Do Benefits of OMS Apply to Ontario Utilities?

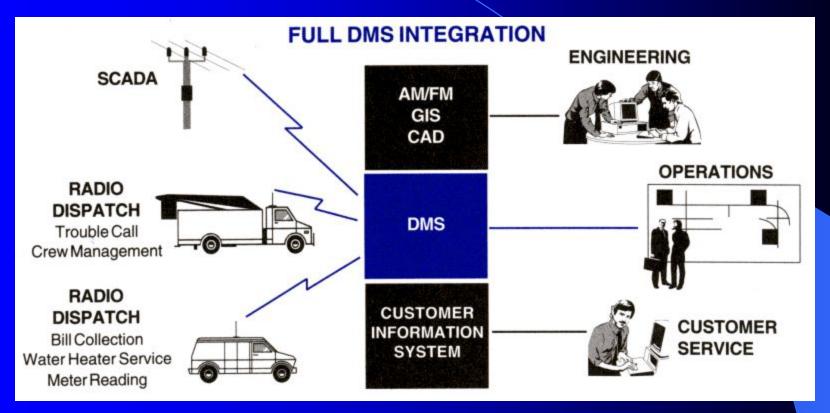
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ExtenSys Inc.
2004 EDIST Conference



Agenda

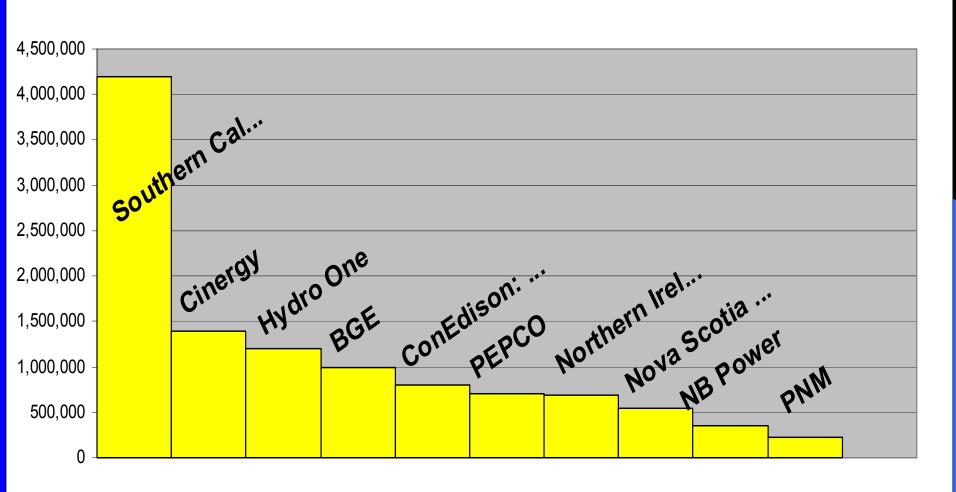
- What is an OMS?
- Who uses OMS? How do they compare to Ontario utilities?
- What problems is OMS solving?
- Benefits of OMS solution. How big?
- Do they apply to Ontario utilities?
- Conclusion

What is OMS?



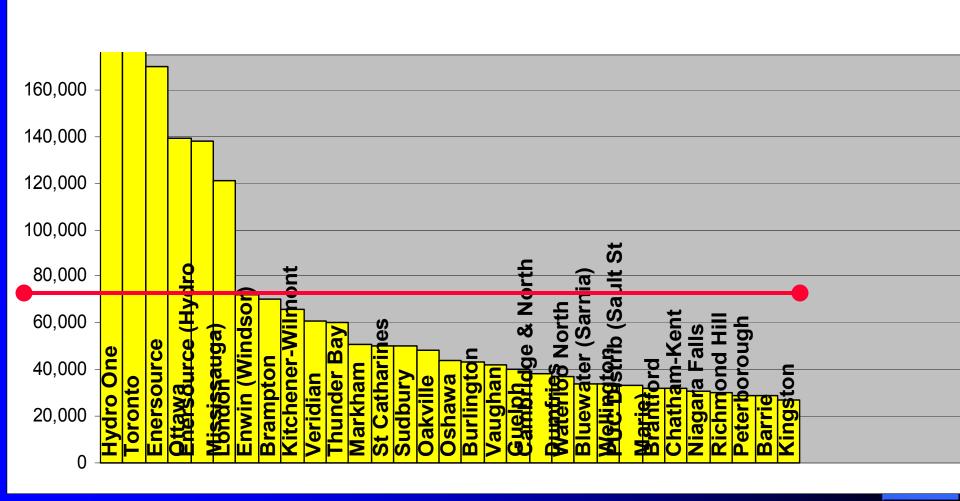
Who Uses OMS?

Customers



Ontario Demographics

Ontario Utilities



What Problems is OMS Solving?

- Complexity
- Managing major outages and catastrophes
- Reporting
- Doing more with less (reducing costs)
- Improving reliability
- Safety
- High customer expectations for information

Benefits of OMS Solution

- Manages complexity
- Manages major outages and catastrophes
- Reports
- Supports doing more with less
- Improves reliability
- Helps with safety
- Provides information

OMS Manages Complexity

- Electrical model with real-time state. Can trace to find energizing breaker.
- With simulation mode (what if's) and switching plan software can plan overlapping work.
- Automating the creation of switching order and permits.

OMS Manages Complexity cont'd

- Standardize processes with software tools like: Call Taking, Dispatch, Switching Plans and Permits.
- Codify best practices in the configuration of the tools or by placing notes on the devices in the electrical model.

OMS Manages Major Outages/Catastrophes

- Tools help prioritize work:
 - Counts of customers out
 - Critical customers
 - Hazardous conditions.
- Overload of information carried by technology (IVR interface, operators only deal with high quality information).
- Improved ability to inform customers and media:
 - Status of outages
 - Restoration schedules.

OMS Reports

- Minimal data entry with automatic recording of outages.
- Fast and accurate reporting with standard reports driven from historical data store.

OMS Supports Doing More with Less

- Generally, automation of processes is used, including interfaces
- Increase operator productivity
- Increase field productivity
- Increase Call Taker productivity with IVR

OMS Improves Reliability

- Pressure to improve metrics: SAIDI, CAIDI, MAIFI. Analysis of accurate data helps to finger high priority areas for improvements or maintenance.
- Faster response to an outage improves reliability without having to make capital improvements to the network.
- Track usage of switches to improve switch maintenance.

OMS Helps with Safety

 Switching Plan and Permit tools with realtime electrical model minimize errors

OMS Provides Information

- Improved ability to inform customers and media:
 - Status of outages
 - Restoration schedules.

How Big are the Benefits?

- Value of OMS Benefits for US utilities over 5 years:
 - Reliability improvement 5 minutes off SAIDI.
 Over 5 years, this is US\$14M to \$127M.
 - Savings on major outages of \$2M (\$0.39/customer)
 - Savings on catastrophic events of \$3M
 - Labour savings of \$2M.

Do the Benefits Apply to Ontario Utilities?

Size is definitely a factor.

What Limits these Benefits for a Small Utility?

- Limited systems to interface OMS?
 - No GIS?
 - No SCADA?
 - No Call Takers?
 - No Mobile Data System?
- No elaborate computer infrastructure?

Overcoming Limitations of Size

- Achieving size by consolidating several small utilities
 - Control room consolidation at night
 - Offer control room services to others

Exploiting Small Size

- Smaller utilities can often be more flexible in processes and use out-of-the-box solution.
- Implement technology more efficiently (faster with less overhead).

Conclusion

- Large utilities have demonstrated that benefits from OMS are available.
 - Managing complexity, major outages and catastrophes
 - Reports
 - Supports doing more with less
 - Improving reliability
 - Helps with safety
 - Provides information
- Business case is up to the small utilities with their specific needs and constraints

Questions?

- Do you agree that size is a factor?
- Do you identify with the large or small utilities?
- Do any of the benefits make a strong element in your business case?