Charlotte-Mecklenburg Schools is located in the Charlotte, North Carolina region and provides academic instruction to more than 148,000 students in pre-Kindergarten through Grade 12 in 170 schools throughout Mecklenburg County. Each day, approximately 19,000 CMS employees guide their students according to the highest standards, earning CMS widespread acclaim as one of America’s best school districts.

**Background**
Approximately 1,400 employees work in the Child Nutrition Services department at Charlotte-Mecklenburg Schools (CMS). Their mission is to contribute to a successful academic experience and encourage a lifetime of healthy eating by providing affordable and nutritious student meals. Each day, they provide 36,000 breakfasts and 78,000 lunches to students, totaling more than 20 million meals a year. To manage the growing volume and complexity of students’ nutritional needs, CMS, with the help of PCSForms Division from partner PCS Revenue Control Systems (PCS), streamlined and automated its manual processes with OpenText LiquidOffice and OpenText TeleForm to save time, improve service, and reduce risk.

**Challenge**
Increasing volume of application forms
The CMS Child Nutrition Services department might be compared to a restaurant chain with 170 locations. Menus are designed and approved by a menu committee, and meals are computer analyzed to ensure they meet federal nutrition guidelines. However, unlike a restaurant, menus are customized to accommodate students with special dietary needs. In recent years, student volumes and special requirements have outgrown the staff’s manual, paper-based processes.

**INDUSTRY**
Education

**CUSTOMER**
Charlotte-Mecklenburg Schools

**PARTNER**
PCS Revenue Control Systems

**CHALLENGES**
• Rising application volumes outgrowing existing processes
• Inefficiencies and delays with manual, paper-based processes
• Increased risks with manual data capture and workflows

**SOLUTIONS**
• OpenText™ LiquidOffice
• OpenText™ TeleForm

**BENEFITS**
• Digitized processes increase productivity, resulting in time and cost savings
• Time redirected to more value-added activities
• Full process visibility and audit trails help reduce risks
• Ability to process 13 times more simple diet order forms per day
Catherine Beam, Executive Director for Child Nutrition Services at Charlotte-Mecklenburg Schools, explains that they began the process of automating and streamlining paper-intensive processes several years ago: “All of this started when free and reduced meal application processing was moved from the individual schools to the central office. We were getting roughly 32,000 paper application forms that had to be processed within 10 days of receipt. There was no way to handle that manually.”

Solution
Intelligent forms automation
Enter PCS (or PCS Revenue Control Systems, Inc.), a nationwide provider of K-12 school food and nutrition services technology and valued OpenText partner. The school board enlisted PcsForms, a division of PCS, to deliver a solution for processing meal application forms. PcsForms deployed LiquidOffice and TeleForm.

TeleForm is an intelligent forms automation solution that provides a paper on-ramp for document and forms-driven processes using powerful design, capture, and recognition technologies to eliminate time-consuming manual data entry, improve efficiency, and control costs. Organizations can easily handle thousands of forms a week using automatic classification and data extraction, and can update integrated systems with accurate validated information.

LiquidOffice is an intelligent forms automation solution that enables organizations to automate people and forms driven processes using electronic forms and workflow capabilities for improved efficiency, control, and customer satisfaction. LiquidOffice integrates with TeleForm to bridge paper and digital worlds and deliver end-to-end intelligent forms automation solutions.

Automatic allergen management system
Managing special dietary requests for students used to be a particularly manual and time-consuming task for CMS. The process hinges on the Diet Order form, which lists a student’s allergies and dietary restrictions, and must be signed by a doctor. In recent years, increasing numbers of students required dietary modifications, leaving CMS staff overwhelmed by the Diet Order submissions. “We typically receive 1,200 to 1,300 Diet Order forms in the first six weeks of school. The stack of papers is huge. The complicated ones take much longer than the simple ones, so we were hoping to be able to process the simple ones more efficiently in a batch,” says Margaret Cameron, Wellness and Marketing Specialist at CMS.

The solution offered by PCS and powered by LiquidOffice and TeleForm was robust enough to handle their growing volumes but simple enough for staff to use and manage.

Benefits
Top marks in digital transformation
At the start of the 2016/17 school year, CMS launched its new end-to-end allergy management system. Incoming documents, including the diet order form, are scanned in and all outgoing documents such as confirmations and menu plans are handled automatically via the system. The Child Nutrition Services department has seen dramatic benefits with OpenText intelligent forms automation, including process acceleration, cost reduction, and lowered risk.

Automated processes save significant time
The once cumbersome, paper-based process of managing special dietary requests is now a smooth, automated process. Employing state-of-the-art digital scanning and online processing, the solution facilitates communication between doctors, nurses, dieticians, managers, and staff, and integrates nutrition requirements, menus, and point-of-sale (POS) systems. Dusty Swan, Product Manager, PcsForms explains, “It used to take CMS an extraordinary amount of time to generate letters and custom menus. They had a huge spreadsheet for more than 900 students at 170 schools, which they emailed to each site manager individually. For each student, they would generate a new Microsoft® Word document and attach the applicable doctors’ note. The Teleform AutoMerge Publisher feature allows them to customize it for one set of allergies based on the record, automating the process and cutting down dramatically on manual work.”

Liliana Myers, Dietetic Technician at CMS, describes the speed of the new solution: “I used to process 10 to 12 of the simple diet order forms in a day, but now I can do more than 20 in an hour. The process now involves simply scanning the incoming orders, verifying the allergens in the system, merging records and then sending out a batch of pre-formatted emails.” Cameron continues, “Being able to scan the diet orders eliminated another cumbersome part of the process which was managing the mass of paper that was flooding our fax machine and courier mail. We can get them scanned so much faster than doing it by hand. When I look at last year versus this year, my time was down by more than half.”
Another manual step in the data capture process that has been automated is the tracking of food ingredients. Today, the team can scan ingredient labels and the solution automatically reads allergen information extracted from the ingredients list. It integrates that with menu planning to highlight menu items that conflict with allergies. “Once it reads the ingredients, it finds all of the different allergens that they track and automatically checks them off. That saves a lot of time,” says Swan.

In the past, the team used a Microsoft® Excel® spreadsheet and manually marked every ingredient from each food label. Now, they scan the labels and the solution tells them which allergens are present. It reduces the time spent in half.

### Tracking and auditing enables process visibility, reduces risks

Another key benefit of accurate data capture has been the audit trail that staff can now follow. The liability risk associated with managing students’ allergies and special diets is extremely high, and documentation is critical. Cameron describes how the solution helped with a recent concern over a student’s allergies: “I was able to go to the database and search for the student. Everything was right there. I found where I had typed in my notes, the phone conversations that I had with the mother and the doctor, the Diet Order form, the supporting documents, and the letters and menus that we sent via email to the manager and the parents. I was able to show exactly what we did and why. We could be confident that we had done the right thing since all the information was in one place with a full audit trail available.”

### Improved customer service

With all the information at their fingertips, the team can provide better service to stakeholders. The time savings also allow staff to focus on value-added activities such as enhanced service. “We’re able to provide more verbal support to the managers. They receive written instructions, but we have time now to address more complicated cases over the phone. In the past, there might have been uncertainty, and we couldn’t address those concerns quickly. Freeing up my time has enabled me to instruct managers personally, which has been really helpful for them,” explains Cameron.

### Bonus marks for surpassing expectations

Building on the success of the special diet program, CMS applied the OpenText intelligent forms automation solution to its Summer Food Service Program. With close to 200 sites providing food services every summer, CMS wanted to improve the site registration process, which was taking one person three months every spring. “There was a sign-up process with a lot of paper that had to be managed,” says Beam. Now, the registration process is online and is already yielding positive results. “It was deployed just this week, and we already have customers signed up. In fact, the team has seen faster responses than when they used to send a large paper application packet,” reports Beam.

### Future

As the CMS school board looks to the future, Child Nutrition Services is seeking out other opportunities to streamline data capture and workflow processes. “I’m very interested in what else we might take a look at, given the success of the Diet Orders and Summer Food Service Program,” says Beam. A document management system to more efficiently store the significant volume of documents may also be on the menu. The team is committed to taking whatever steps are necessary to fulfill its goal of healthy and safe nutrition for its students.

---

**PCS Revenue Control Systems is a leader in school food and nutrition technology, providing a complete and fully integrated line of products and services to the K-12 market. System solutions include; PcsForms – Student Allergen and Special Diet Management, Free & Reduced Scanning and Web Apps, Catering Management, School Inspections, Household Surveys, and digital document management for and business process; PayPAMS – Parent Portal for Web Pre-payment and Free and Reduced Meal Applications; POSNOW – Point of Sale, Vending, Payment Kiosks, Meal Accountability, Claims, and enrollment interfaces; TrakNOW – Menu Planning, Production and Nutrition, Supply Chain Management, Inventory Management, Central Kitchen and Central Distribution. Sales and support services are provided nationwide through regional offices and corporate offices located in Englewood Cliffs, New Jersey.**

[www.opentext.com/contact](http://www.opentext.com/contact)