

## Case Study: Telecom Maintenance Trouble Alerting Tool

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Since the late 1980s, Dexter Systems has been developing workflow systems that automate business processes. In the telecommunications vertical, automation enables telecom service providers to lower operational expenses (labor costs, productivity, and vehicle expenses), improve process consistency and quality, and ultimately improve customer satisfaction.

This case study highlights a situation in which Dexter Systems was able to develop a system for a client that required a process improvement to manage and track Maintenance issues that affected their largest customer accounts. The system provided a significant return on investment and a payback period in months.

### Background

An industry leading US based Telecom Service Provider required a process improvement to manage and track Maintenance issues that affected their largest customer accounts. Senior management needed real-time visibility into all issues that were affecting the largest revenue producing accounts. They also needed a process where they could quickly see the current status of repair activities throughout the lifetime of a trouble ticket. Finally, they needed a solution that would quickly identify trouble tickets that were candidates for FCC reportable events. If there were delays in reporting outages to the FCC, it could result in severe financial penalties.

### Challenge

The Telecom's service managers were responsible for managing an account list that included about a dozen large accounts. There were multiple systems generating trouble tickets and the service managers were using spreadsheets to track those tickets that affected their accounts. There was no automatic notification system to the service managers and, as a result, there was often a delay in getting the most current ticket data into the spreadsheets. If an account had a presence in multiple geographic regions, the service team would have to monitor as many as five legacy mainframes.

From a corporate perspective, there was also a regulatory reason for timely resolution. If there was an outage of more than two hours of another carrier's DS1 or DS3 circuit, then the FCC would need to be notified. Failure or delay to notify the FCC would result in financial penalties. Thus there was pressure to resolve the outage before the two hour window, and pressure to send the notification in the event it exceeded the window.

## **Solution**

Dexter Systems was tasked with developing a software tool that would interface with multiple trouble ticketing systems, capture all of the events associated individual tickets, and store them in a central database. Users from VPs to service manages could search, filter, and sort through all the active tickets, and drill down to see the complete history.

The tool included a feature where service managers could define their own alerts by selecting from a library of trouble ticket attributes (circuit type, customer, status, etc.) and ticket events (open, close, change of status). Service manages could construct alerts that applied to the accounts they were responsible for. They could construct alerts that would escalate to higher levels of management based on the duration of the outage. The alerts would be delivered to their cell phone, their email account, or both – depending on the time of day.

The benefits provided by the solution included real time alerts to several hundred service mangers, millions of dollars in avoided penalties, and improved customer satisfaction by all top tier customers. The FCC was also happy since it saved them from having to administer penalties from the telecom provider.

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