I. The Consulting Situation

A. Organization
The Pittsburgh Mediation Center (PMC) is a nonprofit organization located in the heart of East Liberty. Founded in 1981, PMC is the only non-profit mediation center in Western Pennsylvania and the primary source for mediation training in the region. PMC serves both individuals and organizations in the Greater Pittsburgh area and has successfully mediated hundreds of disputes and provided training in conflict resolution to thousands of people. Their mission statement is to practice, model, teach and promote the resolution of differences through mediation, collaboration and restorative justice.

Programs
The Pittsburgh Mediation Center is the leading resource for conflict resolution in western PA and a catalyst for promoting peaceful communities. It offers three main services:

• Mediation - With the support of volunteer mediators, PMC assists individuals in resolving neighbor/neighbor, business/consumer, landlord/tenant, youth/youth and youth/adult, victim/offender, and domestic conflicts. Cases are referred to PMC by local judges based on the criteria of certain non-violent crimes. Also, people wishing to have mediation can contact PMC directly.

• Education & Training - Through the Center’s educational efforts, individuals and organizations participate in experiential workshops that teach skills, negotiation, facilitation, cultural diversity sensitivity, problem solving, and team building. PMC holds two major sessions a year which offer conflict resolution training and basic mediation training.

• Victim/Offender Mediation (VOM) – The VOM program is used in mediation cases that involve small claims against one or more juveniles such as shoplifting, vandalism, etc. It is a “victim focused” program. Victim focused programming acknowledges that a wrong has been done and that the victim deserves the opportunity to ask questions, express feelings and be involved in exploring ways that can help to make things as right as possible.

These are the main services that PMC offers, but all of their programs are held in locations outside of the main office. The office is primarily used for administrative activities. The staff at PMC keeps in contact with their clients, schools, justice agencies, and other associates on a daily basis. They also generate statistical reports to present to possible donors and others as needed.

PMC has recently expanded and relocated in October 2001 to a larger office at 100 Sheridan Square in East Liberty. Along with this move, PMC hired a consultant to install a network and internet connection so that, for the first time, they could be wired. Gale McGloin is the executive director and manages a staff of 5 full time employees and about 180 volunteer mediators.

Organizational Structure
As executive director (ED), Gale McGloin is responsible for the oversight of all operations including fundraising, bookkeeping, staffing, etc, and reports to a board of directors. The other staff members are in charge of PMC’s different programs such as training, mediation services, and victim offender mediation. There is also an administrative assistant (AA) to handle secretarial duties.
Finances
PMC runs on a budget of about $350,000 per year; most of this budget is used for salaries of the full time employees. PMC charges $5-$50 per mediation, depending on the income of those involved in the mediation, and receives funds through contracts and donations as well. Fundraising is a large part of PMC’s operations and a lot of time and effort is put into their annual fundraising campaign.

B. Technology Situation
- All computers in PMC are connected to a LAN sharing a DSL connection.

- The main office houses a Dell Pentium III with 128 Mb RAM. It runs Windows 2000 and has Microsoft Office 2000, Quickbooks for finances, and Survey Pro for generating questionnaires. The administrative assistant uses it for various purposes such as email, mail merges, and accessing the contact database.

- The LAN server, also located in the main office, is a new IBM machine with comparable specs as the main office computer. It is used to store most documents and data, like the contact database for example, and is accessible by all staff members from the machines in their offices. The ED and assistant ED have access to all files on the server, whereas other staff can only access their own personal directories.

- The executive director has a new Dell Pentium 4 machine in her office running Windows 2000. She also has Office 2000. She uses her computer for emailing contacts, word processing, book keeping, statistical report generation, and Internet access.

- The assistant ED has a 6 or 7-year-old Gateway computer that was given to PMC as a donation from the ED. It has 40Mb RAM, 690Mb disk space, and runs Windows 98 and Office 97. He uses it primarily for word processing and email. The different software causes some compatibility issues with shared documents from other computers. Also, the outdated technology prevents the assistant ED from using more software due to its extremely slow run time.

- The director of the victim-offender mediation (VOM) uses the same computer as the administrative assistant’s computer in the main office. She also runs Windows 2000 and Office 2000. Installed on her machine is MadTrack, software specifically for tracking mediations which stores all of her data for the VOM program. Since she needs to generate templated statistical reports on her program, she enters her information in duplicate into Excel, not using MadTrack’s data export feature.

- The mediation services coordinator also has an older, outdated computer. She is inexperienced with computers and has trouble with the old machine she has. She is not properly trained to use the MadTrack software and email is not properly configured, so she barely uses the computer. Most of her work is done by hand.

Ms. McGloin has a written vision for technology in PMC, but no technological plan is in place. Also, the lack of funds for a budget for technology limits the way PMC can expand technologically. She would ultimately like to see all the staff equipped with new computers and have the skills necessary for doing their job efficiently. Her long range goals are to set up an interactive website where PMC can share information on a broader scale, as well as the use of web cams and streaming video to hold long distance conferences and training sessions.

Ms. McGloin has basic computing skills and is able to use computers effectively. She has a vision for technology to be incorporated into all aspects of PMC, however she needs the guidance to put together an effective technology plan.
Problems and Opportunities
Several problems exist at PMC with respect to technology:

- **Inadequate Skills** – Their software was installed to keep track of mediation and survey data electronically, but only a few of the staff know how to use it. A lot of work must be done by hand, putting extra strain on the staff.
- **Limited Budget** – There is no budget for technical maintenance. Since there is no budget for technology, there are no funds for updating or replacing the old hardware or for new hardware in case of physical problems with the current setup.
- **Website Management** – A website was set up but is out of date and no one on staff knows how to maintain it.
- **Outside Consultant** – The organization relies on a consultant on a monthly retainer for troubleshooting technological problems. When a technical problem arises, PMC often has to wait several hours before they are able to get in contact with the consultant, so system downtimes are high.
- **Obsolete Equipment** – A few people on the staff have outdated computers that cannot execute some of the software used.
- **Information Gathering and Retrieval** – A database of contacts exists but contains a lot of old, outdated information. Also, it is not structured well and therefore hard to query on. Results in inefficient communication between PMC and other organizations and contacts

C. Consulting Focus
The consultant and community partner agreed on a three-phase work plan.

**Phase 1** – Redesign the database of contacts with the ED in Access, keeping important information and deleting unnecessary data. Also teach the ED how to use Access: create tables, link tables with relationships, and entering and retrieving data.
- With an organized database and a proper understanding of its use, PMC will be able to retrieve much more specific data through the use of proper queries instead of just “eyeing” the database for information. Also, the ED will be able to create new tables and fields in the database as necessary, or even a new database if the need ever arises.

**Phase 2** - Develop, with the ED, a standard benchmark of skills that all staff members should have. These include, but are not limited to, internet browsing skills, word processing skills, email and outlook skills, and the necessary skills to use the specific software they have for tracking mediations. After this is set, the consultant will work with the staff to ensure they meet the new standard.
- By discussing the current environment with the ED, she will have a better understanding of the technological needs of the organization. Also, by creating a standard of skills, the staff will all be able to do their jobs more efficiently and with increased compatibility because tasks will be done in a uniform manner.

**Phase 3** - Design a new, more attractive website for PMC. Afterwards, explain to the ED what goes into web design and teach her how to update and maintain the site. Also, explain some features that could be included in the site in the future, such as a message board system.
- If PMC is able to be an entity on the internet, it will allow them to share information on a much higher level. With the proper promotion, the website could be an important tool to increase awareness of PMC, as well as convey data to those interested. The ED will also be able to update the web page and keep contacts with current information.
II. Outcomes and Recommendations

A. Results of Consulting Work

1. Information gathering and retrieval

The consulting approach was to go over basic relational database information with the ED, including relationships, keys, and queries. The ED, another staff member, and consultant worked together to develop a new database and the ED learned how to retrieve data through queries. Both the ED and AA also took an ACCESS class during this interval.

Outcomes: A new database was created and over 3000 outdated entries were removed. The ED and AA now have the knowledge on how to enter, update, and retrieve the information (see Appendix A).

Evidence: On her own, The ED created a table to store information for their open-house event. She made the necessary fields to track names, addresses, responses, etc, of those who were invited to the event. Also, the ED copied the information out of the old database and into the new one primarily by herself, after a little instruction. She created a few queries to retrieve certain data and saved the queries for later use.

Increased Capacity: With a new, well-structured database and the knowledge of how to query on it, PMC can pull up specific data about contacts when looking for information, or data in groups for mailings or other purposes. This will substantially increase PMC’s efficiency because they will not need to spend time locating contact information, which is a large portion of the administrative work done in the office. Also, with the creation of the new database, the ED updated a large portion of the database, making changes and deleting old entries as necessary. This also increased efficiency, because time will no longer be wasted soliciting people at old addresses or those with no real ties to PMC.

Sustainability: This outcome is certainly sustainable. The ED has already performed various tasks with the database on her own and is comfortable with the new layout. The administrative assistant has also used the database by entering data and performing mail merges. Since they are the primary users of the database, it is obvious that the database will continue to be updated.

Recommendation: It is recommended that the ED make a standard electronic data entry form for taking information from new contacts over the phone. This form should be based on the data contained in the database and implemented through the use of Access’s form creation wizard. It should be linked to the database on the server, and all employees should be trained in its use.

- Benefits: This should further increase efficiency by allowing for a standardized method for data collection. This would make the administrative assistant’s job easier because she would not have to “double enter” already collected data. Also, this would eliminate gaps in information that might occur during gathering because a standard form will be used.
- Implementation: The ED has the knowledge on how to create a form in Access. Once created, the database should be saved to the server with the new form. Then, the ED should show the staff how to use the new online database entry form in a staff meeting.
- Resources: The website [http://www.marywood.edu/acnews/accessform.pdf](http://www.marywood.edu/acnews/accessform.pdf) can be used as a reference on how to create a data entry form in Access. Other than that, the computer and the database are all that is needed. Perhaps some paper and a printer will be needed to make printed copies of instructions for the staff.

2. Website Management

PMC had interns create a website for them, however no one on staff had the knowledge to update it. The consultant worked with the ED to determine the information that PMC would share on its website and the new layout of the site. After the consultant built the actual website, the ED was instructed on how to keep it updated by adding information and links when necessary. The ED was also taught how to publish the updates to the web.
Outcomes: With a new website and the knowledge to update it, PMC can share information on a much broader scale. They can now advertise their web URL and have people visit their page to find updated information on mediation and training. Also, the ED now has some experience with web design and can make educated decisions regarding the site in the future (see Appendix B).

Evidence: The ED updated the current website to reflect new training dates and other information. She downloaded, updated, and uploaded several pages from the website on her own, with little instruction from the consultant.

Increased Capacity: The ED now has the capacity to maintain PMC’s internet presence. She has the ability to share information with many people over the internet. Instead of having to do mass mailings, she can direct those with internet access to the web site for data about the various activities of PMC.

Sustainability: Since the ED has the knowledge of web site design and management, this outcome is definitely sustainable. She can do all of the future updating herself or teach other staff members and place the responsibility on them.

Recommendation 1: It is recommended that PMC put their URL on all business cards, letters, faxes, etc. to increase traffic to their website.

Benefits: If PMC was able to spread the knowledge of their website, they would truly be able to share information with the entire population. One easy way to increase exposure is by making people aware of their URL in all of their documents. In this manner, all of PMC’s contacts will have direct knowledge of the website and will be able to visit it whenever they want for updated information.

Implementation: The ED should revise all headers, footers, business cards, etc., to contain the URL. Then, the next time the ED places an order for stationery, the new layout can be used and the URL placed on it.

Resources: The only resources needed are the URL and whatever budget PMC would normally use when ordering stationery. PMC can look into printing their own stationery and would need desktop publishing software like Microsoft Publisher. This may be more cost effective, but would also take more time. Therefore, it is recommended that PMC maintain their usual method of purchasing stationery, using designs with the added URL.

Recommendation 2: It is recommended that PMC use their newly donated scanner to add information to the web site. This information could be in the form of photographs (of staff, etc) or scanned articles from publications on mediation.

Benefits: Adding articles about mediation and photographs would further PMC’s effort to increase awareness about mediation and their services.

Implementation: Firstly, the ED must have their newly donated scanner installed. This should probably be done by their technology consultant so it is installed and configured properly. Afterwards, the ED must learn how to correctly use the scanner to capture pictures and text. Then, the ED should incorporate this new technology in the design of PMC’s website.

Resources: The primary resource here would be their technology consultant to properly install and configure the scanner. Also, the books Scanners for Dummies and Web Design for Dummies would be helpful in learning the proper use of scanners, especially related to the web. Furthermore, any and all articles related to mediation should be used. This, like all other recommendations, would take time and devotion to learn and practice so the ED could become comfortable working with the scanner.
3. Benchmark of Skills
The consultant worked with the ED over the consulting period to develop a standard of skills that the staff members at PMC should at least know, which ranges over a variety of tasks. The consultant then worked with the staff members to ensure that they attained these skills.

Outcomes: All staff members of PMC have the same or similar knowledge of computing skills. In this manner, all employees can perform the same tasks necessary for their roles in the organization. Also, the different data can be shared because they will have created it in compatible ways. Furthermore, PMC has now reached a Staff Level Technology Use benchmark from the Technology Literacy Benchmarks for Nonprofit Organizations at http://www.npowerseattle.org/tools/benchmarks%202.21.02.pdf.

Evidence: Some staff members in charge of different areas all created similar pie charts to display certain demographic statistics. A lot of the staff entered the consultant in their Outlook contacts list and sent the consultant an email as a test. Most of the staff navigated through the network drives to store their data files there, as well as locally on their individual machines.

Increased Capacity: There is now a standard of skills that all staff members must attain. This is especially important because a lot of the work done by the different staff members is very similar and now they can all do it with compatible methods. This way, when the ED or assistant ED asks another staff member for some report, they can be assured that the staff will have the skills necessary to complete the task.

Sustainability: The ED should reanalyze the set of skills every so often to make sure that the skills listed are still current and important. If this is done, it could be sustainable.

Recommendation: It is recommended that the ED use this new set of skills when hiring new employees. The ED should actively pursue those with the necessary qualifications for their job and also the necessary computer skills.

Benefits: In today’s job market, it is easy to find skilled candidates that also have experience with computers. If PMC is able to hire those with the computer skills that are necessary, then no time will be taken training them to use the different computer programs. Besides one program, the software PMC uses is widely known such as Outlook, Word, Access, and Excel. Also, it is quite possible that PMC could hire someone with extensive knowledge on one of these programs and could learn how to use it more efficiently.

Implementation: In the future, when hiring new employees, the ED should keep in mind the computer skills necessary for the particular job and should actively seek someone with those skills.

Resources: None besides the knowledge of the skills.

B. Other Recommendations

Technology Budget:
Currently PMC has no budget for technology. This is detrimental in the case of a technological disaster because funds are not appropriated for fixing hardware or software malfunctions. Also, this makes it difficult for PMC to upgrade technology in the future because they do not have a budget for this purpose.

Recommendation: PMC should include technology in their current budget. This is for technological disasters as well as ordinary maintenance and upgrades.

Benefits: The obvious benefits here are that in case of emergency, PMC can use funds to stabilize a potentially dangerous situation. Also, they will have money set aside for future upgrades in technology, wherever they may be needed. This would also attain a benchmark for nonprofits.
Implementation: The ED should contact other local non-profit organizations of approximately the same size to determine what kind of budget they have and to see if a similar budget would work here. The ED could also run hypothetical disaster situations and research how much it would cost to fix them. Another method would be to figure a number for a fixed budget based on updating different technology yearly. After doing this, the ED should propose the new budget to the board of directors and hopefully get it passed.

Resources: The website http://www.techsoup.org is an excellent resource for finding information about technology related to non-profit organizations, more specifically their section on Technology Planning under Find Tools and Resources, or even a keyword search on “budget”. Also, the ED should use other non-profits of approximately the same size to see what their budget is like. Finally, the ED should use websites like http://www.amazon.com and http://www.bestbuy.com to research prices on new equipment to gauge how much funding is needed for the new budget.

Technology Inventory:
Currently, PMC has no inventory of their technological environment. They have various types and speeds of computers with different software packages.

Recommendation: PMC should take an inventory of all of their current technological equipment including computers (including internal hardware and software), printers, servers, faxes, copiers, etc. They should keep this list updated as new equipment is purchased and used.

Benefits: With an inventory of the current environment, the ED can pinpoint spots where new technology may be needed or be able to troubleshoot more easily because knowledge of the hardware would be explicit. Also, an inventory can be used to standardize the technology by ensuring that everyone has the same, or close to the same, technological working environment. This would have the added bonus of reaching another nonprofit technology benchmark and would help with tracking warranties.

Implementation: The ED, along with their consultant, should go through the entire technological environment, logging manufacturers, serial numbers, and other information on all of the equipment used. An Access database should be created to store this information, perhaps broken into tables by “Hardware,” “Software,” and “Misc Equip.”

Resources: The only major resource would be the outside consultant. He could help in determining some of the components of the equipment used, as well as areas that may need newer equipment. Also, Techsoup is an excellent resource again; if a search for “inventory” is done a number of useful articles come up.

About the Consultant
The student consultant was Jared Silver. He is a Junior in Computer Science at Carnegie Mellon University with a minor in Business Administration. He is originally from Rockland County, NY, a suburb northwest of NYC. He would like to have a career in software design and development after graduating.
How to create a query in MS Access:

1. Open the database in Access.
2. Click on the button in the database window.
3. Double click Create Query Using Wizard
4. Select the table you wish to query on from the pull down menu, highlight the information you want to retrieve from Available Fields, and click the button to move the information over. Do this for all relevant tables.
5. Click Next.
6. Give the query a title pertaining to the information that is being retrieved. Click the Modify Query in Design button and click Next.

** These steps alone will retrieve the information from ALL RECORDS. To get specific data, modify the SQL of the query.

Using SQL:

1. From the View menu, click SQL SQL View
2. Delete the semicolon at the end of the SQL text.
3. Add a new line to the text and the word WHERE.
4. TO RETRIEVE DATA FROM ONLY RECORDS WITH A SPECIFIC PROPERTY:
   - WHERE [TableName].[Field]="keywords";
   - WHERE [TableName].[Field]=####;

Example: WHERE [Personnel].[AffilMed]="A" will retrieve all records where the AffilMed field has only A in it.

5. TO RETRIEVE DATA FROM RECORDS CONTAINING CERTAIN INFORMATION:
   - WHERE [TableName].[Field] LIKE "*keyword*";
   - WHERE [TableName].[Field] NOT LIKE "*keyword*";

Example: WHERE [Personnel].[Board] LIKE "*C*"; would return all records with a C in the Board field, redardless of what other information was in the field.

6. TO RETRIEVE ALL RECORDS WITH 0 or an EMPTY FIELD:
   - WHERE [TableName].[Field] = 0
   - OR WHERE [TableName].[Field] IS NULL;

   **(both lines of this statement must be used)**

Example: WHERE [Donors].[AC01Gift] = 0 OR WHERE [Donors].[AC01Gift] IS NULL; would return all records where AC01Gift was 0; everyone who did not donate in ’01.

**STATEMENTS CAN BE COMPOUND WITH AND AND OR**

**EXAMPLE:** [Donors].[AC01Gift] > 50 AND [Donors].[AC00Gift] > 50; would return all records where people gave more than $50 the past two years.
How to update web page:

1.  Browse to the web page (http://trfn.clpgh.org/pmc)
2.  Right Click on THE LINK of the page you want to update and click Open Link In New Window.  You may need to right click on a button in the left frame menu.
3.  Once the page loads in the new window, click File and Edit With Microsoft Word

To insert a link:

1. Click and drag to highlight the text you want to turn into the link.
2. Click on the button

To insert an email address link:

3. Click
4. Enter the email address in the Email address: field
5. Click OK

To insert a link to a page:

3. Click
4. Delete the URL under Type name of file or web page: and type the name of the webpage you are linking to, such as courses.html
5. Click OK

Once all updates have been made:

1. Click File and Save As to save the updated web page.  Save it to the server (E:) and to the webpage directory.  Keep the same name of the web page.
2. Close Microsoft Word
3. Open Internet Explorer and browse to ftp://pmc:pgh99@trfn.clpgh.org/www
4. Open Windows Explorer and browse to E:\webpage
5. Click and drag the newly updated file(s) from the hard drive (Windows Explorer) to the site (Internet Explorer)
6. Delete the old version of the file from the site if it is an update.  If the uploaded page is brand new, there will be no old page to delete.
7. Rename the new web page on the site to contain the “l” at the end of the extension i.e. staff.html