

# A MitemView Customer Reference

## Solution Overview

### Industry

Gas Utility

### Application

Customer Service

### Business Solution

PC-based application supporting a reengineered work flow process in the call center.

### Architecture

GUI desktop application with expanded business functionality, using high performance middleware for noninvasive access to an IBM mainframe CICS application.

### Products & Services Used

Actron CSS Customer Service System  
IBM CICS; IMS/DB  
Novell SAA Gateway  
Microsoft Win 95 & Win 3.1  
Visual Basic 4.0  
MitemView 4.1.2  
Intel desktop PCs Pentium 100MHz, 32MB RAM

### Benefits

- Improved customer service levels
- Reduced Average Handle Time
- Reduced training cycle by half

### Alternatives Evaluated

HLLAPI Based Tools:  
Attachmate's Quickapp  
Sterling's Flashpoint  
3-tiered client/server  
MITEM's MitemView<sup>®</sup>

Oklahoma Natural Gas (ONG), a regulated subsidiary of ONEOK, Inc. (NYSE:OKE), is a Tulsa-based natural gas distribution company that currently supplies more than 740,000 residential, commercial, and industrial customers. The pending acquisition of the natural gas assets of Western Resources, Inc., will add additional territory in northeast Oklahoma and a substantial part of Kansas. ONEOK will become the 8th largest natural gas distribution company in the U.S., serving approximately 1.4 million customers.

With deregulation of the gas industry on the horizon, ONG began in 1991 to examine ways to improve its operations. "It became clear that with deregulation, ONG was in the delivery and service business of natural gas as a product and not in the natural gas business with service as an afterthought," said Charles Moore, Manager of Systems Development. "This caused us to focus on the information system requirements in order to deliver excellent service in a consistent manner. ONG installed the Actron Customer Service System (CSS) in 1989 and it has undergone substantial modifications," said Moore.

### Call Center Automation Initiative

ONG initiated a call center automation project which concluded that only minor modifications were required for the billing and

accounting functions of CSS, but significant changes would be necessary to support the objective to increase its customer service levels. The automation project identified the additions of several new features including an IVR (Interactive Voice Response) system, screen pops, and intelligent call routing.

In addition, the character-based system [CSS] did not offer an easy way to handle certain transactions such as order scheduling, billing adjustments, and detailed account inquiry. For example, changing an appointment for service or follow-up action on a bill was difficult even for experienced CSRs. It was clear that to support the call center automation initiative, a reengineering of the CSS presentation was needed.

### The Call Center Environment

The two main call centers, staffed with 60 CSRs, are located in Tulsa and Oklahoma City. They handle 70 percent of ONG's call volume while the remaining 30 percent are handled in regional offices.

Over time, each CSR had undergone substantial training on the use of the character-based 3270 screens. "The most experienced operators were comfortable with the system of codes and menus presented by the mainframe software," says Call Center Manager Scott Shepherd, "but with attrition and changes in our business, retaining personnel and the high cost of training were becoming a major challenge." For example, service activation required the CSR to navigate up to six screens, each with their own set of codes, in a fixed sequence. The opportunity for error by a novice user existed at every keystroke. More complicated transactions like rescheduling a service call, account maintenance, and rebilling posed challenges even for the experienced CSR. The more involved the activity, the longer the transaction and call times became, resulting in poorer customer service.

### Technology Alternatives

Several technical options were considered to deliver a workflow which more closely match the process of customer service. Options ranged from a three-tier client/server architecture to face-lifting the system with a graphical user interface (GUI). ONG concluded that the client/server option would not provide the power, stability, security, and performance to which ONG was accustomed. Reclaiming the mainframe functionality using an HLLAPI based



figure 1

*“Our objective was to have a CSR handle any call completely and competently and to do it without lengthening the average handling time. We needed to change the way CSS worked for us without changing CSS.”*

Scott Shephard  
Call Center Manager  
Oklahoma Natural Gas

*“We took a concentrated approach to the CSR functional view in providing access to CSS. We analyzed past call patterns to assess the information requirements which should be presented to the CSR on the first window.”*

Charles Moore  
Manager, Systems Development  
ONEOK, Inc.

*“The performance of MitemView causes users to believe that the mainframe has been upgraded. This is a real advantage for us, since all the other solutions we examined had significant performance penalties in accessing the mainframe.”*

Stan Martin  
Programmer Analyst  
ONEOK, Inc.

## For more information

For more information about Mitem View, please call 1-800-82-MITEM E.S.T. or visit our home page <http://www.mitem.com>

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tool would not offer the developers sufficient design flexibility, robustness, and performance to build the user functionality and workflow which was required.

A superior alternative was MITEM Corporation's MitemView. It comprises a high performance message management system which exchanges information between a Windows application executing on a PC and the CSS mainframe system. The MitemView technology provided the foundation for ONG to design all of the advantages of a client/server architecture without sacrificing the performance and reliability of their mainframe system.

## Design Approach

In early 1995, ONG assembled a team of three developers and six call center CSS users to identify the critical areas for improvements. With the focus on complete customer care, the requirements were used in the design and specification of the new user interface for use by the CSRs. The result was what ONG called the “Dream Screen,” (figure 1) which included all payment, billing, and service activity. Color coding was used to differentiate various account status, warnings, and other critical information. The design was optimized for the most frequently used and difficult transactions.

## Development Process

ONG began development of the Dream Screen based on the user requirements, using MitemView as the middleware to the mainframe system. “By participating in the design phase and having an in-depth knowledge of CSS, we eliminated many potential mistakes in the design and implementation,” said Mike Pride, Development Analyst. “We were confident that we could achieve a fully functional application using the tools we had selected,” he added. The core development team consisted primarily of traditional mainframe COBOL programmers. The team was trained in Windows, Visual Basic, and the MitemView technology. To help with the critical design and development issues, ONG utilized the services of Cornerstone Consulting, an independent integration firm specializing in distributed computing and MitemView. The first phase of the development, the Dream

Screen and six subsidiary windows, was delivered in 90 days. The Cancel/Rebill and major functions including Maintenance, Trouble Order, and the New Service Orders were also delivered.

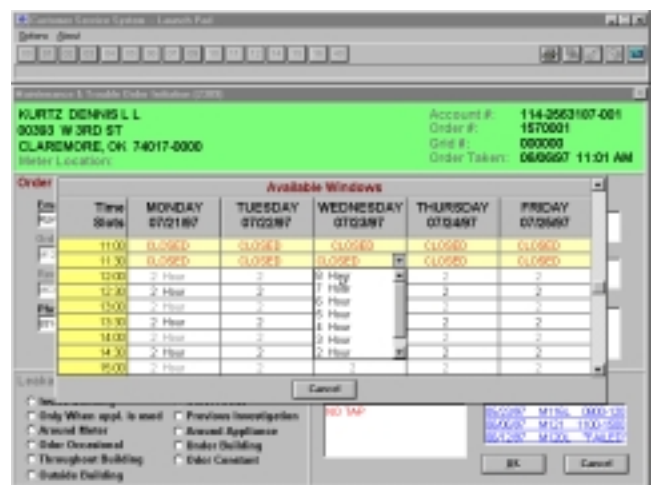
The design resulted in a reduction in initial training time from two weeks to one. In addition, the time to competency and accuracy of the CSR was similarly affected. Seventy-five percent of all calls are now handled by information on the Dream Screen. “Accessing customer information is effortless compared with the screen surfing under the old system,” said Shephard. The Dream Screen is comprised of customer information from up to fifteen 3270 CICS screens.

Overall the project has been a tremendous success. “We have reduced call times, cut CSR training time in half, and improved customer service. We were also able to realize a reduction of transactions on the mainframe. Most importantly, we have been able to lengthen the life of our legacy application, and add functionality and process improvements,” said Moore.

## Future

ONEOK is planning to extend the use of the new GUI CSS to support new customers from Western Resources. The system will be used by up to 150 CSRs, supporting about 1.4 million customers throughout Oklahoma and Kansas.

In addition, ONG is evaluating other application areas where MitemView can deliver business advantages. They include employee self-service for access to human resources and payroll systems, and improvements to the financial accounting systems.



Oklahoma Natural Gas