I. Context Analysis

Organization
The Mount Ararat Community Activity Center (MACAC) is located at 271 Paulson Avenue in the East Liberty section of Pittsburgh. The community center, situated in the lower level of the Mount Ararat Baptist Church, has a staff of 7 full-time and 4 part-time employees. The annual budget is used to directly serve about 350 people in the East Liberty Community. The general budget is large enough to fund the purchase of any new beneficial technology. Part of the funding comes from donations and program fees, and the Mount Ararat Baptist Church supplies the remainder.

The mission of MACAC is to help people in need and at risk to become productively independent. MACAC also strongly encourages family values through a variety of spiritually based programs and activities it offers.

Program
There are a variety of program activities geared toward the East Liberty community. Half of the offered programs make minimal use of technology. Technology is not used in these programs: early childhood development center, health awareness initiative, food and clothing bank, adult aerobics class, and senior luncheons and trips.

Technology is currently used in programming in the following ways. The children in the after-school tutorial program use the computers in the lab to use academic software, play academic games over the Internet, and go to homework help sites on the Internet. The high school students in the robotics class make heavy use of the computer lab to program their Lego robots. The children in the summer youth employment program and the cultural enrichment summer day camp programs only use the computers to play academic games. The adult beginner and advanced computer classes make heavy use of the computers in the lab and the 2 printers in the center. Lastly, the GED program offers adults academic coaching for the GED exam. Starting this year, the GED exam is only being offered over the Internet, so the GED professor wants students to get comfortable with using the Internet to take exams.

Staff
The MACAC has 7 fulltime employees and 4 part-time employees. The directors of the center are Reverend Mary Buckley, Rita Charles-Farris, Deacon Gary Hughes, and Min. Elaine Edwards.

- Reverend Mary Buckley is the executive director of the center. Rev. Buckley mostly uses a computer to check email, and use Microsoft Word, but she is one of the most computer-literate people on staff.
- Rita Charles-Farris is the technological director of the center as well as the contact point for any technological issues in the center. Ms. Farris extensively uses computers, servers, and printers as well as numerous software including virus scanning software, word processors, spreadsheet/database software, email, and the Internet.
- Deacon Gary Hughes is the director of senior services. He mostly uses the computer to check his email and makes use of word processing software to create fliers.
- Min. Elaine Edwards is in charge of youth services. Elaine also only uses the word processing software on her computer.
Four of the other staff members work in the early childhood development center (ECDC) and all of them share one computer located in the ECDC. They use the computer mostly for making birthday cards for the children and going on the Internet. The remaining three staff members, including the two receptionists and the administrative assistant, use the computer in a variety of ways. One of the receptionists is also a desktop publisher, so she uses the computer in her office for making calendars and creating flyers. The other receptionist mostly uses his computer to access the Internet. The administrative assistant uses the computer to create documents.

**Technical Environment**

Every employee of MACAC has a computer, and the majority have email accounts. There are a total of twenty-five computers in the center, twenty-four of which are located on a Windows 2000 Pro server operating system. Since there wasn’t enough room on the hub for the children’s computer in the early childhood development center.

**Technology Management**

The current technical manager is my community partner, Rita Charles-Farris. Her duties include acting as the technology coordinator, the network administrator, desktop support analyst, and the systems administrator.

**Technology Planning**

Currently, there is no defined technical plan in place nor a defined technical budget. If Rita Charles-Farris diagnoses that there is a need for certain technology, she researches to find the best option and presents this option to Rev. Buckley, the executive director. If the expenditure is approved, the administrative assistant proceeds to order the new equipment/software. Previously, Ms. Farris did establish a technology plan. Part of her plan was to get more technology for the center, which was accomplished, however, her goal of training the staff about how to use it was not accomplished due to scheduling conflicts and a lack of interest on the part of the staff.

**Internal & External Communications**

The Mount Ararat Community Activity Center has a central server, to which each computer in the lab and each staff member’s computer is connected, so files can be shared internally. This server is automatically backed up, and zip disks can also be used to backup data. Everybody on staff has an email account. Rita Charles-Farris created a Yahoo! Group including all of the staff emails so that email can easily be sent to the whole group. Currently, the email and web addresses of donors, funders, clients, and volunteers are not maintained.

**Information Management**

It is crucial to the Mt. Ararat Community Activity Center to maintain financial, donor, and client information. There is no universal information system used by the center to store critical information. Different people, using both electronic and paper methods, maintain all of this information. Information does not flow very smoothly throughout MACAC. Paper methods are still overwhelmingly used by most of the employees. Unfortunately, this paper method is causing problems with people losing documents.

**Consulting Task 1: Improve staff competencies in basic computing (staff training)**

Ms. Farris and I came up with the concept of developing a working curriculum ourselves to be used to educate staff members about technology, so that the staff is able to incorporate technology use in more of the programs offered by MACAC. Ms. Farris is running weekly/bi-weekly training sessions with my help. We have created a summary pamphlet of all the covered information,
which is distributed at the end of each training session period. The staff is able to use this pamphlet as a reference tool.

The approach we have taken to accomplish this task ensures that the staff is truly learning more about technology in a fun and innovative way, which will directly impact their individual work towards the mission. We started off by first talking to staff members to get a sense of what they already know, and find out which specific topics they want to learn about. Based on this information, as well as Ms. Farris’ knowledge of which topics need to be covered, we have developed a basic curriculum which educates staff members about specific areas of technology most applicable to their work with MACAC. This curriculum includes various topics such as using all of the functions of email, learning how to create documents in Microsoft Word and naming files so that they are easy to locate. Each training session is conducted in a manner that reinforces and builds on existing knowledge. Exploration outside of the classroom is encouraged, and feedback is readily taken.

By the end of the training sessions we expected to see the following:

- **Program:** The staff will come up with new ways to use technology in programming.

- **Staff:** The staff will become more technically competent. However, while the training sessions continue to be held, they will have less time to work on their jobs in the organization.

- **Technical Management:** Ms. Farris will have more time to work as technical director, rather than answer basic questions after the training sessions end. Till then, she will have less time since she will be running the sessions weekly, and working on the curriculum.

- **Internal and External Communications:** Staff will start using email to communicate and the server to exchange documents.

**Consulting Task 2: Centralize organizational information (database system)**

In order to be able to easily advertise to the community and generate enough interest that MACAC can stay afloat, as well as be able to easily contact already active members, the community partner, with the help of the consultant, is creating a Microsoft Access database. This database will store information about clients, members, staff, donors and funders, so that it will be easier to send out mailings to these groups. It will contain the most up-to-date information, and will be placed on the server so that it is easily accessible by all staff members.

The approach we have taken to create the database involved first contacting each director of MACAC and asking them what type of information they need stored about the members/funders of their individual programs. Then we collected existing information, and created a database using that information. Since we want the information to be centralized, we decided to put it up on the server. We plan to train the staff about how to use a database and how to use a server. Our last step will be to recognize one staff member as the database administrator.

By this approach, we expected to affect many aspects of MACAC:

- **Organization:** It will be easier for MACAC to contact donors and funders. Money will be saved since there will be no more duplicate mailings since all of the information about people involved with the center is consolidated.

- **Staff:** It will be easier for the staff to send out mass mailings to all people associated with MACAC. However, Ms. Farris will have a higher workload as the result of the database,
because she will have to backup the server more frequently and have to make sure the server is always up. Also, the staff member who has to input the data will have a higher workload.

- **Technical Environment:** The technology in the center will be used more since the database will be housed on the server, and the staff will learn how to use the Microsoft Access software as well as the server. However, the server will need to be backed up more frequently.

- **Information Management:** Information management will vastly improve due to donor and client records being stored in one centralized location. Information flow will improve since information will only be entered once in one database, rather than in multiple different systems.

II. Outcomes and Recommendations

**Improve staff competencies in basic computing (staff training)**
The Consultant helped CP develop new training materials, which the CP used in seven training sessions over the past ten weeks.

**Outcomes:**
- **Time Saved**
The staff used to constantly ask my Community Partner basic technology questions. She found herself spending most of her time answering the same basic support questions repeatedly, which caused to have less time to work on developing her classes, and fixing technology problems at the center such as broken printers and network connections. However, since the training sessions have been going on, the staff has been asking my Community Partner fewer basic questions. She has had more time to work on her job within the organization.

- **New technology needs of the organization identified**
Previously, only my Community Partner noticed any technological needs within the center. However, staff members now are coming up with ideas of where technological improvements need to be made. For instance, one staff member mentioned that it would be easier for the children in the daycare use their computer if a smaller mouse and lower desk were purchased. If the staff continues to come up with new ideas to implement technology in their programs, the content of the programs offered by MACAC will continue to improve. As long as the staff is continuously motivated to think of new technology ideas, through training and other means, this outcome is sustainable.

- **Greater appreciation of technological capabilities created**
The staff didn’t understand the vast potential of technology such as the Internet and Email prior to the training sessions. During one of the sessions, a discussion was held about what could be done on the Web and with Email, and the staff expressed amazement about all the uses of both. Individual staff members have come up to the consultant and informed her that they did not know they could do so much with various computer utilities and software prior to the training sessions. The more the staff learns about technology, the more they echo their appreciation of it, which motivates them to see how they can use technology in their programs.

- **More effective use of email**
My Community Partner has been sending out emails to the staff on various topics for the last few years, which she doubts were ever opened since she never got any feedback or replies. In
the last few weeks, the staff has started to check their email more frequently, evidenced by staff members discussing what work-related email they got, or sending replies. The usage of email in work activities will continue to increase as long as the staff is motivated to use email, which can be sustained if the directors continue to use email.

Centralize organizational information (database system)

Outcomes:

• Tables of client, donor, member, and staff information created
  All of the information about clients, donors, members, and staff was previously stored in various formats on different computers. Now, all of this data is gathered in one Microsoft Access database that is organized in tables. Each one of the programs is given its own table holding member information. Programs with volunteers are given a separate volunteer table. All of the staff members’ information is located in one table. Donor information is also located in its own table. This outcome is easily sustainable, since the records are not inputted manually into the tables; rather they are inputted through the means of forms. The tables only need to be changed if programs are changed, or new programs are added on, and my Community Partner knows how to do this since she set up most of the tables herself. It is important that the information continues to be organized in this manner so that there is no confusion about where the data is, or how it is stored.

• Forms created
  The forms provide a simpler way of inputting data for the less technology knowledgeable staff members. They also safeguard the tables from being tampered with by members of the staff who have little database knowledge. The forms are relatively sustainable. However, if the tables change, the forms have to be changed as well, and my Community Partner knows how to create forms, so there should be no problem doing this.

• Time Saved
  Since all of the staff, client, and donor information is located in one centralized database, the time required to access numerous records is drastically cut down, especially if those multiple records are of people in different programs, since now all those records are in one place. As long as the database is continued to be used, this outcome is sustainable.

• Increased Accuracy of Information
  Previously, various staff members had different information about the same individuals, which made it difficult to contact someone, however now the whole staff knows that the database holds the most up to date accurate records on all of the members, staff and donors of MACAC. This outcome is sustainable if the staff continues to input accurate information into the database, and modify records if there are changes in the contact information of individuals.

Recommendations:

• Use database information to advertise
  I recommend that Mount Ararat Community Activity Center (MACAC) uses the database my Community Partner created with my help to advertise in order to increase awareness of the extent of programming offered by MACAC and increase funding. The database holds current information about donors, funders, members, and staff, which is a group that is already connected with MACAC. It is important
for MACAC to keep in contact with this group and inform them of new and exciting things going on at the center, so that they can continue to support MACAC.

- **Expand database to hold information about other organizations**
  I recommend that the database is expanded to hold information about local schools, churches, job employment agencies, community centers and other organizations which service the same types of clients that MACAC does. These organizations can be contacted for advertising purposes as well in order to increase clientele. They can also be contacted for advice in many aspects such as how they use technology in their programs, or how they attract new members.

**Other Recommendations**

- **Develop a Technology Plan and Steering Committee**
  Currently, MACAC has no defined technology plan or steering committee. My Community Partner recommends to the Executive Director to make technology purchases if she observes there is a need. However, due to the structural organization of MACAC, my Community Partner does not know much about the needs of the programs at MACAC other than her own, so it is difficult for her to recommend purchases which accurately reflect the needs of the whole organization.

  I recommend that a technology steering committee be created composed of my Community Partner, the Technology Director, as well as the Executive Director, and the three other directors at MACAC. The goal of this committee would be to identify technology needs of MACAC in accordance with the mission, and come up with a budget that accurately reflects those needs. There are various references this committee could look to for advice or help on the matter on the Internet.

  - [http://www.weblab.org/about/resources.html](http://www.weblab.org/about/resources.html) – This site lists web sites that can be used to come up with a technology plan, create a web site, and get in contact with technical volunteers. Most of the sites listed deal with the greater New York City area, however the information listed on the sites can be used by all non-profits in all cities.

  - [http://www.nptimes.com/May02/sr2.html](http://www.nptimes.com/May02/sr2.html) – This site lists various technical volunteer agencies that can be contacted for help. None are located in Pittsburgh; however, they may be emailed or called for help.

  - [http://www.npowerseattle.org/tools/benchmarks%202.21.02.pdf](http://www.npowerseattle.org/tools/benchmarks%202.21.02.pdf) - This site contains technology benchmarks for non-profit organizations. Section A can be used to create a technology plan.

  - [http://www.webdesignpros.net/nonprofit/npdirectory2.htm#tech](http://www.webdesignpros.net/nonprofit/npdirectory2.htm#tech) – This site lists various technology resources for non-profits, including sites which could help create a plan.

- **Create a web site and web portal**
  Currently, MACAC does not have a web site linked to the Mount Ararat Baptist Church web site. There are multiple benefits from creating a web site branching off from the church’s site, including higher amounts of publicity as well as developing a link between the church and the center. This site could contain up-to-date information about the center’s organizational information and program information for the general public, and then there could be a portion of the site dedicated to just members of the center. In this section, there could be links to helpful sites, such as links to homework help sites for the children and academic gaming sites.
Setting up this web site could be difficult for the staff of the center, so I recommend that they make use of technical consultant to do this work, preferably one that has worked with non-profit agencies in the past. There are a number of technical assistance agencies that one could contact. One example is the Miller Zummo Technical Consulting group. They specialize in providing technical assistance to organizations which do not benefit from private sector technical consulting, including non-profit agencies. They provide various web services among other things, and would be a very useful organization to contact. To find out more information, one could look at their web site http://www.millerzummo.com.

About the Consultant:
Indrani Mondal is a junior in the School of Computer Science at Carnegie Mellon University with a minor in Business Administration. My future plans include working in the non profit sector in New York City to decrease the technology divide between the private and public sectors.