Lean times helped make a case for investment

Opportunity: In December 2007, George Coleman, advertising director of the Kingsport Times-News, toured the new press operation of the Ogden Standard-Examiner in Utah. At the time, Coleman had been enrolled in the Professional MBA program at the University of Tennessee for three months, and he was in the midst of the “macro phase” of his company project.

While on the tour, a large metal box caught Coleman’s eye; it was a computer-to-plate (CTP) imaging system. Instead of making printing press plates from negatives, as was the practice in Kingsport, the Standard-Examiner employed its CTP system to create plate images directly from the newsroom’s editorial computer system. Using an ultraviolet laser to form images on plates, the CTP system required cheaper plates, used no negatives, employed fewer chemicals, and was much faster. Coleman wondered why this new technology had not been adopted at his newspaper.

Challenge: Upon his return to Kingsport, Coleman met with Tim Archer, operations manager for the Times-News. Archer said he would love to move to CTP; unfortunately, although operating costs would be reduced with the new system, he could not cost justify the capital investment.

“Fortunately, as a student in the program, I learned all the analytical tools needed to make the case for taking our press operation into the digital age, such as how to cost-justify capital investments, how to determine return on investment, and how to quantify accumulated savings over time,” Coleman says.

Background: Faster, better, cheaper and less risky were the selling points of CTP. Faster was critical, because a newspaper goes from raw material to a delivered product in just eight hours. Better referred to CTP’s ability to make plates that would consistently line up properly on the press. Improper alignment leads to color that is out of register, which means that photographs are blurry. To correct the alignment error, the press has to be shut down to replace the printing plates, wasting both time and newsprint. Cheaper referred to the lower cost of materials. Finally, the CTP process was much less risky because it required significantly less handling and disposal of hazardous materials.

Solution: Archer, Coleman and the production team mapped out the existing process and identified all the costs associated with it. They met with vendors and developed a proposal to replace the Times-News’s three analog processors (two primary units and one back-up unit) with two CTP units.

Unfortunately, the numbers were not encouraging. At a cost of $480,000, the payback took 6.2 years.

At this point, however, two significant changes occurred that breathed new life into the project.

First, the economy tanked, and orders for major equipment purchases in the print industry came to a halt; as a result, suppliers drastically cut prices.

Secondly, Coleman was introduced to the concept of time studied by one of his Professional MBA professors, Mandyam Srinivasan. By conducting a time study on the new process, Coleman and his team were able to demonstrate that a single CTP processor had sufficient speed to handle the newspaper’s workload; a second CTP processor was not needed.

Ultimately, the CTP vendor offered a price that shrank the return on investment to 2.6 years.

In January 2009, an emergency capital request was made to the owners, and the CTP system was installed nine months later. By October 2009, all plates generated in the Kingsport Times-News production facility came from the new CTP system.

“We spent a lot of time in the Professional MBA program discussing leadership and managing change,” Coleman says. “That was enormously helpful as we worked through this project, which involved a radical change to an operation that had been doing things one way for a very long time.”

Outcome: “We estimated the first year’s operating expense savings to be about $60,000,” Coleman recalls. “After nearly one year of using the new system, we have easily attained that savings. Press restarts due to color adjustments are down by half, and that is expected to improve.”

Coleman adds the timing couldn’t have been better.

“The drastic loss of advertising revenues for the newspaper industry impacted Kingsport’s operation, as it did every newspaper in the country,” he explains. “The ability to reduce operating expenses while simultaneously improving speed and quality was an incredible asset to us in a difficult operating environment.”

Case Study is provided by the University of Tennessee College of Business Administration. For more information, contact Cindy Raines at craines1@utk.edu.