

# The Successes of Centralization “Merger of Support Services”

Claire C. Lassalle  
Pennington Biomedical Research  
6400 Perkins Road  
Baton Rouge, LA 70808  
1-225-763-0933  
claire.lassalle@pbrc.edu

Robyn C. Richard  
Pennington Biomedical Research  
6400 Perkins Road  
Baton Rouge, LA 70808  
1-225-763-0938  
robyn.richard@pbrc.edu

## ABSTRACT

Before centralization in the Computing Services Department, there was a lack of communication, the user work requests were not being resolved in a timely manner, the technical analysts were not taking ownership of the work tickets, and there was no accountability for deficiency in their daily work.

Also, the Health Insurance Portability and Accountability Act (HIPAA) that went into effect in April 2003 impacted Pennington Biomedical Research Center. HIPAA is the national standard to protect the privacy of personal health information. Since Pennington dealt with patient data, we were required to make security changes in the Computing Services Department.

Previously the department was organized by job responsibilities with a manager over each area. The two groups in the Computing Services Department were the “Technology Services Group” (TSG) and “Networking and Infrastructure”. Each group handled specific user requests and the “lines” were drawn for ownership and accountability. It was at this time that the Computing Services Department decided to coordinate the support services.

After these two groups merged, the employees began to work as a team handling all user requests. PBRC users now access the Computing Services Department via one phone number and one email address; they do not contact individual technical analysts. This reorganization was a win-win situation for the faculty and staff of the Center, including the Computing Services Department. This paper will discuss the pitfalls encountered before the centralization, the new structure established, and the successes of the centralization.

## Categories and Subject Descriptors

K.6.1 [Management of Computing and Information Systems]: People and Project Management - *management techniques, staffing, training*

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**General Terms:** Management, Measurement, Performance, Documentation, Performance, Security, Human Factors.

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## 1. INTRODUCTION

Pennington Biomedical Research Center is one of the campuses of Louisiana State University, in Baton Rouge, Louisiana. Currently, the Computing Services Department is responsible for providing services to approximately 500 employees. There are 18 employees in the Computing Services Department; this includes 13 full time staff and 5 student workers. Prior to centralization, the support services that were offered to the users were provided by the “Networking and Infrastructure” and the “Technology Services Group”.

There were communication problems between the two groups and user work requests were not being addressed in a timely manner. After careful consideration and much debate, the director and managers in the Computing Services Department agreed that it was time to reorganize the support services and to centralize all user’s work requests.

## 2. BEFORE THE CENTRALIZATION

Before the centralization, the two groups were structured by job responsibilities with a manager over each area. (See Figure 1.) The two groups involved in the centralization of the Computing Services Department were “Networking and Infrastructure” and the “Technology Services Group”.

Each group handled very specific work requests. Responsibility for each user request was determined by the work ticket; classified as either technical support or network administration.

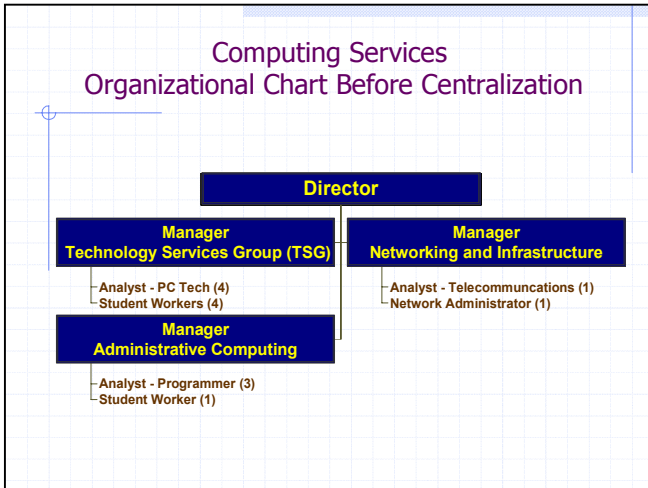


Figure 1: Organization Chart Before Centralization

## 2.1 Responsibilities

TSG was responsible for these user requests:

- Computer and Printer Installation and Support
- Instrument Interface with Lab Computers
- Laptop Loaners
- Presentation Setups for Meetings
- Software Installation and Upgrades
- Technology Research and Development
- TSG Website

Networking and Infrastructure was responsible for these user requests:

- Citrix Setup and User Accounts
- Document Backups and Restores
- Email Accounts
- Employee Login ID's
- New Phone and Voice Mail Setup and Support
- Security Access for Software and Network Directories

## 2.2 Dilemma

In 1996, the government, to ensure that provisions would reduce abuse and fraud in the health care industry, issued the Health Insurance Portability and Accountability Act (HIPAA). Pennington Biomedical Research Center was impacted by HIPAA due to the nature of healthcare and patient information that is dealt with on a daily basis. One of the major controls presented by HIPAA was the technology segment that would be impacted. Confidential healthcare data is constantly being accessed electronically and therefore falls within the strict guidelines of HIPAA. These stiff regulations had to be enforced on Pennington's Computing Services Department by the deadline brought about with HIPAA.

Not only did the department have to make adjustments according to HIPAA, there were also issues with disorganization of the work

request workflow. Having a work ticket designated to a specific group caused untimely completion of work tickets and there was no ownership taken for the tasks. TSG only took responsibility of the tickets that were assigned to their group, even if the ticket needed the Network Administrator to do part of the ticket. The tickets were being opened, closed, reopened, reassigned, and then closed. Since no one was auditing the daily tickets, some tickets would sit in the queue for a few days waiting on one specific task to be completed before the ticket would be closed. This resulted in finger pointing and dissension among the Computing Services employees.

## 3. DECISION TO CENTRALIZE

The stringent HIPAA requirements imposed on Pennington Biomedical Research Center and the ever-increasing budget constraints made it difficult for the Computing Services Department to keep up with the demands of the Center. Changes to the department were necessary. In accordance with HIPAA, all security responsibilities needed to fall under the direct supervision of the Network Security Officer. As the full-time technical analysts of the TSG were violating this requirement, the organizational structure had to be altered.

Not only was the organizational hierarchy altered, but also there were new policies and procedures to be enforced. Another major decision was to centralize all of the support services provided by the Computing Services Department. Consideration of all aspects of every responsibility of the Computing Services Department were taken into account and viewed as technical in nature. The PC Technical Analysts who represented the Technology Services Group (TSG) were combined with the Networking and Infrastructure Group (see Figure 2). The following figure depicts the new organization of the Computing Services Department.

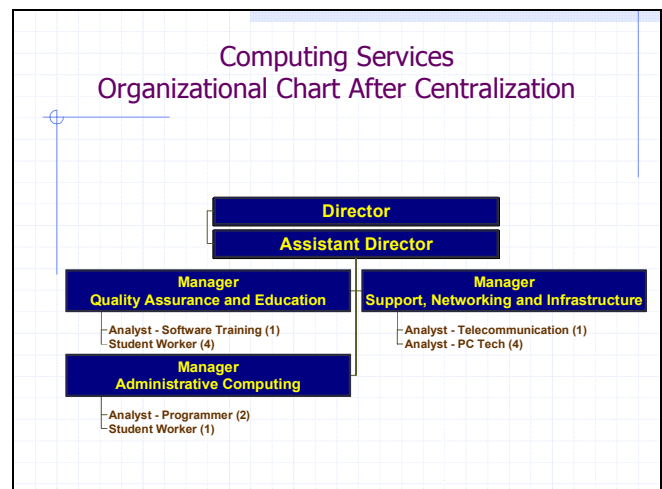


Figure 2: Organization Chart After Centralization

## 4. POLICIES AND PROCEDURES

The reorganization of the Computing Services Department accompanied various changes that had a tremendous impact on the entire department. As the full-time technical analysts were combined to create a centralized service organization, there were also new hires and alterations in job responsibility among the entire group.

Many of the changes involved developing new policies and procedures that would reflect the new organization and its inter-workings. The first list of priorities for new policies and procedures was to have a schedule of duties, emphasize training and knowledge transfers, create quality assurance of work requests, and implement an action plan for incident response.

### 4.1 Scheduled Duties

Before reorganization, TSG employees had no set schedule of duties. Everyone would take turns answering the phones, email, and working on the work requests in the ticket queue. It was realized that there was a great need for defining duties by creating a concrete schedule (See Figure 3.) to eliminate redundancy in efforts and to increase efficiency. This schedule entails specific duties for every working day of the month. The specific duties are described as phone support, field support, and training. Every full-time technical analyst performs these duties on a rotational basis throughout the month. The duties of phone support are to answer all incoming calls to TSG, check and reply to email and voice mail, and oversee all work tickets according to their order of importance. The field support duties include completing all open work requests. All active work tickets that are present in the ticket queue are for the field support personnel. Field support also oversees the students, as they are continuously handling work requests from the users.

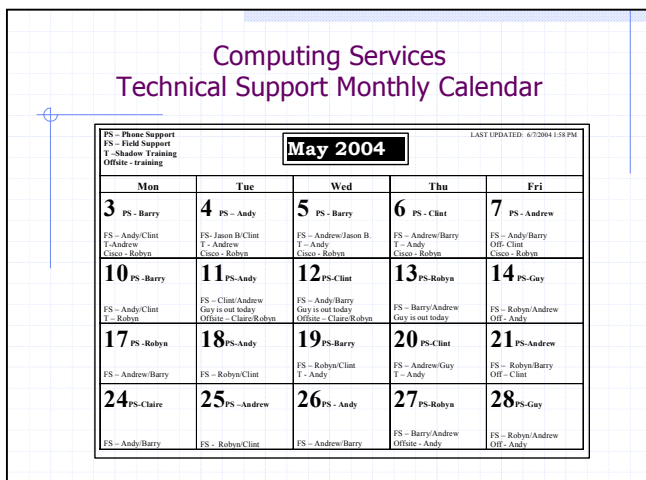


Figure 3: Technical Support Monthly Calendar

Training days are spent completing individual goals in specific technical areas. Each full-time technical analyst has their own technical specialty area in which they chose to train and acquire more expertise. Training days are used to study and train on the specific technical area chosen. The Quality Assurance and Education Manager creates the schedule each month. If full-time technical analysts request a day of leave, they reschedule duties with other full-time technical analysts.

### 4.2 Training & Knowledge Transfer

Training became a huge priority during the reorganization because it was realized that funds were available for full-time employees to get training and therefore increase the level of service provided by the Computing Services Department. There were different training areas of expertise that were presented within the reorganization;

such as Cisco, Windows Server, and Novell Netware. As the two groups merged, the technical analysts were now expected to accomplish tasks that they had not tackled before. On-the-job training became a top priority.

Network administrative privileges were given to all full-time technical analysts. The tasks that accompanied the privileges were taught to the technical analysts through on-the-job training. The network administrators were responsible for training the technical analysts on these every day tasks. In an effort to use the training funds, each employee is now expected to complete some form of offsite training in his or her area of specialty. Once the technical analyst completes training they are expected to present to the rest of the department an overview of their training. The goal of this effort is to expand the knowledge of the entire group by completing a knowledge transfer.

### 4.3 Quality Assurance

Presently there is a communication process in place in the department; the user work requests are monitored and completed in a timely manner. The Manager of the Quality Assurance and Education Group contacts the users frequently, requesting their opinions, ideas and concerns in regard to the work completed by the department.

The manager also oversees the quality assurance of the work tickets and the satisfaction of the users. Customer Satisfaction Surveys (See Figure 4.) are automatically emailed to users. There are three questions on the survey that require a Yes or No answer and comments are not required. Fundamentals used to insure quality for user satisfaction are:

- Internal audit – Completed work tickets are reviewed each day. Closed work tickets are randomly chosen and surveys are sent out to the users. If there are any complaints, the user is contacted by phone as a follow-up. If there are comments on the survey, the survey is forwarded to the technical support person who closed the ticket and copied to the TSG group for information purposes only.
- Metrics – Surveys are randomly sent to users twice a month. The responses are read, and the percentages of satisfied users are monitored. As the TSG personnel adjusted to the new organization, the surveys were able to give insight, especially if the users perception of the service provided changes.

<b>Ticket ID: 25958</b>
<b>User Name: Mary Jane Smith</b>
<b>Technician Name: Joseph Anderson</b>
<b>Was your problem addressed and completed in a timely manner?</b>
<b>Was the original problem corrected?</b>
<b>Was the technician courteous and professional?</b>
<b>Other Comments:</b>

Figure 4: Customer Satisfaction Survey

#### **4.4 Incident Response**

An Incident Response Team was created to handle any incident that affects network connectivity, or network application functionality or performance. This may include unscheduled events, such as a hung service or network issue, or scheduled events such as applying patches to servers, changing out network access hardware or upgrading software or hardware.

The entire technical support group is members of this team. The team is responsible for the evaluation of the severity and impact of the incident. They are to assign the appropriate technical resources to the task of issue resolution and prepare the appropriate response to all those affected by the incident. If it is an unscheduled event, the users will be immediately notified after the impact of the event.

Unscheduled incidents that affect a significant number of users and present severe network degradation in performance will receive an announcement on the public address system or an email that briefly describes the problem and gives some time estimation for the necessary work to be performed.

Although all Incident Response Team members are expected to dedicate all resources available to the incident at hand, the Incident Response Team leader directs the incident response process.

At the end of the incident response process, an "incident closure" notification will be sent to the users indicating that the issue is

considered resolved. After the user notification, the designated team members conduct an analysis including a written report containing all information related to the incident. This information will include the user impact level, likely causes of the incident, an account of the resolution process, copies of status notifications to the users, and technical documents that were used in the troubleshooting process.

#### **5. CONCLUSION**

Presently there is better communication within the Computing Services Department and the user's work requests are monitored and completed in a timely manner. The daily workflow of the department has evolved during our reorganization as we continue to grow, change, and have monthly department meetings. We want to continue to realize the goals of the Computer Services Department, which include maintaining an effective work group, and supporting the users in an effective and timely manner. This includes maintaining the support level with the expansion of the Center and the addition of new faculty on a monthly basis. The Computing Services Department will continue to monitor its success by the satisfaction of the faculty and staff.