

***TROUBLE CALL MANAGEMENT:
THE FIRST STEP IN YOUR OUTAGE MANAGEMENT SOLUTION***

...by Andrew Thompson

The provision of timely and accurate information during an Outage is almost as important as actually fixing the problem.

When the power goes off and customers, management and the media are demanding answers, will you have the ability to provide a seamless, efficient service, capable of informing all stakeholders with the correct information when they want it? Trouble Call Management (“TCM”) is the process of both managing the inbound avalanche of calls that follow the lights going off, and managing the outbound provision of that same information to stakeholders.

Chelan County PUD in Washington State is one utility that understands the importance of immediate communication to their customers and staff during outages. Their commitment to customer and staff satisfaction lead them to review their Trouble Call handling as the first step to improving their Outage Management processes.

The Issues: What Utilities are facing in today’s demanding environment

- Outages are unexpected and unplanned generally having the most impact after normal office hours when customers are at home and there is limited staff to handle the large volume of calls from customers
- Majority of customers all require the same information – does the Utility know the power is out, what caused it; and the likely time of restoration
- Phone lines become swamped resulting in many customers receiving busy signals
- Limited ability for the Call Centre to provide outage information to other areas of the business due to system and time constraints
- Outage messages that are loaded by staff in these high pressure situations may not be as professional or informative as they should be
- The time it takes to handle hundreds of calls from concerned customers, some with key outage information, means staff can not relay information adequately enough or timely enough to aid restoration and an efficient flow of information
- Corporate Communication departments need to be notified of any incident to enable them to handle all external communication issues and often be called upon at any time of the day or night to record outage messages
- Without key outage information that only a very small number of customers have, Utilities are often ‘left in the dark’ as to what the specific cause of the problem is.

After Chelan County PUD assessed their information channels during an outage, they determined five key groups that needed to be within an immediate communication loop: (1) Customers; (2) Key and Sensitive Customers; (3) Dispatch and Control Centre; (4) Corporate Communications; (5) Field Crews

TCM Options?

Once these issues were highlighted, it became a process of researching possible solutions to improve their response and capabilities. The options boiled down to four methodologies and/or technologies; Outsourced Call Centres, Outsourced IVR (Interactive Voice Recording), Internal IVR, and a Combination solution.

The traditional solutions include:

- **Outsourced Call Centres**

Outsourced Call Centres have the ability to handle high call volumes and overflow to other staff; however they are there to make money and the cost per call becomes material given that most callers just wanted to know “Do you know, When will it be restored, and What has happened”. Also most Call Centres are not designed specifically for Utility fault call handling and may not be based nearby the Utility and so are unfamiliar with the local area and place names. Also Utility Dispatch staff would need to continually notify the call centre of any changes throughout the duration of the outage so operators would be able to update customers in a consistent and reliable manner.

Access to and training on existing systems such as CIS, or OMS was also going to be problematic and would have resulted in Dispatchers having to manually update all outage notification.

- **Outsourced IVR Systems**

Outsourced IVR systems have the ability to handle large call volumes with a 24 hour 7 day a week presence. Although outsourced IVR companies have thousands of ports available to handle large call volumes they also service a large number of clients, which means busy signals can still occur during excessively high traffic times, and the calls would have to be hauled to the IVR and then back again to the call answering location for those callers who wanted to talk with an operator which was costly. Direct integration with other systems e.g. SCADA, OMS, was also difficult, although new standards eg (MultiSpeak v2.0) have the potential to make that easier in future.

Being Outsourced and a shared platform the user interface to allow Utility staff to update information was not specific enough to the circuits and dispatchers are still responsible for updating/recording the messages, over the phone. The message content therefore may vary depending on the Dispatchers consistency at a time when they are already overloaded trying to fix outages.

Further, to generate trouble tickets the Utility has to provide a snapshot of their entire CIS to the outsourced center to allow matching between phone number and address raising issues of security and significant IS time to keep the outsourced IVR current with the CIS.

- **Internal IVR Systems**

Internal IVR systems are easier to integrate with existing systems such as SCADA, CIS, OMS, and have historically been the only solution available. These systems were designed for flat or known call volumes and generally do not handle peaking volumes as are associated with Outages due to the nature of them being one line/port per caller.

To combat this, there are two options; provision the system with a significant number of lines (which would sit unused for a majority of the time) based upon what could be the greatest peak of callers at any one time, or accept that a number of callers will receive busy during Outage situations. The first option has a significant OPEX and CAPEX, and the later really defeats the purpose of the solution.

Again Dispatchers are responsible for updating and recording messages at peak times reducing message professionalism and consistency.

The Solution

Chelan elected to implement a combination solution provided by TVD Inc. The Avalanche TCM solution comprised:

- A windows based User Interface showing a combination of maps, zone substations and feeders linked to localities which both Utility Staff and Callers would understand
- A pre-recorded message library to allow staff to quickly build an Outage Message which ensures a consistently high quality of information and professional image presented to callers during outages.
- Messages are uploaded to the local telephone company CO ensuring no busy signals and an almost unlimited call handling capability at a low cost
- Callers can listen to the message and if they still want to talk to an operator they are directed to the call answering point and all calls are local
- Automated outbound notifications via Email, Fax, Voice CallOut, SMS, and Pager
- Internet Fault site with up to the minute outage information accessed by Browser, PDA or WAP phone
- Integration with SCADA for automated message construction when a Feeder Circuit Breaker is tripped.

The Outcome and what next?

Customers who now call during an outage automatically receive a professionally pre-recorded notification message to inform that the Utility is aware of the outage, what the cause is and the likely timeframe for restoration, all specific to their locality. Should the caller have important information such as the actual cause and location of the Outage they are routed to an operator at the Dispatch Center.

It now takes about 30 seconds for Dispatchers to construct a professional outage message detailing the areas affected, estimated time of restoration and cause (if known) playing to inbound callers.

The professional and high quality information has significantly reduced the number of calls Dispatchers have to deal with, and allowed them a lot more 'clear air' to actually work on restoring supply.

Whereas previously there was simply not enough time or resource to be proactive with a large group of customers during the loss of supply now they have been able to increase the number of customers they can contact such as Key Customers, Local Media and District Superintendents.

Also as messages are now uploaded automatically Corporate Communications are not being called into the office at 2am to record outage messages!

In future Chelan will link this system to their new SCADA system and OMS and may start using the CallOut features with other systems such as Crew CallOut and payment prompting via their CIS.

Ken Johnson, Senior Systems Operation Engineer and leader of the Outage Management team summed up the end result, "all stakeholders have benefited from this system, it has been an excellent representation of our commitment to our staff and customers of improving this critical area, in a very cost effective way. We have already identified some enhancements which need to be made and it's given us a good platform from which to expand our outbound communications effort for other areas of the organization."

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