

FYI in 45

Applying Business Intelligence for Data-Driven Decisions

Panelists:

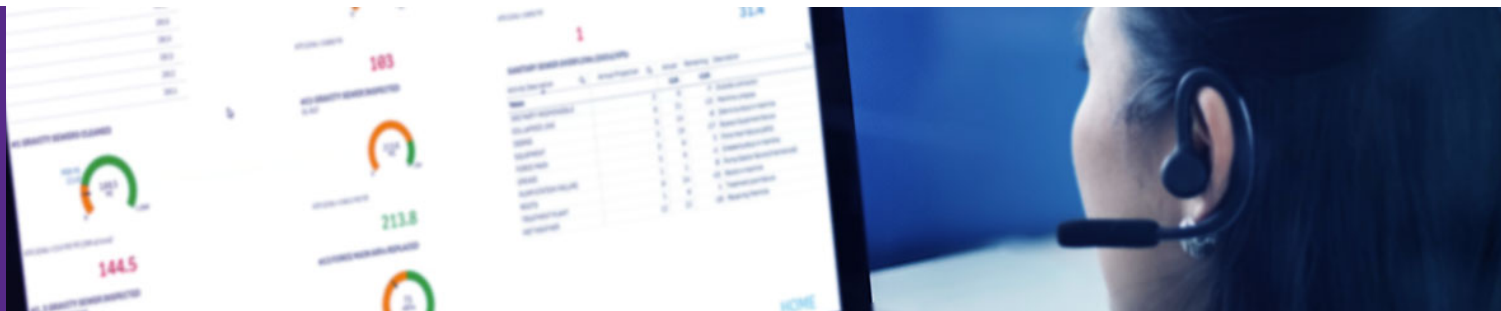
Jayson Brennen

Bryan Cully

Moderated by:

Andrew Beaton

May 15, 2019



**CDM
Smith**

Today's Discussion

- ▶ The basics of business intelligence and key benefits of unlocking its power
- ▶ A step-by-step look into the implementation process
- ▶ A deep-dive into intelligent dashboards and other data visualization tools on the market
- ▶ Trends and future predictions straight from the minds of our industry experts

Before We Begin...



**Technical
Difficulties***



**Webinar is
being recorded**



**Questions are
encouraged**



**PDH
certificate**

* Contact our webinar producer: Danielle Jackson

Our Panel



Jayson Brennen, GISP
Senior GIS & Technology Specialist



Bryan Cully, PE
Program Manager

A person with dark hair, wearing a black headset, is shown in profile, looking at a large computer monitor. The monitor displays a data dashboard with various charts, including donut charts and line graphs, with numerical values like 183, 213.8, 36.2, 116, and 31.4. The background is a solid blue color.

The Rise of the Data-Driven Organization

Strategies for Making Better Use of Data



Strategies for Making Better Use of Data





Evolution of Understanding Data



**Data Visualization
via Dashboard Solutions**



**Business Intelligence
& Analysis**



Predictive Analytics

How are Organizations Employing BI?



Organizational Resiliency
& Efficiency



Capital Planning,
Reporting & Compliance



Program Management
& System Operations

Misconceptions



**“This isn’t doable at
my utility.”**

Misconceptions

“This isn’t doable at my utility.”

“I already have all this data, so why do I need more systems for analysis?”

Misconceptions

“This isn’t doable at my utility.”

“I already have all this data, so why do I need more systems for analysis?”

“This will cost too much, and my IT department probably won't like it!”



CASE STUDY

Columbia, South Carolina

South Carolina's Capital

80,000
customers

60 mgd
WWTP

1,100 mi
of pipe

56
pump stations





A woman with dark hair is seen in profile, wearing a black headset with a microphone. She is looking at a large computer monitor. The monitor displays a dashboard with various charts, including three donut charts with orange, green, and blue segments, and several numerical data points. The background is a solid blue color.

CASE STUDY

United States Navy

Global Utilities Asset Management Program



Developing a Global AM Program Driven by Data



Utility GIS Development



Developing a Global AM Program Driven by Data

1

Utility GIS Development

2

Asset Inventory



Developing a Global AM Program Driven by Data

1 Utility GIS Development

2 Asset Inventory

3 Risk Assessment



Developing a Global AM Program Driven by Data

1 Utility GIS Development

2 Asset Inventory

3 Risk Assessment

4 Data-Driven Analysis



Developing a Global AM Program Driven by Data

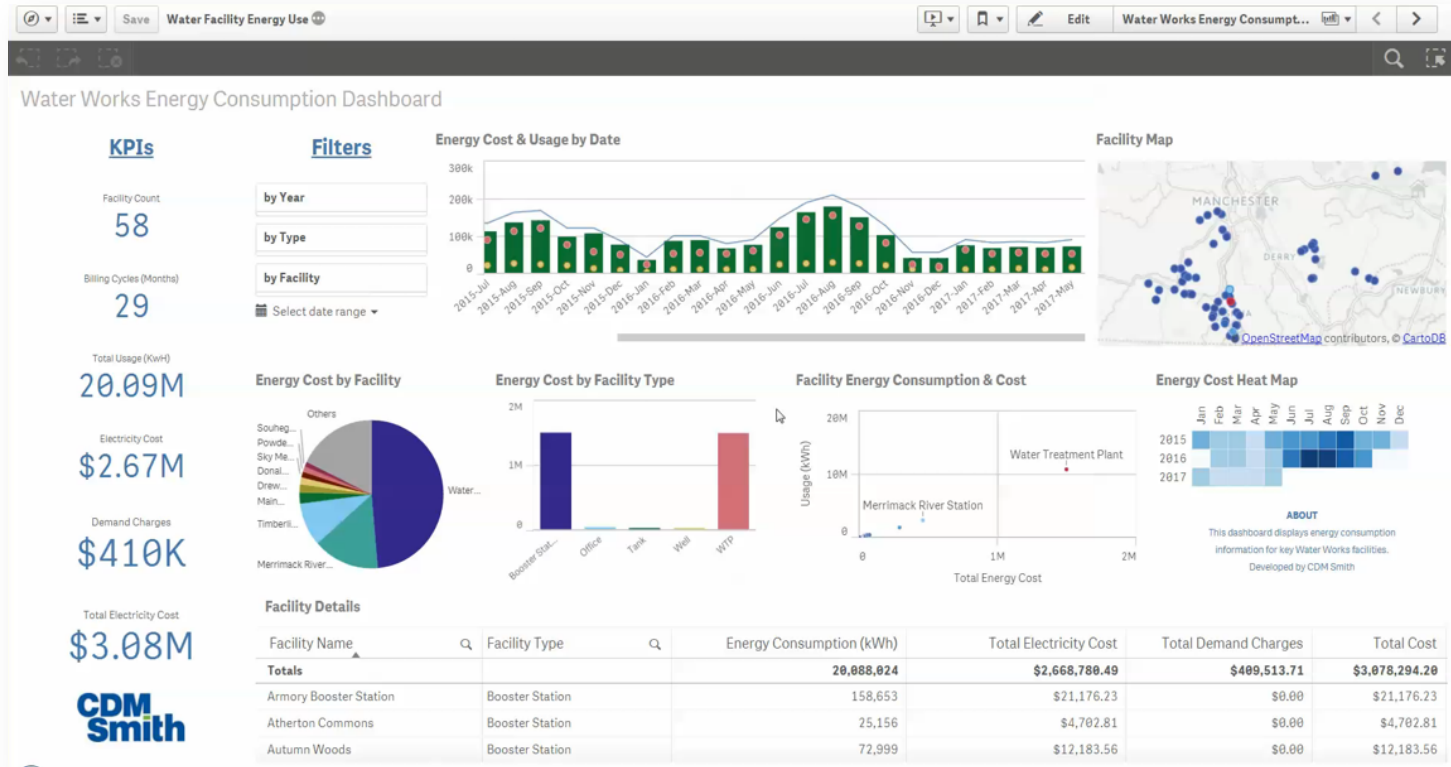




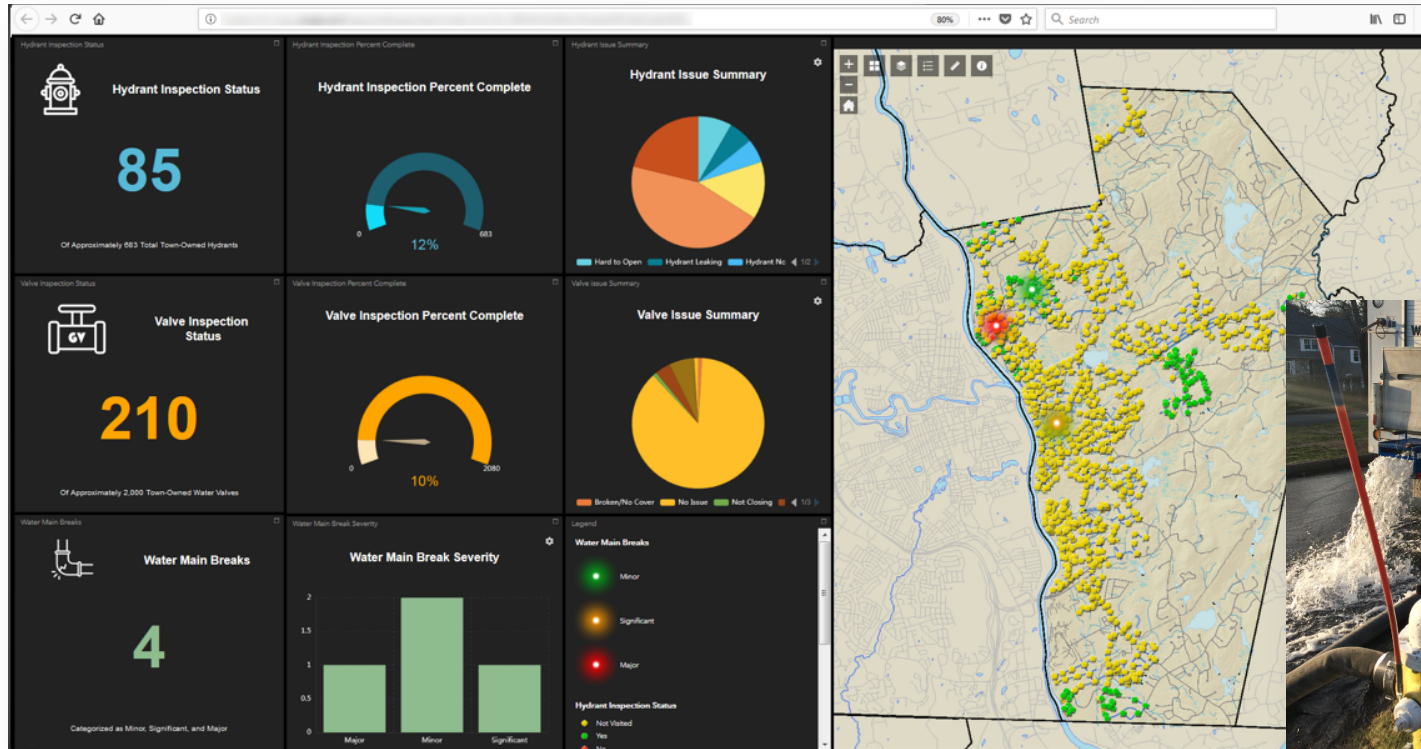
CASE STUDY

Other Examples

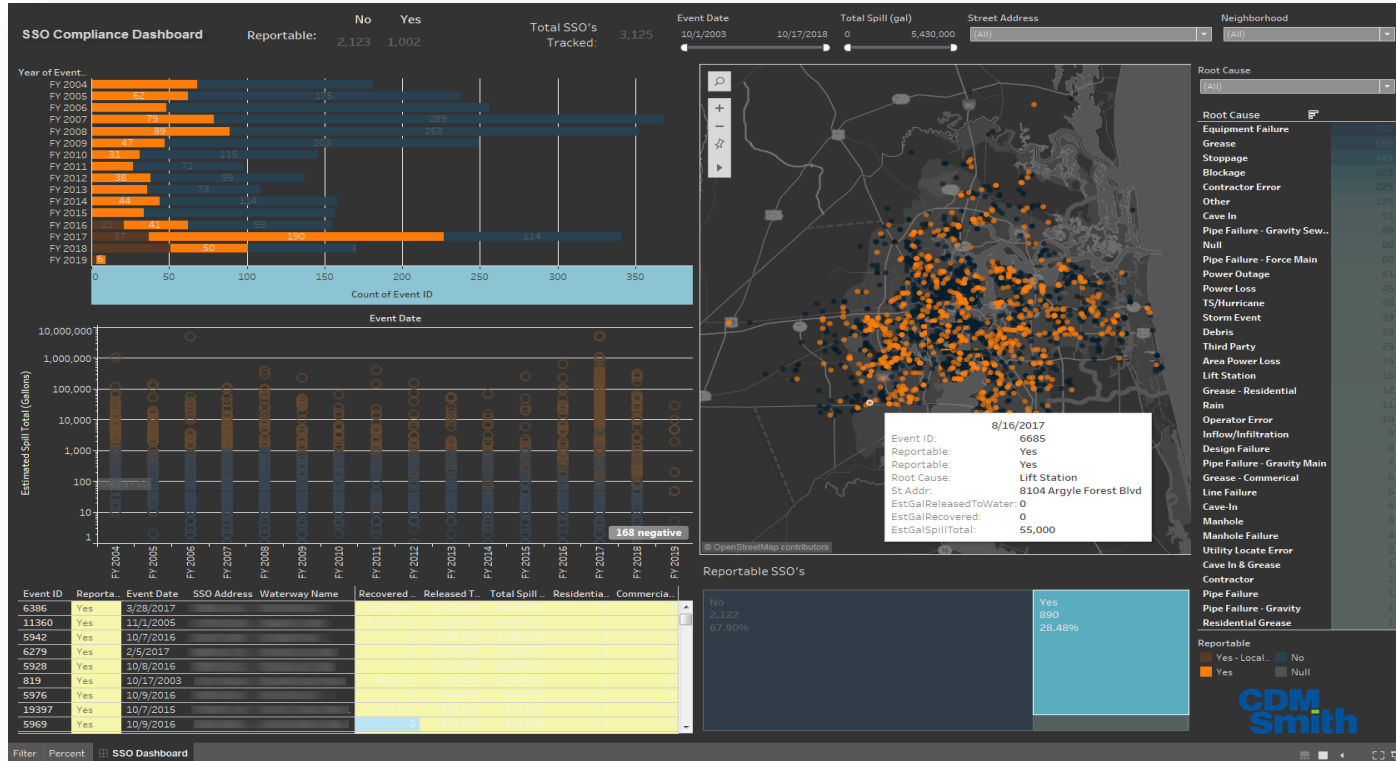
Energy Resiliency



Utility Operations



Real-Time Compliance Tracking





How To Get Started

Build Your Team



Owner's
Leadership



Management
Consultant



“Story boarders”



Data Specialists

Implementing the Process



Identify your priorities

Implementing the Process



Identify your priorities



Take a look under the hood

Implementing the Process



Identify your priorities



Take a look under the hood



Normalize data

Implementing the Process



Identify your priorities



Take a look under the hood



Normalize data



Apply technology

Business Intelligence Tools



Power BI



Business Intelligence Tools



Bill Gates said it well...



The first rule of any technology used in a business is that automation applied to an efficient operations will magnify the efficiency.

The second is that automation applied to an inefficient operation will magnify the inefficiency.

A woman with dark hair, wearing a black headset with a microphone, is shown in profile, looking at a large computer monitor. The monitor displays a complex dashboard with various data visualizations, including several circular progress indicators (gauges) in orange, green, and blue, and a table of data. The entire image has a blue color overlay. The text "Looking into the Future" is centered over the image in a white, sans-serif font.

Looking into the Future







Questions & Answers

Contact Information

Panelists



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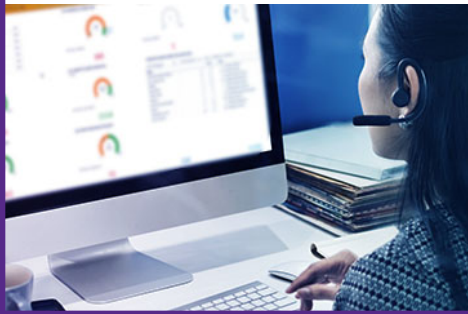
Moderator



Andrew Beaton

Moderator

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Thank You