



A TCS Basys Controls Solution

Ubiquity Makes Dollars and Sense for Large Retail Bank Chain

TCS Basys Controls Case Study

Automating facility management in retail banking promises financial gain,

enhanced customer comfort, and cost reductions. *But can such systems deliver significant energy and operational savings as promised?* Yes, based on the results of a recent trial of the TCS Ubiquity enterprise management solution by a large, multi-site retail bank.

Trial results of Ubiquity's web-based remote communications capability for HVAC and lighting showed that test sites experienced significant savings in utility costs and maintenance labor expenses, as well as other tangible benefits compared to control sites.

Goals of the Ubiquity trial were to track cost savings in operational labor and utilities, identify other benefits and determine the viability of retrofitting existing bank locations. Test sites were geographically diverse with remote locations and represented different types and sizes of buildings. The trial consisted of 37 locations with TCS equipment and 37 control sites utilizing existing HVAC controls. The test ran for 20 months.

For the test, a typical installation included one DDC programmable thermostat for each HVAC unit, normally four per branch, one DDC programmable time clock to control ATM lighting and exterior sign lighting, one communication controller, and the necessary wiring for installation and networking of these components. The Ubiquity web site provided the access tool for monitoring the operation of the test sites. Test data showed that the energy consumption of the trial group *decreased 6.2% in electricity use and 41.2% in natural gas use*. However, the control group

actually used 5.1% more electricity and 7.4% more natural gas due to year-to-year differences in outdoor temperatures, making the trial group's savings even more significant.

Ubiquity also resulted in significant operational cost savings by reducing the number of trips required to troubleshoot routine HVAC problems. A survey of the bank's control sites during the test period recorded 94 work orders from HVAC calls. Fifty-seven of these work orders were related to requests for temperature changes, which could have been accomplished with the Ubiquity web site. During the trial, there were 67 HVAC work orders from test sites. Thirty seven of these requests were resolved through

remote communications via the Ubiquity web site. The *operational savings identified in the test averaged \$936 per location in reduced labor* as a result of the reduced number of on-site service trips. It was determined that Ubiquity had a 48% initial return on investment which was 4 times the bank's criteria of 12%.

The Ubiquity test also demonstrated the benefits of using historical data for performance trending. When a condition arose that required monitoring of a test site, Ubiquity was able to remotely trend and

provide a log of all of the conditions pertaining to the operation of the HVAC system and provide information for analysis and review.

Based on the excellent financial returns, this financial institution is currently using Ubiquity to enforce its corporate energy policies and is planning a rollout program for 2006 and beyond to retrofit existing locations to fully leverage the potential savings across the enterprise from Ubiquity.

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