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# Impact of Technology on the Legal System: A Study of a Law Firm's Disaster Recovery Planning

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#### **ABSTRACT**

The manuscript presents the results of an unanticipated opportunity to study disaster recovery planning and collect data about a law firm's successes (and failures) when the plan had to be implemented. The researchers are engaged in an ongoing study of a professional law firm handling tort (civil) cases in the U. S. legal system. Prior research was presented at the 2005 IRMA International Conference in May, 2005 and reported on a case study that examined the strategic planning undertaken by a law firm pertaining to its developing use of information technology. Based upon the experiences of this legal firm in planning for disaster recovery and its successes (and failures) in protecting its developing decision support capabilities a post-disaster study was conducted to ascertain the impact on the law firm's continued viability and growth, and on the impact on the U. S. legal system.

#### INTRODUCTION

One professional firm, identified in this research only as the Professional Law Firm, [PLF] has undertaken strategic disaster recovery planning efforts that they believe will allow them to recover quickly from a natural disaster. On August 29, 2005 Hurricane Katrina struck the U.S. and the planning for a disaster by the PLF was put to a test.

#### REVIEW OF LITERATURE

A review of the literature related to disaster planning by law firms and others in the U. S. legal system resulted in minimal literature that was specific to a law firm. The review was limited to the immediate six month period to gain insight into current usage of the disaster planning for maintaining existing technology usage in a disaster area. No effort was made to review the literature that would establish a need for the use of technology; rather, the review was directed toward learning how planning in the U. S. legal system for natural disasters has been adopted and if planning efforts were adequate. Due to the specific focus of the current study the literature review revealed little regarding the impact on the individual legal firm, but did provide an understanding of the general (and frequently discussed) disaster recovery planning that all business firms should undertake. However, no literature specifically addressed the issues related to the legal system.

#### CASE DESCRIPTION

The law firm [PLF] used as the basis for this case study is considered a specialty firm. The firm coordinates litigation efforts by legal firms located in thirty-five states that are involved in class action suits related to health care. The workload of the office is not measured in terms of actual clients; rather is measured in terms of the number of plaintiffs and number of individual suits that are related to other suits addressing the same legal issues. Two individual suits managed by the firm illustrate the

complexity of coordinating the activities within one firm within the justice system. These two lawsuits include over 5,200 and 5,000 plaintiffs, respectively. Each plaintiff has an attorney representing an individual's or a group of individuals' legal interest.

The required legal documents (paperwork) and information change exponentially with the addition or deletion of new plaintiffs to existing litigation. A concurrent change is that of administering a database to permit the firm to manage the required coordination between separate suits in each separate legal jurisdiction.

The firm's workforce is made up of three partners, four non-partner associates (attorneys), five paraprofessionals, fifteen to twenty legal clerical staff, and six to eight other hourly personnel. The firm currently operates offices in two states with two affiliated law offices located in two additional locations.

The Professional Law Firm (PLF) law partners recognized within the past two years that a paper intensive environment had resulted in a firmwide system that was in danger of collapse from just the normal ongoing business activities, and if a natural disaster occurred the firm was faced with the potential loss of clients if client records, court filings, etc. were lost, damaged, or resulted in delays in the legal process. The financial impact would be direct – lost billable time, actual lost revenues, increased costs of recovery, and the lost of future income as clients and potential clients selected other legal representation. In short, a natural disaster could significantly impact the size, partner income, and growth of the firm if adequate plans were not developed and when needed implemented successfully.

One of the three partners, Partner of Office Management, was hired within the last two years for two specific purposes related to the use of technology: (1) to improve the management of the processes and data flow within the firm's system and (2) to undertake strategic planning to insure the firm's continued growth and success by improving cost efficiencies through better usage of technology including the policies, procedures and technology needed to successfully survive a natural disaster.

The research group interviewed the Partner of Office Management (POM) using the nine milestones recommended by the SEARCH (the National Consortium for Justice Information and Statistics) during the literature review as a guide in determining the strategic planning and implementation for a typical law firm within the justice system. The milestones permitted the research group to organize its findings in a manner that is consistent with other efforts within the justice system. However, since the law firm is a component of the justice system the findings are grouped into fewer categories to allow the research group to structure the intent of the recommendations provided by SEARCH to a specific case study within a specific segment of the overall judicial system [1].

#### STRATEGIC DISASTER PLANNING

The PLF originally had a self-contained computer-based information system housed internally in one of the two branch offices of the firm. As growth of the client base grew and the firm expanded the firm added a small but effective information technology (IT) staff. First, part-time, consulting-in-nature IT support that evolved into full-time employment at the PLF. Initially IT periodically backed up the firm's data on an infrequent basis that evolved into a routine practice over time. However, no firm backup policy or procedure existed; rather the IT staff simply implemented common sense and applied what experience had shown them was what the firm needed. Simple use of backup tapes and disks as determined informally by the IT staff and as their time permitted.

However, as the PLF continued to grow the original partners began to informally create a plan for backup; however, the backup was still localized and stored at the firm's main office where the IT operation was housed. In short, the backup plan was to store duplicate copies of computerized files in the same physical location where the master copies were located.

Experience proved to be a lesson learned. The main office of the firm is located in an area of the U. S. that is prone to hurricanes. While the office is not located on the coast hurricane damage has occurred within the life of the firm and the original partners learned that offsite storage of backup copies could prove to be a wise course of action in an area that has experienced hurricanes on a frequent basis. Thus a backup of computerized records with offsite storage became the default plan for several years.

The POM, upon being charged with responsibility to improve the management of the processes and data flow within the firm's system and to undertake strategic planning to insure the firm's continued growth and success by improving cost efficiencies through better usage of technology initiated planning by developing a firm wide identification of technology needs, policies and procedures that would be necessary for the firm to successfully survive a natural disaster.

This planning effort included charging the IT staff with the responsibility to recommend changes in the computerized firm-wide system that would permit the daily backup of all databases and other files at remote sites including alternative network capabilities that could be used to resume email and other communication capabilities as quickly as possible if the main office location was down due to a natural disaster. The plan was to have alternatives that would permit the firm to resume and maintain operations from various sites within the U.S. if necessary. On no single date was the system to be backed up at only the main location by having the master and backup files physically located at the same system.

The IT staff recommendations were used by the POM to subsequently develop plans for the PLF that addressed the backup, relocation, security, and recovery in the areas of hardware, software, databases, and physical structure or operational areas, and telecommunications-network links internal and external to the PLF. The IT staff was requested to provide the POM with suggested scenarios that would describe the cause and effect of actions (procedures) that the PLF should implement. Examples provided by the POM included the following:

- Hardware laptop computers were to be taken home (and subsequently to evacuation locations) by individuals the laptop was assigned to by the firm. All servers, routers, non-removable computers, etc. were wrapped in heavy plastic for protection from wind and water damage (anything short of a direct destructive hit). The PLF building was to be secured to minimize the effect of wind and water debris and structural damage.
- Software All software programs, systems and applications, backed up and sent to offsite locations in second firm office located another geographical region of the country.
- Databases all data backed up and copies moved to local and distant locations electronically and hardcopy. Two sets prepared

- and kept at two different locations locally and one set sent to the Kentucky office (the firm's other physical location and not in line for hurricane damage).
- Telecommunications-network reviewed the backup contingency plans with vendor that was located in another geographic region to initial recovery efforts once the PLF and vendor could resume contact and after power and other utilities were restored.

Partners of the PLF were obviously kept in the loop and were advised to carry certain hardware, software, and paper files to other locations (homes and perhaps subsequently to evacuation location areas outside of the disaster area). The partners supervised the transfer of items to the second PLF location [from Mississippi to Kentucky overnight].

#### DISASTER PLAN IMPLEMENTATION

On August 26, 2006 the path of Hurricane Katrina continued to indicate that the PLF likely would be within the projected landfall area and subsequent inland path of destruction. The increasing magnitude of the hurricane became obvious to the firm personnel and the disaster plan was set in motion. The plan identified those responsible for each of the planned areas of responsibility.

When the decision was made by the partners-owners of the firm to implement the disaster plan there was approximately four hours remaining in the work week. PLF employees were already concerned for family and personal property and the firm began to allow employees to leave work early to tend to those needs. However, a core of employees – IT staff and partners remained to oversee the completion of disaster procedures.

Who did what? When asked this question the POM stated that the IT staff did the activities related to insuring the hardware, software, databases, telecommunication-network and structural preparations were completed as quickly as possible. He commented that what most have to remember is that Hurricane Katrina grew from a category 1 to a category 4 or 5 within a very short timeframe. All disaster planning had been based on what disaster experiences in the past had shown would be probably. The IT staff worked without stop until the last items were relocated, secure, backed up and ended their efforts on Sunday, August 28th

The PLF partners at both locations dealt with the business end of the disaster plan implementation. Those tasks included:

- Notifying clients and carriers the PLF was "battening down" and would be back in touch as soon as possible,
- Arranging to have any imminent incoming checks re-routed to Kentucky office (for safety and operational banks),
- Updating voice messages for the office,
- Making final decisions about which paper (hard) copy file needed which level of protection (covered, uncovered, removed to another location, etc.),
- Reviewing that all electronic (soft) copy were backed up according to the plans to insure that copies were located in several locations locally and remote and the person responsible for each copy,
- Providing phone contact lists for all employees and giving out partner information to all employees (who had already been sent home to deal with personal and family disaster preparations), and
- Checking insurance policy coverage (and later following through [for example, business interruption insurance has been troublesome]).

## EVALUATION OF PLANS AND FUTURE CONSIDERATIONS

Since Hurricane Katrina the PLF has had approximately four months to recover from the disaster. There continues to be ongoing issues related to utility disruptions as recovery crews from the basic restoring of minimal services to the current (January 2006) restoring to normal services to the area. The legal system schedule has been disrupted, but

gradually more normal business processes are resuming. As the firm moves into an initial resumption of normal daily activities at levels that are approaching pre-Katrina levels the PLF has begun to review and update its disaster recovery plans based upon this recent experience. The POM stated that the firm simply has not had enough time yet to fully review the success and failure of the plan that was followed but a general assessment by the partners (and based upon initial but limited feedback from clients and others in the legal system) the policies and procedures appeared to be more successful than not.

#### CONCLUSIONS

The manuscript presents the results of an unanticipated opportunity to study disaster recovery planning and collect data about a law firm's successes (and failures) when the plan had to be implemented as

Hurricane Katrina passed over the PLF with sustained winds of 100 miles per hour. The researchers are engaged in an ongoing study of a professional law firm handling tort (civil) cases in the U. S. legal system. The experiences of this legal firm in planning for disaster recovery and its successes (and failures) in protecting its developing decision support capabilities permit a post-disaster study to be conducted that will aid in the ongoing research of the changing usage of technology in the U. S. legal system.

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