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Development of A Monitoring System for Vouchers Processed by Departments at Clemson University

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## PROJECT GOAL

Study payment problems associated with Clemson's new accounting system and reduce these problems by developing a monitoring system and recommending training for departments at the University. Adjustments may need to be made to the monitoring system if problems are found during its implementation.

## PROBLEM STATEMENT

Clemson University is built on what was once the Fort Hill plantation of Thomas Green Clemson. In his will, Clemson stipulated that his home and its surrounding farmland be used to establish a college for agricultural and scientific education. As a result of his bequest, Clemson Agricultural College of South Carolina was founded in 1889 and began full-time operation in 1893 as a military institution. By the mid-1950s, the first female students enrolled on campus, and the cadet corps ended. In 1964, Clemson College became Clemson University and has since evolved into one of the nation's leading land-grant institutions. It is one of the major research universities in the United States. Clemson University is a public land-grant institution offering 75 undergraduate degree programs and more than 74 areas of graduate study through five academic colleges and the Graduate School. Long known for excellence in the agricultural and engineering sciences, Clemson is a nationally recognized, comprehensive university with strong programs in architecture, business, the liberal arts and a number of other disciplines.

Approximately 16,500 students study at Clemson University. About 45 percent are women and 55 percent are men. Of the 12,700 plus undergraduates, 71 percent are South Carolinians. African American students are the largest minority group on campus, representing 8 percent of the student body. The international student population fluctuates between 700 and 900 students each year. Clemson students represent 50 states and 71 foreign countries.

Many of the employees at Clemson have been with the University for 20 or more years and are very loyal to the University. In 1974, a new accounting system was developed for the University by two outside consultants and a team of programmers within the University. Having used this system for over 25 years the employees and faculty were extremely comfortable with this system. However, as the need for information from sources outside as well as within the University increased, this system could not keep up with the demands.

Therefore, in 1997 the decision was made to purchase a canned accounting and human resources system from an outside vendor (Peoplesoft). The decision was also made to obtain technical help from outside the University to adapt this package to the needs facing the University. A team of University employees was selected to help with this implementation which was to occur by July 1, 1999.

This new system provides a dramatic change for University personnel as it takes Clemson into a paperless world. Paper entries and vouchers, giving the users of the system a comfort zone where they could physically see the entries as they were paid drove the previous system. With this comfort zone removed and with previous monitoring of departments on campus identifying problem areas, it was determined that a monitoring system should be developed to track problems arising from the use of this paperless system.

## **CAUSE ANALYSIS**

Until July 1999, the Accounts Payables section at Clemson University was charged with the responsibility of processing all payments of invoices for all departments on campus. This policy had been in place since the system was developed in 1975. This system was a comfortable vehicle to most employees at Clemson. There was a paper flow in this system that allowed the users to have "in hand" the documents they processed, providing a comfort factor to them. Departments had the assurance that when their vouchers were delivered to Accounts Payable they would be reviewed for accuracy and any errors detected would be corrected before payment was made. This practice was advantageous in that it assured correctness of the vouchers, but it slowed down the timeliness of payments. It also allowed the departments on campus to become complacent in their knowledge of the rules and regulations applying to payment of vouchers since the mentality was that Accounts Payables would catch all my errors for me. When the old system was developed it met all the requirements needed by the University, however no one realized the volumes of paper this system was going to generate. As Clemson moved toward the new millennium it was obvious that

changes would need to be made or a new building would be needed to handle record retention requirements.

In 1997, the decision was made to purchase a new accounting system for the University. This system was to be a paperless system (all vouchers and reports would be online) and one that would require vouchers to be entered directly into the system by each department. This would eliminate the duplicate auditing of the vouchers (first by the department, then by Accounts Payable) and place the responsibility of voucher correctness with the departments. The departments comfort zone had been removed. It was realized that there would not only be the need for training in the new system but also the need for a way to monitor a sample of the vouchers being processed to see if compliance of laws, rules and regulations were being followed. When auditors review Clemson's financial statements at year end, they want to see evidence that vouchers have been tested for accuracy and compliance, therefore the need to develop this monitoring system was realized and the responsibility given to develop it.

## IMPLEMENTATION AND RESULTS

The only things we are assured of are taxes and death, so goes an old saying.

Everything else will change and so it is with the accounting system at Clemson

University. When developed in 1975 the Accounting Information System (AIS)

was a "state of the art" system, meeting University as well as State and Federal

guidelines for reporting. The University looked like it was ready to reach into the 21st century. However, as times and laws and regulations have changed, so has the need to adapt existing systems to these changes. As a result, the "state of the art" AIS system now resembled a tired old system plodding and squeaking along.

Therefore as mentioned earlier, in 1997 the University President Dino Curris directed that a new Accounting and Human Resources system for the University be up and running by July 1, 1999. A team of University employees, which cut across the broad diversities on campus, was selected to decide which system to purchase and then oversee its implementation. Outside consultants from KPMG (Peat Marwick) were hired to assist in this implementation.

As stated in the booklet entitled Managing Change, "changes occur so rapidly and in such varying magnitude that it is not always easy to get a handle on how they affect us and how we tend to react.<sup>i</sup> All employees at Clemson used the old system and each was comfortable with using it. With the announcement of the new system, the stress levels rose at Clemson. The employees comfort zone was being eroded. Change was on the horizon and moving like a speeding locomotive. But handling change is nothing new. We must often communicate various organizational changes – in policies, regulations, equipment, schedules, work force – to employees who see nothing wrong with "the way we've always done it."

The change coming at Clemson was the movement to a paperless system. A mechanism that would allow the accuracy of the vouchers entering the system to be tested had to be developed. Gone was the pre-audit performed by Accounts Payables. Gone was the comfort cushioning that Accounts Payables would catch departments' errors before checks were written. Therefore the charge was given to develop a monitoring system which would test vouchers, after the fact, for adherence to University policies as well as State and Federal laws and regulations.

This monitoring system needed to be developed and in place when the Peoplesoft system went live in July 1999. The first thing that needed to be decided was what items would the team performing the monitoring look for. In order to decide this issue a team consisting of members from Accounts Payable, the tax unit, Internal Auditing and the Comptroller's Office at the University met to discuss what these items should be. The list had to be exact enough to test items such as sales and use tax, yet broad enough to insure compliance with issues auditors might want to check for compliance. After several meetings and discussions a list of these items was agreed upon. (EXHIBIT 1) Every voucher sampled would be checked for these items.

Next, came the issue of what level would the monitoring take place. Should it be at the college level or at a more microscopic level? It was decided that the system had to be flexible enough to address all levels from wide range issues to individual compliance issues. Flexibility was the key.

With these guidelines in hand the monitoring system began to take shape. It was decided to develop the system using the query function found in the Peoplesoft system and then transfer this information to an Excel spreadsheet. Once in the spreadsheet a sample to be tested would be identified from the population pulled by the query. The Excel spreadsheet possessed a sampling tool that randomly selected the vouchers to be tested. This eliminated the possibility of human preference playing a part in voucher selection. The scope of the monitoring can vary. Samples from one year's activity can be tested just as easily as one week's activity. Once the vouchers to be tested are determined, the list is sent to the Business Officer in charge of the unit from which the query was pulled. (At Clemson every college and Vice Presidential area has a Business Officer whose responsibility is to see that all budget activity is coordinated through them). The Business Officer is then responsible for gathering the vouchers to be tested and informing the employee from the Monitoring Section of Procurement Services who is doing the testing when they are ready.

When the vouchers arrive in Procurement Services, each voucher is checked for adherence to those items appearing on the monitoring checklist. When all vouchers have been checked, the monitoring officer sends the Business Officer an e-mail outlining any errors that were found. The errors are explained and the Business Officer is instructed to inform those who prepared the voucher of the

error. In each letter training is offered in the areas where the errors occurred. It is the Business Officer's decision on whether training is needed.

The result of each test sample is then entered into a spreadsheet (EXHIBIT 2) that tracks the number of errors of each item on the monitoring list. By doing this, we are able to see trends of areas where policies may need to be explained or where training is needed. Training is offered not only to individual areas, but also campus wide. In our campus wide training we plan on offering one session to those who have been trained before but wish to have a refresher on any new issues and one session to those employees who are new to Clemson and as such have never attended training before. As we get more into our monitoring system we hope to develop a schedule for periodic monitoring of all areas on campus. From the results of this monitoring we will adjust our training issues and the frequency of the training to meet the results revealed.

As of this date, the new system has presented quite a challenge to Clemson. We are still going through an adjustment period where employees are struggling to understand the ins and outs of the new system. Those administering the system are also beginning to better understand the end users needs. Only time will tell how successful we are, but this monitoring system should aid us in seeing how rapidly our people adjust to change. As they become more familiar with it, we hope to see our error rate decline. However, with turnover always being a constant in any business, we see our job as trainer always being there.

i Managing Change, International Training Consultants, Richmond, Virginia...pg. 16-1. ii Managing Change, International Training Consultants, Richmond, Virginia...pg. 16-1.

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