Not a Natural Disaster, but Business Continuity Planning 101 All The Same

Wilson Blake Branham
Allen E. Smith
Susan D. Peters
Francis Marion University

Business continuity planning is a crucial and necessary aspect of a company's strategic business plan. It involves the planning, organizing, and strategizing the recognition of external threats facing an organization, with the purpose of ensuring the proper personnel and assets are available and have the ability to function should a disaster occur. It is the cornerstone by which businesses can continue to thrive even under dire circumstances. The continuing development of technology is allowing employees to work from home more often, creating more of a non-traditional work environment. Many employees possess company-owned cell phones, laptops, tablets, and other technological tools to aid them in submitting and receiving information. This use of technology has become more the rule than the exception. As businesses continue to develop technological advances, increasingly they are utilizing the technology as part of their business continuity planning. Any interruption of daily operations can have a deep and lasting effect on a company's cash flows and revenues.

This case involves a business in South Carolina affected by a water main break that flooded its first floor, where the building's central heating and air and electrical equipment are located. The flooding, however, did not damage the equipment that serves AgFirst or its district. The building itself was uninhabitable for six weeks while repairs were made and equipment was replaced. The primary focus of this case is to stimulate a discussion on business continuity planning and the way in which technology can be utilized in the event the plan is needed. This case is an example of the surprising events that can cripple a company without proper planning of technology use. Targeted towards upper level undergraduate business majors, this case illustrates that events can and will occur that may interrupt or halt business operations. However, with proper planning and the utilization of technological advances, business can continue operations until the event is remedied.

INTRODUCTION

When Jerry received the call, it was 2 am on an August 2011 Saturday morning in Columbia, South Carolina, and it was hot. This would turn out to be anything but a typical weekend. Jerry's wife awoke as well, and once she gathered herself, quietly joked, "Who is that at two in the morning?"

Knowing her reference to a commercial they had laughed at earlier in the evening, Jerry responded jovially, "Jake from State Farm." Jerry's smile lasted only seconds into the call the call, as he realized what he was facing.

Jerry worked for AgFirst, a cooperative land bank in the capital city who serviced farm credit associations from Pennsylvania to Alabama to Kentucky. He had been an employee of AgFirst for many years, having worked his way up in the company to Vice President of Information Technology. Prior to working at Agfirst, he had earned a Bachelor of Science degree from the University of South Carolina. He had many certifications and had shown his superiors his ability to work well under pressure and to do whatever it took to keep the main functions of the business up and running, no matter the circumstances.

The company was housed in what was originally the Federal Land Bank, a historical building in downtown Columbia that was built in 1923 by the Federal Government (The State). A water main break in downtown had occurred, and the subbasement of the bank's building was flooded.

The bank, thankfully, already had a business continuity plan in place. Jerry was well aware of the plan in place and knew what steps to take. The police department, fire department, and gas company were quick to respond; however, it took longer for the City of Columbia to get the water turned off. The result was more than 200,000 gallons of water in the subbasement of the bank's building. The operations systems that helped support the associations at the local level were, thankfully, located on the second floor, however, the building's heating, air and other electrical units were on the first floor. The building would have to be shut down for at least one week.

AGFIRST FARM CREDIT BANK AND THE FARM CREDIT SYSTEM

AgFirst was part of America's Farm Credit System, a Government-Sponsored Enterprise that was the largest agricultural lending organization in the country. AgFirst had more than 27 million dollars of assets under management and provided funding and services to 19 affiliated customer-owned farm credit associations in the eastern United States and Puerto Rico. The cooperatives that AgFirst supported provide real estate and production financing to over 80,000 farmers, agribusinesses, and rural homeowners (AgFirst).

AgFirst provided products and services to the associations in its district. These applications included credit programs, multiple reporting tools, basic accounting programs, document imaging functions, and personal employment information for individual employees among many other key database systems which were essential for the day-to-day operations of each Association.

The Farm Credit System was adopted by the United States Congress in 1916 to provide a means by which access to affordable and adequate credit in rural and agricultural areas could be made available. It was a cooperative structure that was formulated based largely on Germany's Landschafts, which had been in operation since 1769. Farm Credit was the first Government-Sponsored Enterprise (GSE), and had been inexistence to the current day. The system had gone through many changes over the last 100 years, but continued to live up to its promise of providing affordable credit to finance agricultural and rural needs. Farm Credit provided more than $199 billion in loans and $260 billion in assets to rural residents, farmers, ranchers, timber harvesters, and other agribusinesses. The system was comprised of nearly 500,000 member-borrowers and more than 13,000 employees.

BUSINESS CONTINUITY

A Business Continuity Plan was a "set of documents, instructions, and procedures which enable a business to respond to accidents, disasters, emergencies, and/or threats without any stoppage or hindrance in its key operations" (Business Dictionary). It was an important tool for businesses to help prepare for various threats and hazards (Ready). These threats and hazards may vary depending on where a business was located. For instance, a business in the Midwest would not necessarily prepare for a hurricane in the way that a state like South Carolina or Florida would; they were more inclined to prepare for a tornado. Regardless of the disaster that could strike, it was important for businesses to have a business continuity and disaster recovery plan in place. When addressing potential threats and hazards, companies should consider events that could cause "injury, property damage, business disruption or environmental impact" (Ready).

Much time and thought had gone into the company's business continuity and disaster recovery plan from the Information Technology department. However, many in management had scoffed at the budget requests and other funding ideas to continue to upgrade systems – operational and security. The group, including Jerry, continued to make their argument for the need of additional monies to continue upgrading and become better prepared in the event of a disaster. They argued it was not a matter of if, but when.

All bank employees had capabilities through the citrix application. The company had a cold site alternate data center located in Atlanta, GA, but no hot site. Some in management did not see it as necessary to business continuity and disaster recovery as they did not think it would be needed. The cold site merely provided the company with office space to store and use equipment in the event a disaster occurred that disrupted operations. The cold site idea was effective and cheaper, but it did not provide all the equipment, including office space and furniture, telephone jacks, and computers needed for the company to quickly continue operations. It should also be noted the company had identified almost one year prior to the water main break that any water level above 4 inches in the subbasement would cause a power outage.

In 2009, AgFirst began a new plan to improve disaster recovery of infrastructure. The plan continued through 2010 and was steadily taking shape. At the time, the company mostly used physical servers, but was pushing forward on virtualization, or the conversion of multiple operating systems on to one single piece of hardware (Technopedia). At the time, virtualization was limited to only a few, non-critical servers. There were obviously security concerns from the board of directors and regulators about the virtualization process, and the company was working through these issues step-by-step with the board and the Farm Credit Administration, the Farm Credit System's regulator. The company worked with regulators to develop standards to be implemented across the district for the virtualization process, and met regularly with the board of directors to review the benefits and security of the improved systems. The company then commissioned a third party virtualization assessment and roadmap to project the potential savings, which totaled an estimated two million dollars in the first two years. Upon completion of the savings projections, a third party Security Audit Consultant was hired to perform a comprehensive security audit for the virtual environment. After the results were received, the company began to invest significantly in virtualization infrastructure and licensing. Not only would the conversion to virtualization save money on hard costs, but would also save significantly on energy costs.

Under the plan, employees would be able to work remotely from home. The plan listed the contact information of the employees chosen to correspond with other employees about the accident and how the daily routine of business would continue through the clean-up and recovery period.

IMMEDIATE CONCERN

As mentioned before, AgFirst provided many products and services to the associations which were essential for the day-to-day operations of each Association. Without these key functions running properly in the time period

following the flood, many associations would have had to send key personnel home. There would not have been any way for them to perform the functions of their jobs since operations would have come to a near halt. The dollar value of the losses that would have been incurred would have been significant.

Jerry was faced with an enormous task. How would the IT department be able to provide a means by which the bank could continue operations, even though no employees would be able to work in the office? Although the equipment for district programs was located on the second floor, the flood caused them to go out. How would they have the systems up and running by Monday morning for the associations that depended on them? It was also up to the IT department and the management team to get the word out to all employees that they would be unable to report to work Monday morning.