MAPCOM SYSTEMS

Leaders in Operational Efficiency Software
Geographic Data Visualization

Can You See The Difference?

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Mapcom Systems

- Thought leaders in OSS and BSS solutions for service providers
- Creators of M4, the leading VOS solution software package
  - Revenue generation
  - Network Planning
  - Service Fulfillment
  - Service Assurance
  - OSP and ISP management
- Over 40 years Telecom experience with 180 clients
- Expanding domestic and international presence
The Rise of Data

Recount the buzzwords that continually remind us every day that data, and the analysis of data, is here to stay.
The Value of Data

Is anybody still denying the value of data in today’s world?

Your data is worth more than you think
Business Intelligence Recalibration

- What do I need to collect customer and market data?
- Do I have access to that data?
- Am I doing everything possible to leverage that data?
- Am I seeing successful returns?

Geographic Data Visualization
What is Geographic Data Visualization

Geographic Data Visualization is a set of tools and techniques supporting the analysis of geospatial data through the use of interactive visualization.
Why Geographic Data Visualization

• **“Space”** is a fundamental perspective absent from many reports and data sets
• The **stories revealed** by data often involve “location”
• Displaying data on a map bring you **actionable insights**
• Provides real-world sanity check and much needed **context** to the data
The “Why” for Service Providers

New Business Opportunities

• Leverage a single lead opportunity into multiples of 10 with minimal additional cost, if any
• Outage Reporting for quicker resolution
• Mobilize your resources to attack the data more efficiently
• Keep up with regulatory reporting requirements with minimal disruption to your business operations
Opportunity: Revenue Generation

Turn single opportunities into multiples of 10 with minimal additional cost, if any.
The Tabular Data World

Most of the data the world is used to seeing is tabular

- Massive columns of data
- No trends
- No geographic relationship
- Hidden conclusions

Bottom line: Tabular data correlation can only go so far.
Anchor Customer scenario:

- Large sale customer is looking for your services
- But…there’s no existing coverage and it’s an expensive route to build

Solution:

- Spread the cost over multiple customers. Use VOS software to build a buffer along the proposed route to determine potential customers within 500 feet of the route.
Geographic Visualization World

Use demographic data along with visualization to determine best fit customers along the route for targeted marketing.
Opportunity: Customer Usage

- How can I leverage my customer’s usage patterns? It’s a massive data set.

- Use Geographic Data Visualization to achieve the following goals:
  - Identify Trends
  - Identify upselling Services
  - Assist Network Planning decisions
The Tabular Data World

- Big Data
- Bunch of numbers and difficult to read
- Need to correlate with other datasets
Use Geographic Visualization to identify customers' usage patterns:

• Whose using high amounts of bandwidth (upsell opportunity)

• What trends exist in areas not utilizing bandwidth? Are service levels beneath the agreed upon levels?
Opportunity: Outage Reporting

Viewing outages and where they are located as well as who is affected by the outage.
The Tabular Data World

Most NOC’s live in an environment of multiple screens with tabular data
Geographic Visualization World

Visualize ONT alarms
Geographic Visualization World

Visualize equipment locations and alarms
Geographic Visualization World

Visualize affected customers
Opportunity: Operational Efficiency

Mobilizing your resources to attack data more efficiently
The Tabular Data World

NOC’s are using multiple views of different data
Geographic Visualization World

Visualize trucks or assets in relation to work tickets (service order, troubles, and alarms)
Geographic Visualization World

Visualize geofences of technicians and receive alerts when tech leaves area
Opportunity: Regulatory Reporting

Geographic data required by the FCC
Geocoding

The geocoding process makes systematic guesses regarding structure placement that can be invalid.
Geocoding

- Cons:
  - Largest Potential for Error
  - Variations in Datasets used for Geocoding
GPS

GPS all structure locations for improved precision
Another option is to utilize existing GIS/CAD solution to place accurate structures.
FCC 477 Reporting
HUBB Portal Submission Requirements

• Coordinates in the form of Latitude/Longitude

• Address, Speed Tier, Date of Deployment

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HUBB and CAF II

- Direct Exports of Lat/Long Data
- Qualifying Locations for Required Speeds
- Identifying Underserved Areas
Conclusion

A Picture is Worth a Thousand Words

• Geographic Data Visualization
• Location
• Context
• Actionable items
Questions
Thank You
Get in touch with us!

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