



# COOK COUNTY GOVERNMENT

## 2005 COMPUTERWORLD HONORS CASE STUDY

### GOVERNMENT & NON-PROFIT ORGANIZATIONS

THE SECOND LARGEST COUNTY IN THE UNITED STATES CREATES A VIRTUAL NETWORK TO PROVIDE DIAL TONE TO OVER FIFTY THOUSAND TELEPHONE LINES IN MORE THAN 90 BUILDINGS, SWITCHING TENS OF THOUSANDS OF INTERNAL CALLS PER HOUR, PROVIDING WIRELESS, VIDEO CONFERENCING, VOICEMAIL, MEET ME CONFERENCE AND INTERACTIVE VOICE RESPONSE SERVICES COUNTYWIDE, AND SAVING AROUND \$9 MILLION IN THE PROCESS. [20055415]

*A Search for New Services*



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### SUMMARY

The Cook County Government project is a state of the art telecommunications system for the second largest county in the United States. Cook County owns thirty seven Avaya switches which tied together act as a virtual network and provides dial tone to over fifty thousand telephone lines to over 90 buildings. Besides switching tens of thousands of internal calls per hour, this network provides wireless, video conferencing, voicemail, meet me conference and interactive voice response services countywide. By standardizing on one platform, the County saves \$8-9 million just in usage costs on an annual basis, in addition to maintenance, personnel and training costs. This network is viewed as a County asset.

### APPLICATION

Cook County is named after Daniel Pope Cook, one of the youngest and most brilliant statesmen in Illinois history who worked diligently for the statehood of Illinois and was present on April 18, 1818, when it was granted. Cook County was created on January 15, 1831 by an act of the Illinois State Legislature and the 54th county established in Illinois. On May 7, 1831, Cook County elected its first officials. Today, the County's population is estimated to be 5.4 million over 935 square miles and contains over 121 municipalities with the most well known being the City of Chicago.

The Cook County Government project focused on standardizing on one voice platform. This allowed the County to save millions in personnel, maintenance, usage and administrative costs over the years by maintaining a small staff of knowledgeable individuals. This virtual network has exceeded all original expectations. The old adage "one Bell system-it works" lives on in Cook County.

### BENEFITS

The Cook County Government project has benefitted the County in many ways, and has provided all internal and external users with a state of the art telecommunication system that can be integrated with other functionality to further the County's mission. Through this project, citizens and internal staff do not have to visit County locations, but can access important information on a 24X7X365 basis, such as land, zoning, jury administration, insurance, vital statistics, elections, and ethics in three languages. The telecom project is tied to the digital interactive voice response system that calls the County's enterprise server for real-time data through a local phone call. Reports for each department provide metrics to assist department managers with needed information of usage. The IVR payback equaled 3-4 months and has allowed the departments to remove over 60 percent of the workload to the technology and has allowed the staff to focus on the difficult requests in a more timely manner. This has proven to be a huge success by freeing up the time of department personnel to perform more tasks in the same amount of time.

### IMPORTANCE

The advances of the product line that the County standardized on allowed Cook County to utilize all the functionality to meet our requirements. Based on the County's four major lines of business-health, administrative, public safety and land, and over 100 departments that are aligned in each line of business, the voice system needed to possess the flexibility to meet the mission of each department. Moreover, the County built a virtual network that allowed an internal user to integrate other related systems into the open architecture. No longer could the County rely on a proprietary system that couldn't talk to other related systems. Each line of business required functionality to perform its tasks more effectively and efficiently. For example, the Bureau of Health requested wireless phones in the emergency room of each of its four hospitals in order to move patients through the ER process faster. The ER doctors also wanted lab results of their

patients to be accessed through the wireless devices for more timely disposition of patient needs. This has been a huge success, and the ER doctors have been able to treat more patients with the same staff.

## **ORIGINALITY**

The Cook County Government project evolved due to dedicated, professional voice network technicians and administrative staff who realized that the County could save millions by installing one state of the art infrastructure. Cook County used to lease voice services through its local carrier. This was very costly and, more importantly, did not possess any synergy with the other 90 County buildings. Each building was an island and telephone usage charges were ten times the cost. The team not only wanted to save millions on usage, maintenance, training and administrative charges, but wanted the advanced functionality provided by having on our network. This has served the County well, and the originality is integrating the entire product line for into a seamless infrastructure.

## **SUCCESS**

The Cook County Government project has exceeded its goals and is fully operational. All of the County's buildings have the state of the art infrastructure and are linked together by a very robust sonet ring. Both internal and external users have embraced the technology and the payback to this investment has been less than a year. By installing the voice switch has allowed the County to build on this platform and implement the state of the art countywide interactive voice system, the wireless system, voicemail, meet me conference, video conferencing, and the in-house mail order pharmacy for the Bureau of Health patients. All of these subsystems work seamlessly together and allow the County to operate a highly effective and efficient 21st Century telecommunications system. Future plans call for the IVR to be placed on our portal.

## **DIFFICULTY**

The Cook County Government project did not face any obstacles based on great technicians that the County possesses and the great technology Avaya provided. Based on the many years of telecom experience, the County technicians were able to work out any obstacles during the implementation phase. However, the major effort occurred during the planning and walk-thru stages. Planning this project and having standardized on one provider has allowed the County to implement this technology without any major issues. Moreover, the research that the County performs before the implementation phase benefits us in the long run. The funding was also authorized by the Board of Commissioners by providing the Board with a cost/benefit analysis. Once the Board reviewed the costing analysis with a payback of less than a year allowed us to move forward with this investment. The most difficult part was having to change the County prefix which meant new stationery from the County printshop.