



Analyze City Data and Avoid Flying Blind

Presented by Matt Hooper
Session #4



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Grand Prize



Don't forget to fill out your card!



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Overview

Analytics and dashboards measure everything from performance data to crime rates. Explore how analyzing your city's existing data with a business intelligence tool can drive better decisions.



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Why Business Intelligence?





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What is Business Intelligence (BI)?

- Business Intelligence comprises the strategies and technologies used by enterprises for the data analysis of business information.
- BI platforms provide historical, current and **predictive** views of business operations.
- The purpose of BI is to support **better decision making**.



“That which is measured, improves.”




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BI Example – VC3 Municipal Pulse

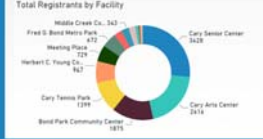
Parks and Recreation

Total Registrants by Month Name


Total Registrants: 13.49K



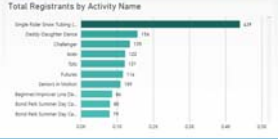
Total Registrants by Facility




Total Registrants by Zip-Code



Total Registrants by Activity Name






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What to look for in a BI Platform


- Quickly adapt to changing demands
- Support visual tools such as dashboards and charts
- Support **multiple data sources**
- Highly accessible (Desktop, Tablet, Phone)
- Single point of access to information
- Provide **timely** answers to business questions




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BI - Access from Anywhere



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BI - Wall Displays



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Popular BI Platforms

- Microsoft Power BI
- Oracle
- MicroStrategy
- SAP
- IBM
- Tableau
- Domo
- etc.

Gartner - Feb 2018
Magic Quadrant for Analytics and BI Platforms

Source: Gartner (February 2018)

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Why Microsoft Power BI?

- Industry leading, comprehensive BI platform
- Not a siloed reporting tool. Combine multiple systems into single dashboard/report
- Nearly any data source can be loaded
- Ease of use and access from any device
- Visual appeal
- One of the lowest priced solutions
- Integrated into Office 365

Gartner - Feb 2018
Magic Quadrant for Analytics and BI Platforms

Source: Gartner (February 2018)

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BI Challenges

Ongoing Challenge for Municipal Power Systems

- To provide high quality public services

Intelligence Gap

- 73% of municipalities indicated that they would benefit from defined Key Performance Indicators (KPIs) (ICMA survey)
- 43% of municipalities use benchmarks to assess performance

Costs & Complexity

- BI platforms can be very expensive and complex
- Lack of staff to manage and support BI solutions

"If you can't measure it, you can't manage it."

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What is required to create a BI platform for my organization?

Implementing a successful BI platform is a multi-step process

- Step 1 Assessment
- Step 2 Data Discovery
- Step 3 Development
- Step 4 Launch and Training

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VC3 Municipal Pulse

- Municipal Pulse helps execute the 4 step process quicker
- Essential KPIs already developed
- Development accelerated

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BI Process – Step 1

During the **Assessment** phase, **Key Performance Indicators (KPI)**, are identified. KPIs are used to measure key organizational objectives.

Common Municipal Power KPIs:

- Total Customers
- Total Revenue
- Service Requests
- Hold/Wait Time
- Power Outages
- Energy Consumption
- Water Line Breaks
- Water Average Daily Flows

- Step 1 Assessment
- Step 2 Data Discovery
- Step 3 Development
- Step 4 Launch and Training

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BI Process – Step 2

An understanding of your existing data systems is vital in developing a successful BI solution.

During the **Data Discovery** phase, the KPIs determined in the assessment are traced to your **data systems**.

Common data sources:

- Microsoft SQL Server Database
- Oracle Database
- Microsoft Excel
- Microsoft Access

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BI Process – Step 3

During the **Development** phase, BI dashboards, reports, and visualizations are created to best display your data.

Common visualizations include:

- **Maps (GIS)**
- Column Charts
- Pie Charts
- Tabular Data

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BI Process – Step 4

During the **Launch and Training** phase, staff are trained on the KPIs and underlying data.

Staff are also trained on how to access your dashboards from a variety of different devices such as Desktops, Phones, or Tablets.

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Thank You!
Stop by our booth to learn more.

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Suggestions and feedback?
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