



Case Study

Reducing Circuit Outages Protects \$4 Billion Business

The Opportunity

Top management at a large communications company was vitally concerned about protecting a regional market worth \$4 billion per year because of pending legislation allowing competitors (including customers) for the first time to enter this market. The company needed to reduce (by at least 25%) the time to restore service when a failure occurs in a high capacity phone circuit. This reduction would make customers happier, reduce costs, and thus prevent loss of business to new competitors.

The Approach

A group, formed to reduce the time to restore service, worked with hundreds of people across thousands of square miles involving three circuit types. Personnel involved in this project included problem call receiving personnel from the central office, maintenance personnel, supervisors, field personnel, etc. Project participants used QualPro's 12-Step MVT Process[®]. They brainstormed over 100 ideas for improvement and then narrowed the list down to 24 ideas that were quick, easy, and inexpensive to use.

The Test

The following ideas were tested for each of three different circuit types.

<i>Idea</i>	<i>Old</i>	<i>New</i>
<i>Trouble Call Receiving Group—Circuit Type A & B</i>		
Scheduling System	Current	New
<i>Trouble Call Receiving Group—Circuit Type C</i>		
Scheduling System	Current	New
Dispatch Checksheet	No	Yes
Specific Technician Responsible	No	Yes
<i>Trouble Call Receiving Group—All Circuits</i>		
Circuit Calls Handled Separately	No	Yes
Same Tech (if available) for Repeats	No	Yes
Color Coded Tickets	No	Yes
Refresher Training	No	Yes
Meeting Frequency	Monthly	Weekly
Computer Screen Layout	Current	New
<i>Dispatch Center</i>		
Error Measurement System	No	Yes
Standby List System	Current	New
Hand-Off System	Current	New
Meeting Frequency	Monthly	Weekly
<i>Central Office</i>		
Extra Tech in Larger Offices	No	Yes
Refresher Training	No	Yes
Tech Repair Overtime	No	Yes
Tests	Current	New
Pager Type	D	E
<i>Outside Work Groups</i>		
Control Chart Preparation	Tech	Supervisor
Technicians Update Log	No	Yes
Network Interface Change System	Current	Revised
Refresher Training	No	Yes
Geographic Location	Current	New

The Results

The test results showed that the time to restore service could be reduced by 20% for circuit type A, 60% for circuit type B, and 50% for circuit type C. Ideas that favorably impacted all three circuit types were using the new computer screen layout, having circuit calls handled separately, and using refresher training for the outside groups. Other ideas helped only one or two circuit types but were still considered for implementation for only these circuit types. The reduction in time to restore service resulted in increasing the company's relative competitive advantage against its future competitors, thus protecting its \$4 billion business.