

**CACUBO**  
**2007 RBC Capital Markets Best Practices**  
**HIGH EFFICIENCY CLEANING**

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## Abstract

Many colleges and universities face the challenge of providing cleaner, healthier environments with limited resources. Wright State University takes pride in their High Efficiency Cleaning Program utilizing the Kaivac No-Touch Cleaning System for restroom cleaning, ProTeam Super Coach Back Pack Vacuums for office cleaning along with task specialist training and implementation which provides greater productivity, more thorough cleanliness, increased employee accountability and quality customer satisfaction. With the expertise of Aramark consultants, this program began in September 2005 and was in full operation by July 2006. It resulted in a savings through attrition of eleven (11) full-time employees, four (4) from contract custodial staff and seven (7) from WSU staff, with combined annual savings of \$286,897.31. The net savings of \$66,237.60 from the (4) contract custodial staff were applied to increase wages of contract employees. Savings from the (7) WSU staff with a base wage rate of \$10.24 per hour and 48% benefits resulted in a net yearly savings of \$220,659.71. These annual savings were obtained from a one time investment of \$332,461. Overall cleaning increased 15% per person for an average productivity rate of 30,400 sq. ft. general cleaning per person per night.

## Introduction of Wright State University

Wright State University was named after the world-famous Wright brothers. Wright State University in Dayton, Ohio, continues their spirit of innovation. Wright State is a place where the sky's the limit! The nationally accredited state university serves nearly 17,000 students. Its six colleges and three schools, including schools of medicine and professional psychology, offer more than 100 undergraduate and 50 Ph.D., graduate, and professional degrees with 2,279 faculty and staff. Wright State University's main campus is located in a beautiful 557 -acre wooded setting and consists of 26 academic and academic support buildings for approximately 2,200,000 cleanable square feet. There are also 26 student residential buildings and 5 Dayton off-campus locations. WSU's Lake Campus is located on the shore of Grand Lake St. Marys between Celina and St. Marys, Ohio.

Wright State University Main Campus is unique in that a system of tunnels connects almost all buildings on central campus at basement level. The tunnels are linked to the upper floors of buildings by elevators and stairways. Color-coded signs help you to find your way around the tunnels. Students with physical disabilities find that this system allows them to navigate easily from building to building no matter what the weather. Extending the opportunities of higher education to people with disabilities is a high priority at Wright State. The university's Office of Disability Services offers programs to promote each student's academic, personal, physical, and vocational growth so that people with physical and learning disabilities can realize their full potential.

We encourage you to visit Wright State University.

Problem: Cost and Customer Satisfaction in the Custodial Function.

For a number of years, Wright State University has used a combination of university employees and a contractor to provide custodial services to its main campus. In 2005, we took on a project to reengineer our custodial function to improve campus satisfaction and to reduce costs. At that time, we had 78.6 university employees and an additional 28 contractor employees and an annual budget of \$3.25 million for this function. Several additional buildings were scheduled to come on line in the next few years, placing additional upward pressure on the budget.

## Design

With the support of Business and Fiscal Affairs, Aramark was hired as a consulting management firm to work with Environmental Services to implement a High Efficiency Cleaning Program in September 2005 with completion date of August 2006 for the contractual sum of \$285,913.88. Time studies were performed on each employee in all areas by Aramark so that Aramark could determine how to best restructure the cleaning processes and schedules in our facilities.

Upon completion of the time studies, new preliminary work schedules were drafted by Aramark for one-on-one implementation of specialized training with employees. Twelve Kaivac Cleaning Systems were purchased for \$40,807.47 in addition to 16 ProTeam Back

Pack Vacuums for \$5,390.00 and 25 packages of vacuum bags for \$350.00, with total equipment cost being \$46,547.47. Equipment was stored and disbursed to the employee one piece at a time during individual training implementation.

Total cost of the project was \$332,461.35.

## Implementation

Prior to our High Efficiency Program employees had been assigned 1 person per floor and responsible for all cleaning tasks. With the High Efficiency Program specialized task schedules were prepared by single task per building. Training was implemented by the Aramark consultant one specialized task per person per night. This was a lengthy process as employees became specialized cleaners. We transitioned from employees performing all cleaning duties in assigned work areas to employees performing one specialized task per area: trash specialist does nothing but collect trash, restroom specialist does nothing but clean restrooms with the No-Touch Kiavac Cleaning System and vacuum specialist does nothing but vacuum carpets. All employees are cross-trained to perform all specialist duties. Each cleaner performs one specialized task a night resulting in team cleaning rather than individualized cleaning. Supervisors along with the specialized cleaner provide quality control inspections, complete a specialized inspection report, and then grade their work performance. Having specialized duties with routine quality control inspections holds each employee accountable for his or her work assignment. As schedules have been prepared for each specialized task in each building any individual can perform any assignment where needed.

In addition we have also contracted with our customers to have routine meetings which enable us to review our service and ensure that we are in fact providing quality customer satisfaction. Work requests are called into our customer service center and logged as work orders to help us track work performed and hours used.

Implementation of this process was long and at times difficult due to turnover of employees until all persons were finally cross-trained. Customers were educated as to the change taking place; however, many customers as well as employees were resistant to the change. Employees did not like completing just one task nor did they like learning new equipment and processes. Customers were uncomfortable with having unfamiliar faces in their space. Cleaning restrooms with the Kiavac No-Touch Cleaning equipment was disruptive while evening classes were in session. Detailed tasks and dusting had been omitted from the original schedules therefore omitting important tasks during the training process. We stuck with our program, adjusted some scheduling, added dusting to the trash specialist's duties, maintained on-going communication with our customers and are now enjoying the benefits of this High Efficiency Program.

## Benefits

Implementation took 1 year. Quality has definitely improved. Complaints have drastically reduced, customers are pleased and employees are happy. People get used to their ways and resist change. Change can be good. We reduced staff through attrition by 11 FTE's, 7 WSU employees and 4 contract employees, for an annual cost savings of

\$286,897.31. At this level of savings, the cost of the project is repaid in less than 1.2 years.

The savings of \$66,237.60 from the 4 FTE contract employees was applied to increase salaries of all contract custodial employees, whose pay had been only slightly above the minimum wage. (In November, 2006, Ohio voters approved an increase in the minimum wage that established a wage somewhat higher than the new wage provided to contract employees. Consequently, the savings in contract employee FTE's proved to be a real cash savings, since the increase provided to employee wages would have been required in any event.) The reduction of 7 FTE State employees with a base wage rate of \$10.24 per hour and 48% benefits resulted in an annual savings of \$220,659.71. Overall cleaning productivity increased 15% per person for a productivity rate of 30,400 sq. ft. general cleaning per person per night. The greatest achievement is that the employees like their new equipment and have found multiple uses for both the Kiavac No-Touch Cleaning System and ProTeam Back Pack Vacuums. The life expectancy of this new equipment with proper maintenance should be 7 to 10 years. At that time, with improved technology, there may be new equipment which could provide even greater efficiency. Distributor recommends that replacement equipment capital be budgeted for a 15% to 20% increase. This High Efficiency Cleaning Program was a wise investment for WSU and is certainly our daily best practice.