Metropolitan Nashville Public Schools
Large School District Transitions to Centralized Printing Strategy

ABOUT THE CUSTOMER
Metropolitan Nashville Public Schools (MNPS) is a large school district in Nashville, Tennessee that comprises 80,000 students and 10,000 staff in nearly 140 schools. Each school was granted significant autonomy for managing document output. As a result, most schools had a mix of centralized network devices and standalone printers in most of the classrooms.

CHALLENGE
Every school district faces unique challenges when trying to manage people, processes and equipment cost-effectively — especially when it includes thousands of users in dozens of locations. As MNPS discovered, inefficiencies can spiral out of control quickly.

Standalone printers littered classrooms throughout the district. In many cases, teachers purchased personal printers because their print needs were not being met. Eventually, most of the printers became outdated and inefficient.

Because there were only spotty records to determine which printers were the district’s responsibility and which were personal printers, maintenance became increasingly difficult for IT personnel. Many maintenance issues weren’t even reported. As a result, printers sat inoperable for service issues as minor as toner replacement. The district struggled to control centralized printing, too. More specifically, it struggled to control unauthorized and excessive usage.

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Tom Bayersdorfer
E-Rate Coordinator
Technology and Information Services
Metropolitan Nashville Public Schools

CHALLENGE
- Standalone desktop devices
- Unauthorized and excessive usage
- Inconsistent or non-existent tracking
- Need for printing policies/guidelines

SOLUTION
- Ricoh Professional Services
- Ricoh printers and MFPs
- PCS Director tracking software
- TRAC web-based management
- @Remote device management

RESULTS
- Reduced paper costs by up to 30 percent
- Eliminated unnecessary single-function inkjet devices
- Implemented tracking and monitoring
- Formal Print Policy & Guidelines
District leaders realized that new output devices were needed. They also knew that new printers alone wouldn’t quell escalating replacement and operating costs. So, it issued an RFP for a new document management strategy throughout the district. Three vendors presented to the district CFO, COO, Executive Director of Technology and Tom Bayersdorfer in IT Resource Management. Each claimed up to $1.5M in savings. But, when pressed how they would make it happen, the suggestions were vague and unrealistic.

When Ricoh presented, Amanda Redgate, Ricoh Consultant, Enterprise Solutions Delivery, and her team offered more than generalities. She devised a comprehensive scope of work, including interviews, plant maps and web surveys backed by a legacy of affordable document management solutions customized to meet the specific requirements of each school.

**SOLUTION**

The Ricoh team knew that it couldn’t garner an accurate assessment of the existing document management environment from afar. As a result, Redgate and others visited numerous schools with Bayersdorfer, who was serving as the local project manager and contact for the engagement. Together, they developed a detailed, customized survey to determine the needs of print users in the district. Bayersdorfer was impressed with Ricoh’s willingness to accept his feedback and tailor the survey to fit the audience and maximize its impact.

The survey helped identify what users wanted. A comprehensive assessment of the existing print environment helped determine what they needed. “Once we realized how much we were actually spending on document management, we knew we had to develop a new, more efficient output strategy immediately,” said Bayersdorfer.

The on-site Ricoh team used asset mapping software on a portable tablet device to locate and catalog assets. It also used @Remote to monitor fleet activity and to compile raw data on existing networked printers. As a result, Ricoh was able to provide pricing for equipment and supplies for deployed devices. The report also detailed unique trends. For example, the color printers were used at an alarming rate during the lunchtime hours, indicating that teachers were using them for personal use.

The next step was to demonstrate how transitioning to centralized printing could improve service and reduce operating costs quickly. Ricoh recommended replacing all inkjet classroom devices with hub printing. It enables the district to regulate how many printers are deployed and to ensure proper maintenance on the devices. More importantly, the district can manage operating costs much more accurately.

New digital MFPs with print, fax and scan capabilities were placed in strategically located work rooms. Color output was limited to color-designated MFPs. Inkjet printers and standalone faxes were eliminated and older monochrome laser printers are marked for gradual phase out.

In addition, the district implemented other innovations to streamline workflow. The Ricoh TRAC solution is an easy-to-use, web-based reporting tool that allows the district to more efficiently manage people, space, assets, and document management functions. For example, administrators can use it to track asset utilization and chargeback costs.
RESULTS

Overhauling print environments for 138 schools doesn’t happen overnight. That’s why Ricoh and the district decided to conduct a pilot program with seven schools, including two high schools, two middle schools, two elementary schools and a magnet school. Print efficiency varied significantly between the schools.

Ricoh started with maps of the current state compared to the optimal future state. The Ricoh team visited with principals at each school and walked the hallways to determine the best mapping strategy. But, the placement of printers was only the beginning.

Ricoh used PCS Director software to accurately track usage at each device in every school. It provided centralized management and reporting for printing, copying and scanning so the district could reduce waste, curb excessive usage and allocate proper resources moving forward. For the first time, users must provide authentication directly at the device to gain authorization to approved functionality. IT staff can even set limits for individual users or groups.

Previously, print expenses were primarily the responsibility of each school. With centralized printing, the district could ensure optimal efficiency with strategically located, cost-effective devices. The district purchases the devices, toner and pays for maintenance costs. So far, it has worked exceptionally well. The next step is to leverage the district print shop for more efficient printing. This initiative includes the implementation of a web-based job submission and ticketing system to streamline the process and improve accuracy.

Ricoh has implemented the new centralized printing and monitoring at about 30 schools, using a mix of legacy and new devices. On average, there are two large high-speed MFPs and one smaller MFP at each location. It’s estimated that about 100 devices have been removed from the fleet. With default duplex printing and authentication controls, the district is projecting to reduce paper costs by at least 30 percent. All devices are equipped with “sleep mode” to adhere to environment stewardship initiatives. Some schools are leveraging an electronic portfolio through SharePoint to reduce costs even more.

Ricoh will assess the print shop’s capabilities to determine how to leverage its capabilities and improve efficiencies. Ricoh Professional Services will monitor service calls and assess operations to identify trends and best practices moving forward.