

BUSINESS INTELLIGENCE AND ANALYTICS

Marquita Culross
Data Systems Analyst
Carroll White REMC

ABOUT CARROLL WHITE REMC

- 16000 Meters
- 12000 Members
- AMI – Aclara TWACS
- NISC-CIS, ABS, GIS,OMS
- Located in Monticello and Delphi Indiana



WHY DO WE NEED BUSINESS INTELLIGENCE?

- ❖ Engineering Analysis
- ❖ Marketing – Targeting Members for additional services
- ❖ Staffing Needs
- ❖ Technology enhancements
- ❖ Financial Analysis
- ❖ Future Needs

Business intelligence is not just about turning data into information, rather organizations need that data to impact how their business operates and responds to the changing marketplace.

- GERALD COHEN

WHAT DO WE NEED FOR BUSINESS INTELLIGENCE?

Member
Data

DATA

Meter Data

Engineering
Data

Financial
Data

WHAT DO WE NEED FOR BUSINESS INTELLIGENCE?

Gather Data

Customer
Information Systems

Accounting or
Financial Systems

SCADA-Engineering

GIS or Mapping
Systems

Survey Data

Metering Systems or
Meters

WHAT DO WE NEED FOR BUSINESS INTELLIGENCE?

- **Data Storage**
- **Accessibility**
- **Ease of Retrieval**
- **Reporting Tools**
- **Presentation Platforms**

WHAT ARE THE CHALLENGES WITH DATA ?

- **Data Consistency**
- **Accuracy**
- **Missing**
- **Compatibility**
- **Knowledge/Understanding**
- **Security**

WHAT TOOLS DO WE USE FOR BUSINESS INTELLIGENCE?



Oracle
Databases



Microsoft
Excel



SQL



Crystal
Reports

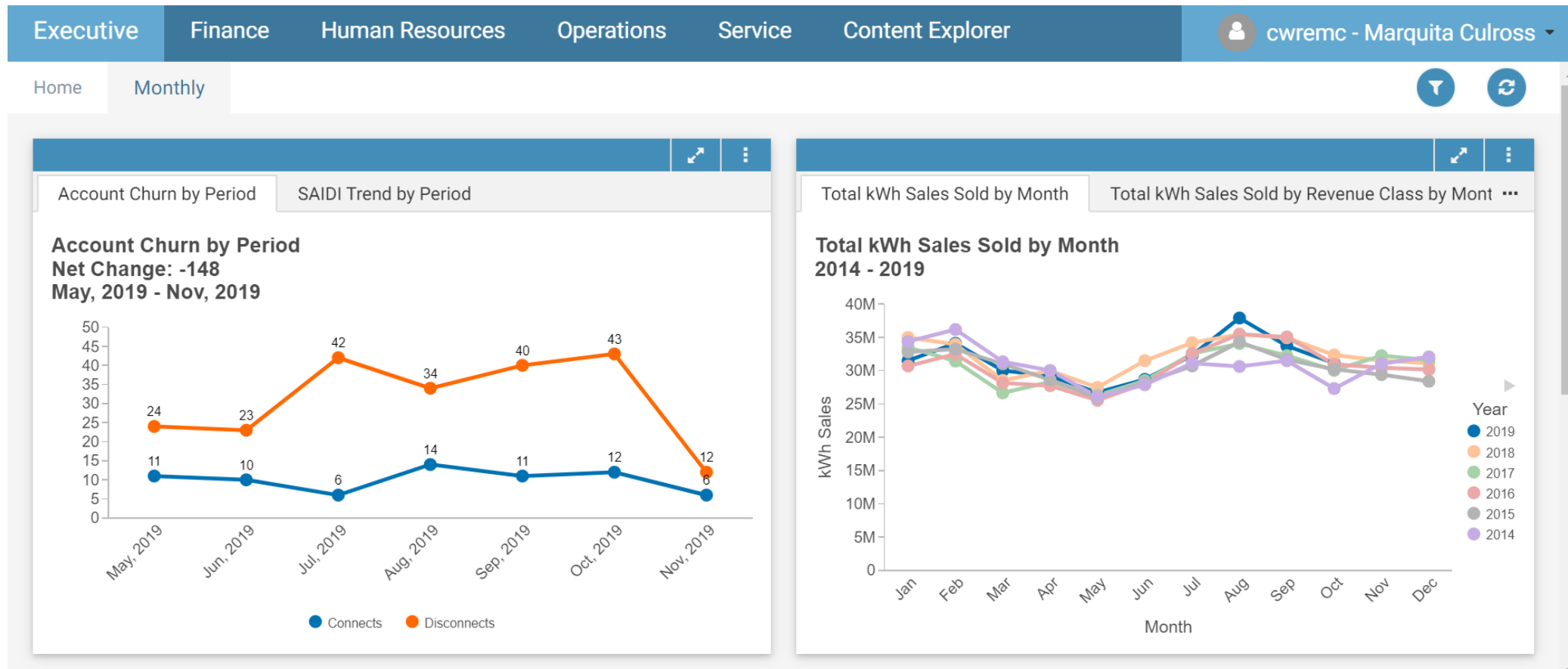


Microsoft
Access



Other
Third Party
Platforms

HOW ARE WE USING THE INFORMATION?



HOW ARE WE USING THE INFORMATION?

The image shows a dashboard interface with a dark blue navigation bar at the top. The navigation bar contains several menu items: "Executive", "Finance", "Human Resources", "Operations", "Service", and "Content Explorer". On the right side of the navigation bar, there is a user profile icon and the text "cwremc - Marqu". Below the navigation bar, there are two tabs: "Budget vs Actual" and "Expense vs Revenue". Underneath the tabs, there are three report cards. Each report card has a blue header bar with a share icon and a menu icon. The first report card is titled "Budget Expense Comparison & Variance". The second report card is titled "Budget Revenue Comparison & Variance" and includes the subtitle "Jan, 2019 - Dec, 2019". The third report card is titled "Budget Analysis by Period" and includes the subtitle "Jan, 2019 - Dec, 2019".

Executive Finance Human Resources Operations Service Content Explorer cwremc - Marqu

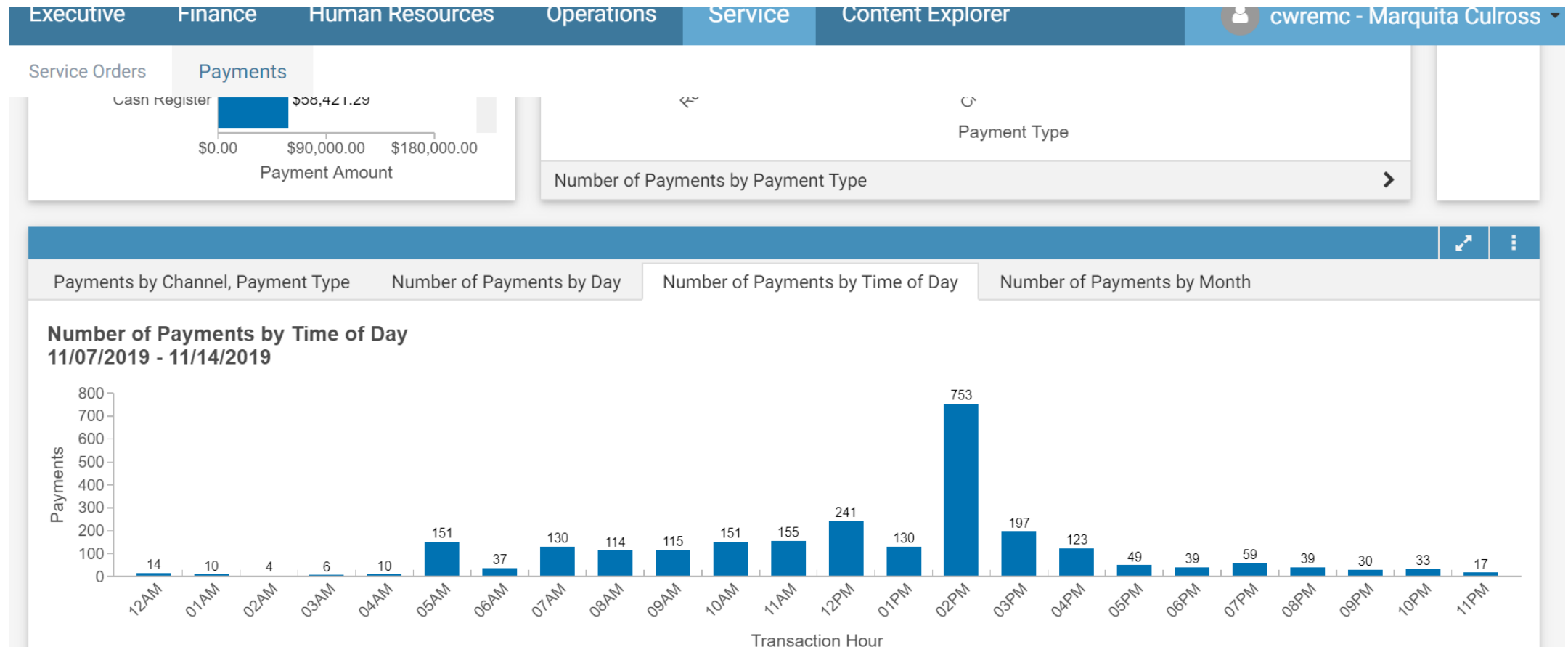
Budget vs Actual Expense vs Revenue

Budget Expense Comparison & Variance

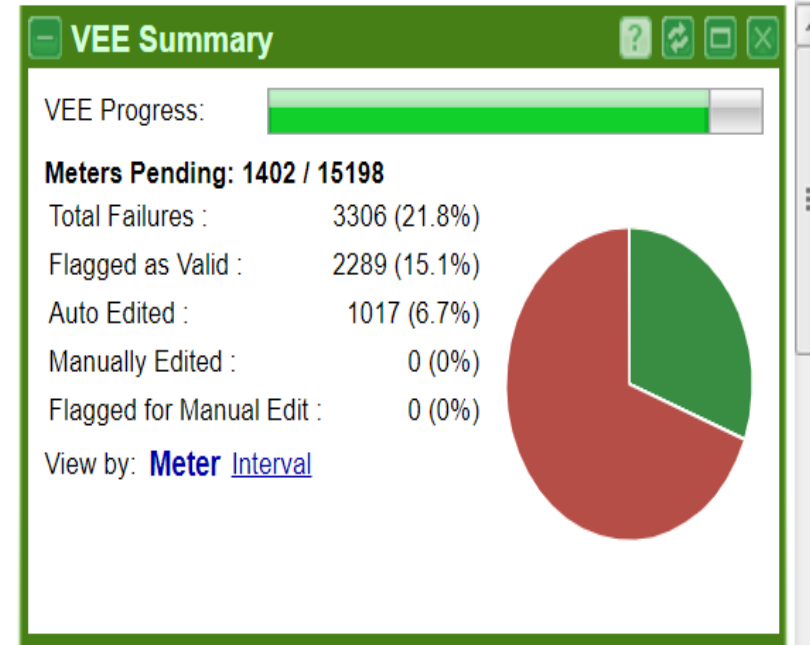
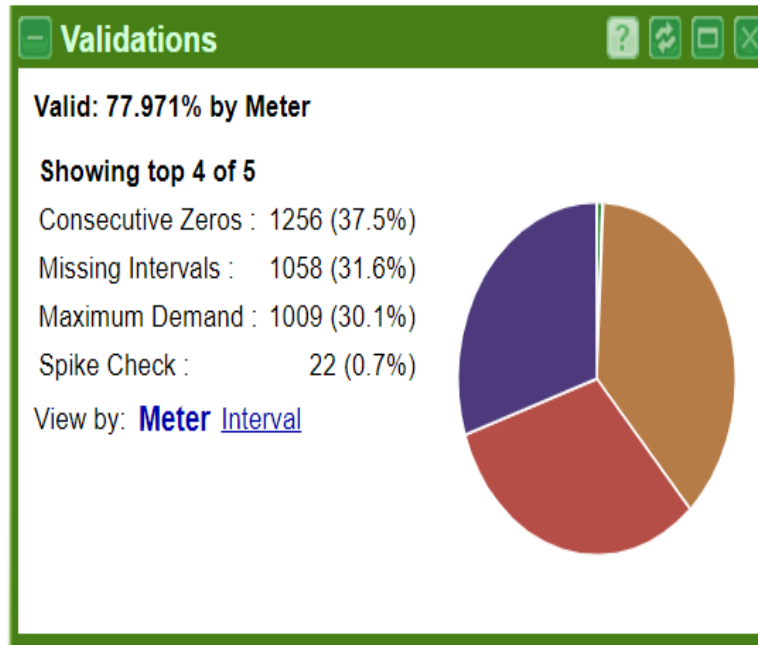
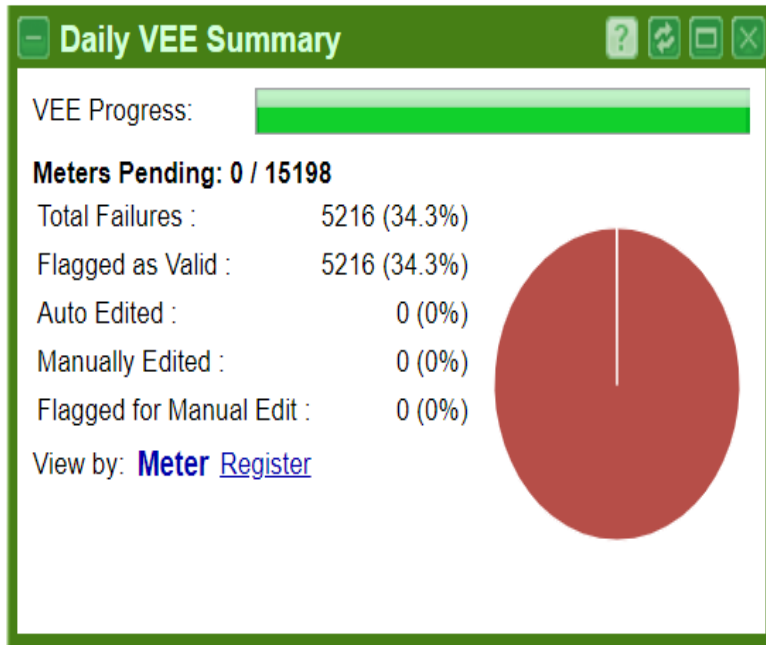
Budget Revenue Comparison & Variance
Jan, 2019 - Dec, 2019

Budget Analysis by Period
Jan, 2019 - Dec, 2019

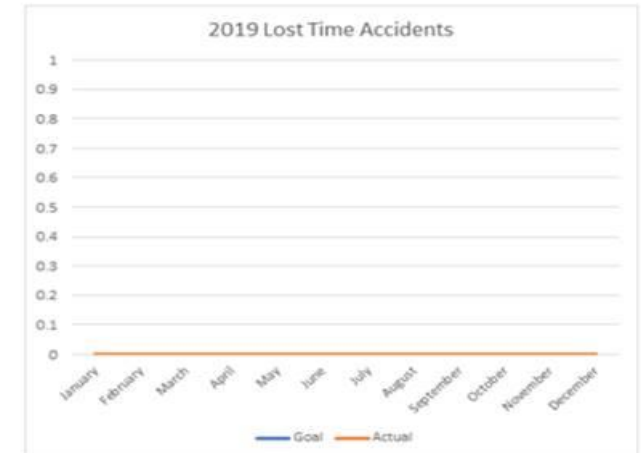
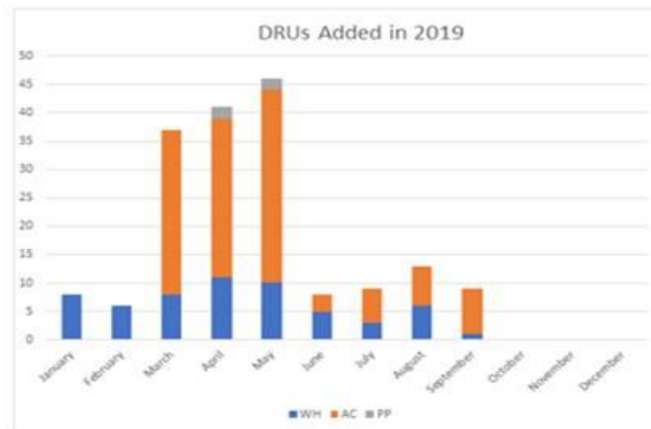
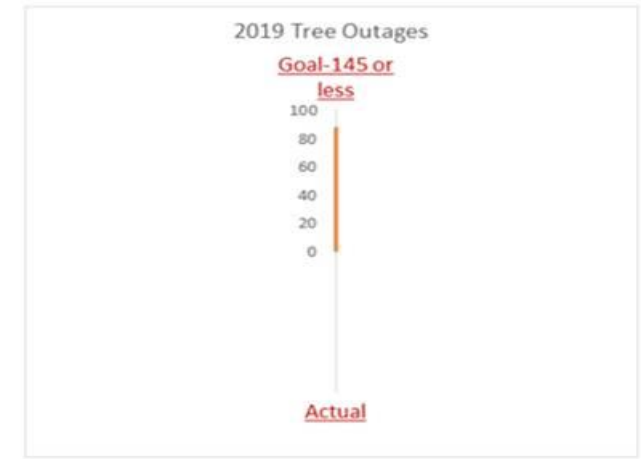
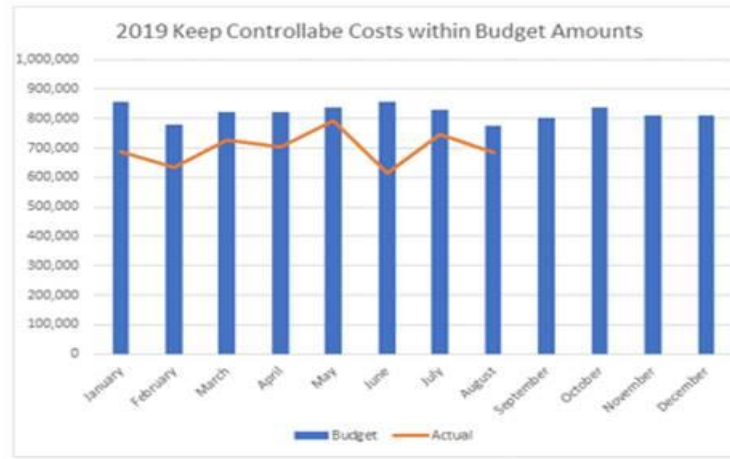
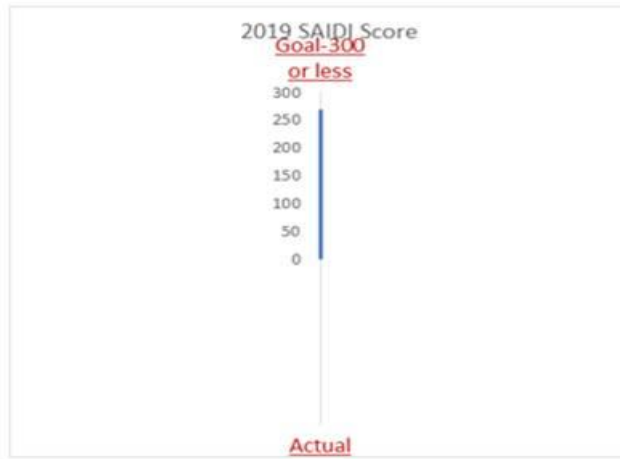
HOW ARE WE USING THE INFORMATION?



HOW ARE WE USING THE INFORMATION?



HOW ARE WE USING THE INFORMATION?





WHAT IS NEXT?

- Bring in Engineering Data, Scada Data, Additional Meter Data to analyze it to make system improvements.
- Automate the import of data.
- Make the tools available to the end users.
- Develop Member engagement promotions based on their profiles.
- The possibilities are endless...



WHY ARE YOU USING BUSINESS INTELLIGENCE?



THANK YOU!
MARQUITA CULROSS
mculross@cwremc.coop