS Systems
- First generation of Capital Asset Management Software

BIGGEST BENEFITS

- Data can be used to do additional analysis
 - Building-by-Building
 - Element-by-Element
 - Portfolio Subsets (Regions, Zones, etc.)
- List of Needs can be Prioritized into a Capital Plan
- Data can be more easily updated over time
 - Although this continued to be a challenge for many organizations



QUICK SHOW OF HANDS

How many of you are still mainly using data to support your capital planning?



THE MODERN TIMES

2020 TO PRESENT

WHERE ARE WE TODAY

- Buildings continue to age
 - Need a longer-term view (beyond just 5-10 years)
- Underfunding of renewal (and maintenance) continues
- As Facilities Professionals we many love data, but it is not about us
 - Our stakeholders are not facilities people, so we have to “translate” our data for them
 - Need to communicate the risks and needs
- Need more than just DM and FCI
 - What If?

A BRIEF INTERLUDE



**Help Us Abolish
the Term Deferred
Maintenance!!!**



IT'S STORY TIME!!!

KNOW YOUR AUDIENCE



Who are you trying to communicate with?

Is there only one audience or more?



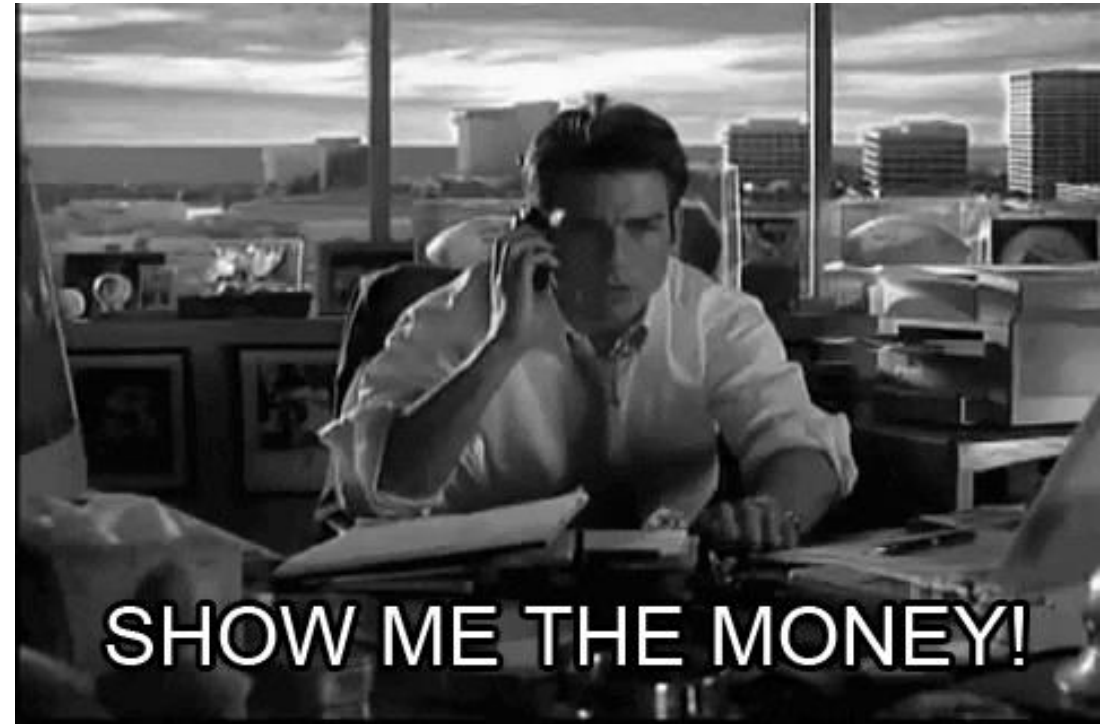
What does each group care about?



How can you make their goals part of the Hero's Journey

May need more than one story depending on who you are telling the story to.

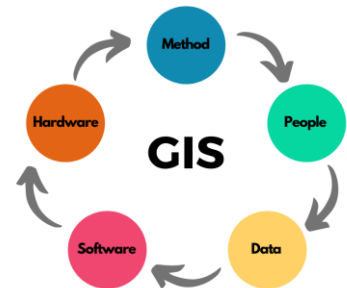
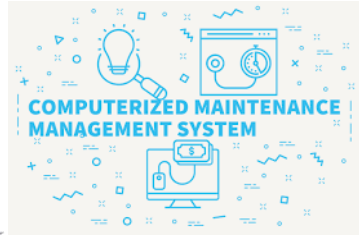
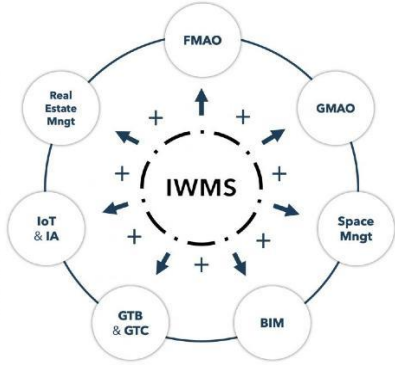
WHAT'S THE STORY MORNING GLORY?



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IATA_CODE	AIRPORT	CITY	STATE	COUNTRY	LATITUDE	LONGITUDE
ABE	Lehigh Valley Allentown	PA	USA	40.63236	-75.4404	
ABI	Abilene Rage	TX	USA	32.41132	-99.6819	
ABQ	Albuquerque	Albuquerque NM	USA	35.04022	-106.60919	
ABR	Aberdeen Raj	Aberdeen SD	USA	45.44906	-98.42183	
ABY	Southwest Ge	Albany GA	USA	31.55552	-84.19447	
ACK	Nantucket M	Nantucket MA	USA	41.25305	-70.06018	
ACT	Waco Region	Waco TX	USA	31.61129	-97.23052	
ACV	Arcata Airpor	Arcata/Eureka CA	USA	40.97812	-124.10862	
ACY	Atlantic City	Atlantic City NJ	USA	39.45758	-74.57717	



KEY FACILITY TECH

- ▶ Excel
- ▶ Computerized Maintenance Management System (CMMS)
- ▶ Integrated Workplace Management Systems (IWMS)
- ▶ Capital Asset Management System (CAMS)
- ▶ Enterprise Resource Planning Tool (ERP)
- ▶ Geographic Information Systems (GIS)
- ▶ Drawing Management System
- ▶ Others?



LEVERAGING TECHNOLOGY

- Consistent and Defensible Data Acquisition
 - Let technology do the easy work
- Visualization
 - A Picture is Worth a Million Dollars
 - Take detailed data and makes it easy to understand
- Ability to share information with others
- Streamlined Data Updates
 - Make it easy to keep things current so your story isn't out-of-date

WHAT'S THE CATCH?



The best technology in the world will fail miserably if the data it houses is incomplete, inconsistent or incorrect!!!

DATA IS THE CORE OF YOUR STORY



- ▶ You need to develop an effective strategy to acquire, manage and update consistent and defensible asset data on a regular basis
- ▶ Finding your data sweet spot
 - ▶ More data is not always a good thing
- ▶ Requires collaboration across your organization
 - ▶ Capital/Construction
 - ▶ Operations & Maintenance
 - ▶ Finance
 - ▶ Program/Users
- ▶ Getting the data is only the beginning

A STRATEGY VS A SOLUTION



In-depth annual revision to the specific projects selected

- ▶ Reconcile deferred projects from previous year's plan
- ▶ Consideration of the previous assumptions / priorities
- ▶ Adjustments based on current business objectives

Update you story accordingly

- ▶ Priorities evolve
- ▶ Stakeholders change
- ▶ Data evolves

THE FCA EVOLUTION TIMELINE

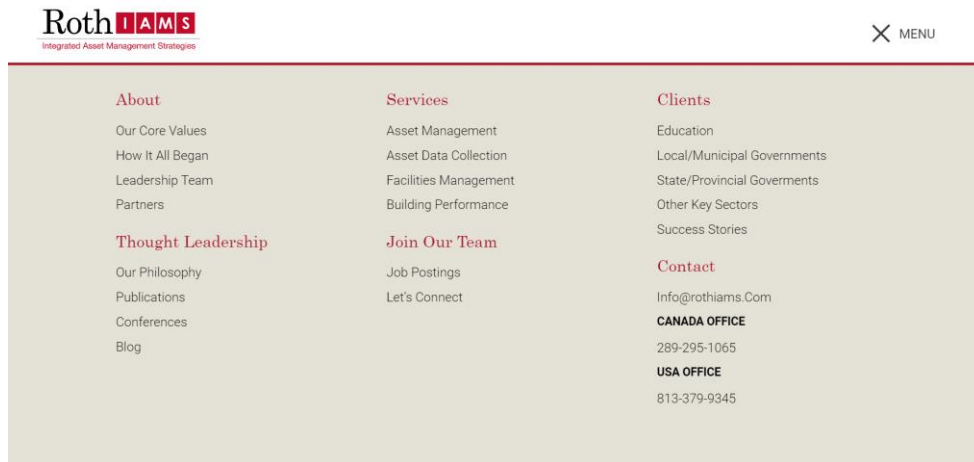
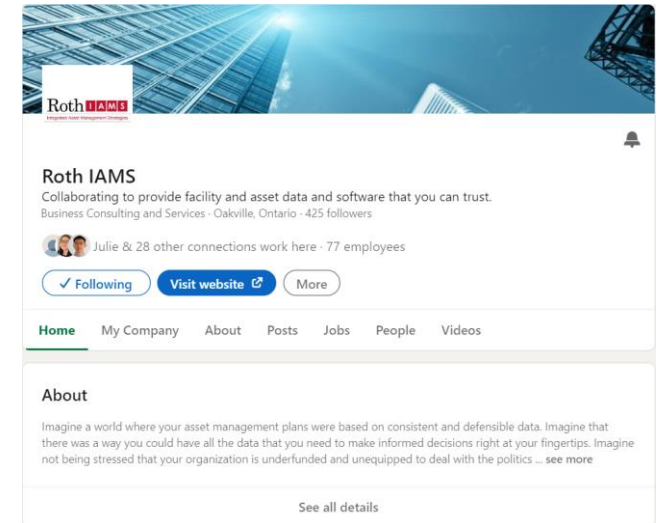




Q & A

THANK YOU FOR ATTENDING

- ▶ Visit our website at rothiams.com
- ▶ Follow us on [LinkedIn](#) for more content
- ▶ Connect with us directly through email at bill.roth@rothiams.com or call **(727) 247-9419**



Dive Into Our Thought Leadership

