

Pittsburgh Mediation Center
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Community Partner, Gale McGloin

I. Consulting Situation

A. About the Organization

The Pittsburgh Mediation Center (PMC) is Western Pennsylvania's only non-profit mediation center. With a diverse and highly trained group of eight staff and about 100 volunteers, PMC is the leading provider of mediation, training, and restorative justice services for individuals and organizations in the Greater Pittsburgh community.

PMC's mission statement is:

The purpose of the Pittsburgh Mediation Center is to practice, model, teach, and promote resolution of differences through mediation, collaboration, and restorative justice.

PMC provides the community with a less time consuming and more convenient alternative to courts for resolving disputes. Most mediation sessions occur within 3 weeks of calling PMC at a location and time convenient for all participants.

PMC's main office, located in East Liberty at 100 Sheridan Square, houses most of PMC's administrative functions. Mediations and training sessions occur throughout the region at various locations, such as Carnegie libraries, county libraries or other neutral sites. Many of PMC's customers come through PMC's referral relationships with Pittsburgh's district courts, city magistrates, and the Pittsburgh Police Department. Others come voluntarily after seeing articles or advertisements about PMC or after seeing information on PMC's web page.

Among its achievements since incorporation in 1981, PMC created the first school mediation program and the first Victim Offender Mediation program in Pittsburgh. Along the way, PMC has developed a unique partnership with the Pittsburgh Police and courts. Certain non-violent juvenile cases are referred to PMC. PMC has mediated hundreds of disputes and boasts an 85% success rate. It also trains over a thousand people per year in conflict resolution and mediation skills.

The 2003 annual budget for PMC is \$437,179. 75% of the budget goes towards personnel costs such as salary, health care, and other benefits. 15% goes towards non-personnel costs such as supplies and telephone. The remaining 10% goes towards rent and utilities. Most of PMC's funding comes from the fees they charge for mediation, restorative justice, and training services. 35% comes from grants from local foundations, banks, and corporations. 5% come from donation and interest income.

PMC offers programs falling into three categories:

- Community Mediation- PMC offers mediations, facilitations, and conciliations for neighbor/neighbor, landlord/tenant, youth/adult, youth/youth, employer/employee, multi-party, business/consumer, and many more types of disputes between individuals or organizations. Impartial volunteer mediators,

with at least 39 hours of training, support both parties as they explain their point of view of the conflict, clarify any problems, and jointly brainstorm and choose the best solutions for both of them. In the end, a written agreement may be made between the two parties. Since mediators work only as facilitators, participants are more likely to live up to the agreement they had a part in creating. Fees, ranging from \$5 to \$50, are charged on a sliding scale based on annual income. Ms. Dyane Rue is the Community Mediation Services Coordinator and is responsible for screening, scheduling, and monitoring each case that comes in.

- Education & Training- PMC offers training sessions in conflict resolution and mediation to adults and youth. Topics include developing skills in communication, negotiation, cultural sensitivity, problem solving and team building. Experienced trainers who are also mediators and facilitators lead these training sessions, which are offered to the general public several times a year. PMC also does contractual work, offering customized training to meet the needs of community groups, non-profit agencies, businesses, universities, school districts, hospitals, and police departments. Currently PMC has a specialized program funded by Allegheny County to provide individuals moving from welfare to work with conflict resolution and anger management skills. Ms. Ellen DeBenedetti and Ms. Katie Klain are the Training Coordinator and Trainer for PMC. They are in charge of developing the training material and holding training sessions throughout the year for PMC's clients. They also routinely provide continuing education for volunteer mediators.
- Restorative Justice- Restorative justice is a new approach to the criminal justice system, focusing on the crime as a violation to people and the community, not just the act of breaking a law. Instead of just trying to punish the criminal like in a retributive justice system, restorative justice looks to repair the harm caused by the crime and to restore the relationship between the offender and the victim or with other community members through community service, educational activities, or other types of restitution. The participants in these programs are referred from district justices, police, Allegheny County Juvenile Court, and schools. PMC's restorative justice service area has two programs:
 - Victim Offender Mediation (VOM) is a "victim focused" program designed for first time juvenile offenders of small claims, such as shoplifting and vandalism. Cases are referred from Allegheny County Juvenile Court. After each attends a pre-mediation meeting, the victim and offender meet face to face with the intention of allowing the victim to ask the offender questions that may provide insight into the crime, clarify the offender's responsibility, form a restitution agreement between the victim and the offender, and hold the offender accountable for his or her actions. Upon successful completion of the VOM process, the criminal record of the offender is cleared. The VOM program has been extremely successful- 100% of all victims and offenders felt satisfied with the process according to a recent evaluation report. Ms. Cris Corbett is the Victim Offender Mediation Coordinator.
 - Community Accountability Panels (CAPs) is PMC's newest program. In this program, the first time juvenile offender meets with a panel composed

of community members. The panel holds the offender accountable for his or her actions and determines an appropriate restitution. Rather than meeting with the victim, like in the VOM program, participants of the CAPs program are reintegrated into the community with the help of the panel. Each child has a monitor who oversees his progress and acts like a mentor. Like the VOM program, the criminal record of the offender is cleared upon successful completion of the program. Mr. Jerome Jackson is the Community Accountability Panels Coordinator.

B. Current Technology Situation

Technology cannot replace the expertise of the staff members of PMC. However, there is a great need for technology to assist in the coordination, communication, and data collection involved with PMC's day-to-day operations. Technology provides PMC with a means to provide quicker and more efficient service, track vital statistics and demographics, and to maintain communications between its clients, its mediators, and its funders. Using computers, PMC has been able to create training material to be used in its training sessions, pamphlets to give to prospective clients and supporters, and a website where community members can look to see upcoming training sessions PMC is offering.

While PMC has incorporated technology into its vision statement, it does not presently have a written technology plan, budget, or inventory. As a result, PMC has been slow to expand technologically. PMC is currently working to develop a capital budget and seek funding to underwrite it. With a capital budget, PMC hopes to have enough money allocated for technology that it can provide four staff members with new computers and training for all staff in skills necessary to do their jobs effectively.

Currently, PMC hires a contractor, Mr. Nick Callas, to come in to fix and maintain the network and computers. Mr. Callas, the founder of Megalogic.com, has been working with PMC since 1999. When Mr. Callas is not in, the Executive Director attempts to handle most technology issues. Occasionally, it is necessary to contact Stargate to fix Internet access. There is no full-time staff member whose main responsibility is to manage the technology.

At the beginning of the semester, PMC was using two Microsoft Access databases to keep track of contacts. The Administrative Assistant is the main person in charge of entering and maintaining the information stored in the database. For mediation data, PMC uses MADtrack, software designed specifically for tracking mediation information and data with a built in database, to monitor its Community Mediation Services and Victim Offender Mediation programs. PMC's newest program, the Community Accountability Panels program, is currently deciding on a program to use. Microsoft Word and Excel are also used to keep track of and analyze data. Microsoft Word, and occasionally PowerPoint, are used to create and develop training materials. All data is stored on the office's server.

Each staff member is responsible for backing up their own files from the server to their respective personal directories on their hard drives. Data on the server used to be backed up using the zip drive PMC owns. However, because of the time and hassle of having to back

everything up on zip disks, the server data has not been backed up recently. PMC is looking into purchasing a tape drive, which will allow for fast and convenient backups.

C. Consulting Focus

The student consultant has been working together with Ms. Gale McGloin, the Executive Director of PMC to identify opportunities to sustain the current technology situation and expand the technology capacity.

Task 1: Development of a technology plan

Description: PMC incorporated in its 2002- 2005 Vision Statement a vision and goal for technology. Among PMC's goals are to become "technology-savvy"¹, to "develop and maintain a PMC list serve or other web based communication service to connect our community's peacemakers,"² and to use financial resources to maintain cutting edge technology and use this technology to improve service delivery to the community. However, there was no plan to accomplish these goals. The Executive Director (ED) and a contractor, Nick Callas, managed the technology.

Problems that arose as a result of no technology plan include:

- No dedicated resources for technology- The ED was working on a capital budget proposal. Without a technology plan, it was hard to estimate a technology budget. Since PMC's technology goals were not clearly stated, it was hard to predict future purchases and to build these purchases into the capital budget. Furthermore, donors or lenders generally want to know what their money is going towards before investing great amounts of money.
- Obsolete equipment- PMC was unable to upgrade and maintain their equipment regularly. Things got fixed only after a problem has occurred and when absolutely necessary with no anticipation of future needs. Equipment came either through funding for a program or through donations. Some effects of obsolete equipment were:
 - The staff was often frustrated and not as efficient. For example, an unusual, but commonly reoccurring error involving ClipArt and printing training material resulted in many hours wasted rebooting the crashed computer and trying to print again.
 - The staff was limited in what they can do. For example, the Assistant Director of PMC is currently using a Gateway desktop with 64 megabytes of memory and 640 megabytes of hard drive storage. Due to the limitations of his computer, he has been limited in what programs he can install and even what operating system he can has. Low memory also slowed down many of the computers.
 - Non-essential equipment that may increase productivity was not purchased. For example, when someone signs up over the phone for mediation, certain data must be entered into MADtrack, case management

¹ From PMC's 2002-2005 Vision statement

² From PMC's 2002-2005 Vision statement

software PMC uses to keep track of its mediation data. This usually means the staff member will jot down the information on a notepad while on the phone and enter in the data after hanging up the phone. However, if PMC had headphones, this would free the staff member's hands to type the data into MADtrack directly.

- Lack of full-time technology management- There was no full-time staff position devoted to the maintenance of technology. PMC only had a contractor, Nick Callas, who came in from time to time. If a problem arose, the ED would try to handle it or the staff would have to call Mr. Callas to come. That sometimes required waiting on his availability.
 - The ED, who was the main technology person when Mr. Callas is not in, spent more time to help others with technology problems.
 - The staff was dependent on Mr. Callas and the ED. If both of them were not in for the day and a major technology issue (for example, the internet goes down) occurred, no one would know how to fix it.
- No inventory of equipment- An inventory was conducted last spring (by the previous Student Consultant) and this spring, but there was no written inventory of PMC's equipment. As a result, it was difficult to know what machines needed to be upgraded. In order to upgrade, one needed to search through paperwork looking for the invoice or order of the computer or to go the computer and find out the specifications. The Executive Director has the invoices and orders for some of the newer computers PMC has, but records of the older machines or donated machines are not readily available.
- Approach: Research into technology planning, looking at online resources and articles. An example for a guideline is "Technology Literacy Benchmarks for Non-Profit Organizations" by NPower, which lists some components of technology plans.
- Find out what PMC wants in a technology plan and what, of these components, PMC already has.
- Collect all information PMC has on its technology use and goals (e.g. PMC's technology vision, previous student consultant's reports, previous technology assessments, etc.).
- Divide up the undeveloped parts of the technology plan between the ED and the student consultant to work on. The student consultant can work mainly on the simple tasks, such as collecting data, with the ED handling more complicated tasks that require more knowledge of PMC, such as writing a budget.
- Combine all the components into a technology plan.

Expected outcomes and expanded capacity:

- The ED will understand more of PMC's technology environment and needs and will be able to adjust, or even rewrite, the technology plan in the future.
- A formal written inventory of equipment will be created.
- All of PMC's technology information, policies, and procedures will be gathered together in one location.

- PMC will have a strategy to achieve their technology goals. This will give them direction in how they handle technology. PMC will be able to better plan in preparation for, as opposed to react to, technology problems.
- Information will be able to be abstracted from the technology plan such as the budget and used in a capital budget proposal. This could lead to a technology budget, which could give PMC the ability to maintain a cutting edge technical environment with state-of-the-art equipment.

Task 2: Strengthening Technology Skills

Description: Most staff members come from mediation backgrounds and know basic computing skills. Beyond basic computing skills, the level of skill and comfort with technology for each staff member varied. Some staff members attended short courses or tutorials in programs such as Microsoft Access and PowerPoint and Adobe PageMaker. The staff was eager to learn new skills that would help them accomplish their tasks more efficiently, but time and money had previously limited their ability.

Several problems were related to this:

- No inventory of skills- A formal inventory of skills was never taken so what skills staff members have already mastered, as well as what skills the staff members wish to acquire, were unknown. What needs the staff have were also unknown. It is hard to provide training without knowing this.
- Some staff members felt uncomfortable using or wished to know how to better use certain essential software, such as MADtrack and Microsoft Excel and Outlook.
- Staff was not as efficient as they could be-
 - They were unaware of features that would help them.
 - Even if they knew of a feature or program that would be useful, they didn't know how to use it or didn't feel comfortable enough to try it.
 - Some programs were used inefficiently just because staff members were already comfortable with it and it was less of a hassle to use it than to learn a new program. For example, using a table in a Word document and manually adding up the tallies in each column as opposed to using formulas in a spreadsheet in Excel.
- Programs that had been designed and developed by since departed staff members/volunteers were not being used again because no one had knowledge on how to use them or adapt them to changes.
- Staff members who attended classes in the past still had problems because the courses were "crash courses" (one day courses) that tried to cover a lot of material.
- Classes didn't always cover everything. Many of the problems the staff members encounter were not major ones and would not necessarily be covered in classes or training sessions.
- Specialized software, such as MADtrack, did not have classes available.

Approach:

- Create a checklist of minimum computing skills and inventory the skills of the staff. Determine what needs the staff had.
- Research into the most effective means to address their needs.
 - If training is required, look into possible classes or training sessions offered around the community. Invite staff members to take classes at Community College of Allegheny County.
 - Look into the possibility of purchasing more support time for MADtrack. If possible, purchase tutorial books to teach staff members. Begin a library of tutorial books where staff members can check out whatever book they need.
 - As a last resort, if one-on-one tutoring is required, the student consultant should familiarize herself with the application. Then she will be able to work with the staff member to help him or her use the program with every day tasks. Develop a quick reference sheet with the staff member if necessary.
- Compile the quick reference sheets into a “Technology Manual” that will be kept on file at PMC.
- Re-evaluate staff members’ skill levels at the end to see if improvements were made. If more training opportunities are needed, make note of it in the long-term technology goals of the technology plan.

Expected outcomes and expanded capacity:

- An inventory of skills will be conducted, recorded and included in the technology plan.
- Staff members will reach a minimum comfort and skill level with every day tasks in applications. This will allow them to be more efficient in completing administrative tasks and frees up more time to be spent on actual service. They will be better able to adjust to changes in the technology environment and keep up to date on technology.
- A “Technology Manual” will be created that includes simple procedures and tasks and troubleshooting help. Staff members will be able to reference this manual whenever they need to.
- More tutorial or manual books will be purchased.

Task 3: Improving tools used by PMC to collect, analyze, and manage its data

Description: PMC has a lot of information and data involved with its day-to-day operation. Information can be divided into two categories- internally focused and externally focused. It should be noted that information is not exclusive to one category or the other. There are cases where data is important for both internal and external purposes. Examples of internally focused information include records of how many hours staff members worked in key activity areas and demographic data collected on who is using PMC’s services. Examples of externally focused information include mailing lists to contact supporters and donors, and reports generated to present PMC services to current or potential supporters. Currently, PMC has two databases storing essentially the same information.

Problems related to internally focused information management included:

- No means to document productivity and key performance indicators-
 - No software or database existed that allowed staff members to input the number of hours they spent in preparation for mediations or trainings.
 - No means to analyze how staff members spent their time in preparation for mediations or trainings.
- Outdated tools- Certain tools were designed by staff members or volunteers who had since left. Current staff members were unable to adapt these tools to analyze data for the current year.
- The new Community Accountability Panels (CAP) program- A database was needed to keep track of panel members and to analyze data related to the panel members. For example, how many panel members were female? Male? Etc.
- Backups- PMC did not regularly backup their information.

Problems related to externally focused information management included:

- Communication- PMC did not have an email list to contact all their mediators because not all their mediators were Internet connected. PMC had to use primarily physical means to contact their mediators.
- Maintaining information on donors and supporters-
 - A new database was created last spring basically storing the same data as the older database, but in a different format. The older database is basically one large table with all the information, allowing easy data entry and for those familiar with the database, fairly easy retrieval of data. Although the newer database was designed to allow for better data analysis and more flexibility, the older database was not retired because staff members still felt more comfortable with it. This resulted in:
 - Inefficiency and duplication. The Administrative Assistant needed to enter in data twice with no added benefits to having two copies.
 - Increased chance for discrepancies since entering data twice increases the chance of errors. Error checking was made more difficult since the two databases were separate, making comparing and confirming data a hassle.
 - The staff avoided using the newer database because it couldn't retrieve the data it wanted. More training in creating queries to retrieve information was needed.
 - The transition from the old database to the new one has been slow because the ED is the only person familiar with the data.
- The new Community Accountability Panels (CAP) program- A database was needed to keep track of juveniles participating in the CAP program. This database needed to be simple enough for CAP panel members to use and on a platform available to all CAP panel members.
- Backups- PMC did not regularly backup their information.

Approach:

- Interview staff members to find out what programs they are currently running and how effective these programs were at doing their tasks.

- Evaluate the usefulness of the program and the feasibility of redesigning a tool. Specifically, programs and tools to evaluate include:
 - Spreadsheets for documenting staff time- work with staff members to develop and test prototypes for the spreadsheets.
 - The current situation with two databases- complete the transfer over
 - A program for the CAP program- decide on either purchasing another version of MADtrack or designing an Access database or Excel spreadsheet for the program

Expected outcome and expanded capacity:

- Staff members will have a tool to document their time. This tool should be easy to use since they help design it. Likewise, it should be easy to adapt to future needs.
- PMC should transition off of the old database and begin using the new one. The old database should be saved to a backup location.
- Data will be able to be collected on who uses PMC’s programs and how to continue service to these communities. Reports can be generated from this.

II. Outcomes and Recommendations

A. Results of Consulting Work

Task 1: Development of a technology plan

Work Task: The consulting task was to develop a technology plan for PMC. Furthermore, instead of developing a technology plan for PMC without involving the ED, as had been done in the past, the ED was the main person developing the plan, with the student consultant helping. The ED and the student consultant researched technology plans and decided on a basic technology plan including³:

- Technology vision statement for the organization.
- Statement describing the organization’s mission and programs.
- Statement describing the organization’s current use of technology and how it supports program operations.
- Inventory of the organization’s current hardware and software.
- Inventory of staff computer skills.
- Statement of long-and short-term technology goals.
- Strategy for meeting the plan’s goals.
- Timeline for meeting the plan’s goals.
- Budget detailing the costs of implementing the plan.
- Evaluation criteria to determine whether the plan’s goals have been met.

Outcome Evidence

³ Taken from “Technology Literacy Benchmarks for Non-Profit Organizations” by NPower

Of the components listed above, PMC already had a technology vision statement and a statement describing its mission and programs. During the consulting period, a detailed inventory of PMC's hardware and software was conducted and recorded. An inventory of the staff's computer skills was also conducted and recorded. These components were compiled into one working document. Rough ideas for technology goals were formed. Ms. McGloin and the student consultant also looked at other technology planning resources to gain ideas for PMC's plan.

Evidence of Expanded Capacity

Evidence of expanded capacity has been hard to see. Because the technology plan is not complete yet, it has not been implemented.

Sustainability

Ms. McGloin has been very enthusiastic about technology planning and understands the importance of it. She is the main person in charge of the technology plan. As a result of her extensive knowledge of PMC and her involvement in the technology planning since the beginning, Ms. McGloin will be able to continue work on the technology plan even after the student consultant leaves. To ensure the sustainability of the technology plan, suggested webpages and documents on technology planning have been passed onto Ms. McGloin.

Next Steps to Sustainability:

Work on the technology plan should continue until it is completed. It is best to implement the technology plan as soon as possible so as not to lose the momentum from planning to implementation. Work to follow the timeline set in the plan. PMC should try to regularly (perhaps on a yearly basis, prior to the annual budgeting process) update their technology plan in order to keep it current with new technology developments.

Resources

The following resources were passed onto Ms. McGloin to help her develop PMC's technology plan.

- NPower's article, "Technology Literacy Benchmarks for Nonprofit Organizations"
- Dr. Larry Anderson's article, "Technology Planning: It's More Than Computers"
- Webpage: <http://www.techsoup.org/>
- Webpage: <http://www.coyotecom.com/>
- Webpage: <http://www.nten.org/>
- Webpage: <http://www.tech-library.org/>
- Webpage: <http://www.comtechreview.org/>
- Webpage: <http://www.nonprofit-tech.org/>
- Webpage: <http://www.ctcnet.org/>

Task 2: Strengthening computing skills

Work Task: The consulting task was to help each of the staff members raise their efficiency by helping them better utilize technology to complete their tasks. Each staff member was helped so that they achieved a minimum level of comfort and skill with technology determined by the ED. Additional support time for MADtrack was negotiated at no cost by PMC to allow staff members

to call in with any questions or problems they may have had. Manuals were also purchased to help staff members familiarize themselves with the program.

Outcome Evidence

Task	Evidence
Sending emails, adding attachments in Outlook	Staff member composed an email, added an attachment, and sent it to the Administrative Assistant.
Creating spreadsheets, using formulas in Excel	Staff member created formulas to add up the rows and add across the columns. She also formatted the spreadsheet to have a title and table outline. This table ended up being used for her program.
Adding and formatting ClipArt and WordArt in Word	Staff member inserted ClipArt and WordArt in an already existing document. Then she formatted the word wrap around the image to fit around the text in her document.
Creating templates in Word	Staff member created and used a template to start a document.
Creating queries in Access	Staff member generated multiple mailing lists for a specific target audience (for example, donors, mediators, etc) by creating a query in Access. Then using the query, she performed a mail merge to create letters to send to the audience.
Updating the front page of the website	Staff member edited the front page of PMC's website by removing an old link and updating the "Last updated on" date. She uploaded the updated page onto the server and visited the website to see her changes.
Adding a page to the webpage	Staff member copied an already existing page of the website and modified it. Then she edited an existing page to include a link to the new page and uploaded both files onto the server. She visited the website to see her changes.

Evidence of Expanded Capacity

With the new knowledge the staff gained, they have been more efficient in completing their tasks. For example, after helping a staff member learn how to use formulas in Excel, the staff member was able to create tables where she would enter in the number of cases handled by PMC for each month. At the bottom of the table, the yearly total was calculated. This task used to be calculated by hand, requiring the staff member to spend a couple of hours at the end of each month to count up the cases for the month and to add it to the running yearly totals.

In addition, PMC is able to send out training opportunities more efficiently and without the worry of forgetting someone. After practice with creating queries, the staff members are able to generate queries much quicker. With these queries, they can generate a mailing list very quickly that can be used to send out training session information to mediators who have not yet completed their training requirement. Using the queries is quicker and less prone to error than going through the list of mediators by hand and picking out those who PMC wishes to mail.

Sustainability

Quick reference “cheat sheets” were created for each task that the student consultant helped the staff complete. The “cheat sheets” were given to the staff to use for a couple of weeks. Afterwards, the “cheat sheets” were modified and improved by adding any suggestions the staff members may have had. Hopefully, because they helped with the process of making the “cheat sheets”, staff members will be able to remember the skills they have learned. As a worse case, the “cheat sheets” can act like a guide to staff members in case they forget how to do one of the tasks.

Recommendation

PMC is interested in getting its entire staff to start using Microsoft Outlook’s scheduling feature. Currently, only a paper calendar is used. Furthermore, it only tells when staff members will be working, not necessarily if they are free. Sometimes, it is still necessary for staff members to call each other to find out if one another are available at the time. If PMC could utilize Outlook’s scheduling tool, everyone would have easy access to one another’s schedules. To learn Outlook, one-on-one training would probably not be the most efficient use of the staff’s time. PMC should find another way to teach its staff. Possibilities include:

- Hire an outside trainer (either a professional trainer or a student volunteer trainer) to come in and teach the staff members how to use Outlook’s scheduling feature.
- Send the staff to a one-day class on Outlook at Community College of Allegheny County (CCAC).
- Find online tutorials on Outlook’s scheduling feature.

Resources

Some suggested sources of information include:

- <http://www.carnegielibrary.org/subject/compinternet/edu.html> includes a list of companies and organizations in the Pittsburgh region that provide computer education.
- Carnegie Mellon University holds Computer Skills Workshops (CSW) for freshmen to learn basic computing skills. Other Carnegie Mellon University students teach these classes. PMC may be able to find one of these CSW instructors interested in teaching a class on Outlook’s scheduling feature. Potentially, these students could be under the Federal Work Study program and the cost to hire them would be subsidized by the government.
- Eric Barker is a Carnegie Mellon University student who was a CSW instructor. He has taught kids and adults computer skills in the past at a rate of \$15 per hour.

- Ms. McGloin already has CCAC's registration packet.
- Some online tutorials that include Outlook's scheduling tool are:
<http://www.rochester.k12.mn.us/tutorials/ol2k/ol2kpage6.htm>,
<http://ipr.iupui.edu/outlook/chapter3.html>, and
<http://tutorials.beginners.co.uk/read/query/Outlook%202000/id/292>.
 More can be found using a search engine.

Task 3: Improving tools used by PMC to collect, analyze, and manage its data

Work Task: The consulting task was to work with the staff and find out what programs they used to perform what task and if there were any problems with these small programs. These small programs were designed to save PMC time, but have instead resulted in staff members wasting time trying to get them to run correctly. Additionally, PMC would like to complete the transfer from the old database to the new database.

Outcome Evidence

On April 8, PMC decided to switch over completely to the newer database and began entering data solely into that database. This was a huge step because it showed that the CP and the Administrative Assistant were comfortable entering data and creating queries with the newer database. Most of the data off the old database had been transferred and data discrepancies within the newer database had been resolved. The key problems with the new database was solved by adding a new table was created in the database to keep track of data that didn't require keys. The Administrative Assistant and ED know how to create mailing lists with the database and Word's MailMerge function.

Initial Excel spreadsheet prototypes for use by the Trainer were created by the Assistant Director and reviewed by the ED and student consultant on March 11. The Trainer began using the spreadsheet within the next week. Data on the hours she spent doing specific tasks at specific training locations could be analyzed using the spreadsheet. In addition, the spreadsheet keeps track of number of clients served and the demographic breakdown by race and gender. PMC used this data to generate reports to the contracting agency and respective training locations. By April 1, the spreadsheets had been adapted for all staff members and went into use.

For the CAP program, PMC decided to purchase another license for MADtrack. A database was set up for the program and is currently being used.

Evidence of Expanded Capacity

With the new database, PMC was able to generate a mailing list of mediators who still needed training, which it used to send out training information. The new database should improve communication between PMC and its donors and mediators because mailing lists will be more specific and complete and can be generated more quickly.

With the new Excel spreadsheets, PMC will be able to better analyze where its staff spends the most time. Using the data collected by the Trainer (who began using the spreadsheets a few weeks before the rest of the staff), PMC has already been able to generate reports on the time the Trainer has spent at specific training locations. This data is also being given to those training

locations so they will know the breakdown of the Trainer's time with them. Other staff are also recording their time spent per task which will be used by the PMC administrators as a supervisory tool and for planning and billing purposes.

Sustainability

By the end of the consulting period, it was mainly the CP who was creating queries and teaching the Administrative Assistant. Both of them became quite skilled at creating queries. In order to sustain the changes made during the consulting period, the Administrative Assistant will need to be careful when entering data. Perhaps the largest hurdle PMC had in switching over to the newer database was because of data discrepancies that had occurred as a result of the Administrative Assistant having to type the same data multiple times.

The Assistant Director handled the creation of the Excel spreadsheets to document staff time. He was also in charge of adapting the spreadsheets for use by all the staff members. The sustainability of this seems very high because most of this task was already being done without much assistance from the student consultant.

B. Additional Recommendations

Outside of the scope of work, PMC is also recommended to:

1. Begin the practice of regularly backups of PMC's server
2. Create forms in Access to enter in data.

Begin the practice of regularly backups of PMC's Server

Currently PMC does not back up its server. They used to back up the server using a zip drive, but discontinued that because it was too difficult to maintain. The server has never crashed before so PMC has never lost any data due to lack of back up. However, the server has been down. Staff members whose data were saved on the server were unable to access their information for a while. For the time that the server was down, work was unable to be completed and staff members waited around idly. As a result, some have resorted to keeping everything on their computer hard drives. Many of the computers are beginning to run out of space to store things. Staff members need to feel comfortable with a backup system so that they will be willing to delete files on their own personal computers to create more working space for new documents.

Why

Regular backups of PMC's important data protects PMC against the possibility of a crash that would leave it completely lost. If a crash were to happen, PMC could end up losing all the contacts it has spent years making, important court data, and training materials that have taken years to develop. It would take a long time to recreate the information lost. A reliable backup system would ease the anxieties of the staff members who are afraid to lose their documents and therefore backup every file on their own hard drive. This is not a reliable backup because their own personal computers could crash at any time. At some point, the staff members should move older files off their personal computers and backup. Furthermore, using the small storage capacity of a personal computer to store files created and used many years ago limits the amount

of space the staff member will have available for documents currently being used and developed. PMC should find a reliable way to backup its data and slowly encourage its staff members to begin utilizing the server to back things up again. The whole purpose of the server is to have a centralized location for PMC's data. Backing up important data on the personal computers of staff members is not safe.

Steps

1. Begin backing up the server with the zip drive immediately.
2. Evaluate current situation with backups.
3. Decide when backups need to be made, how frequent backups would need to be made, what data would need to be backed up, who will be in charge of backing up.
4. Decide if using the zip drive is a good way.
5. If decided against zip drive, research into other ways to back up. (Professional back up service, tape drive, CDs, others?)
6. Purchase any additional service/equipment if necessary.
7. Request that all staff members use the server as their main backup for their data. Educate staff members so they won't have any anxiety about backing up onto the server. Ask them to move older files off their personal computers and onto the backups. (Files that probably won't be accessed and are just sitting on their hard drives.) Remind them to backup their files daily on the server.
8. Beginning backing up server.

Resources

Some suggested sources of information include:

- Technology Literacy Benchmarks for Nonprofit Organizations
 - Create an automated backup plan.
 - Designate someone who is responsible for conducting the backup.
 - If the network includes a server, be sure staff members store mission-critical documents on both their local computers and the server.
 - Make sure your network backup is on material that can be removed from your office, such as tape or zip disks. Keep backup tapes or disks off-site in a fireproof storage container.
 - Back up your data on a very regular basis. Daily backup is advised.
 - Test your backups before you need them!
- Remote Backup Free backup system quotes from multiple vendors
http://www.buyerzone.com/computers/backup-remote/qz_questions_7.jhtml?requestid=10899
- PCGuide – Care – Backups and Disaster Recovery
<http://www.pcguides.com/care/bu/>
- Norton Ghost is a professional application, used by many companies to back up their data. It can perform full-system backups regularly and has a friendly interface making backups simpler. The price is a bit high. More information can be found at http://www.symantec.com/sabu/ghost/ghost_personal/.

Create forms in Access to enter in data

PMC's data entry is handled mainly by the Administrative Assistant. Usually potential donors or mediators fill out the forms when they first come in. Sometimes, staff members will fill out the form, depending on what information is needed. The forms are passed onto the Administrative Assistant who then enters in the information into the databases. This system has been fairly effective for PMC. However, because the new database has multiple tables, data, which will comprise the key for the tables, must be entered multiple times, once on each table. This complicates data entry.

Why

In reviewing the database with the CP and the Administrative Assistant, it was found that information on one table did not necessarily match information on another table. For example, for the mailing list database, information regarding a new donor was added to the mailing list table. However, the new donor's information was never added to the donor's list. When mailings for thank you letters for donations were to be set out, the new donor would be missing off the list because he was never added to the donor's table. Furthermore, suppose a donor's address information, part of the key, on the mailing list table was entered as "Apartment 4", but on the donor table it was entered as "Apartment #4". Access would not recognize this to be the same and a query to combine the mailing list and donor information would not include this particular donor. Data must be entered exactly the same on each table. If, instead of entering the data on each table separately, the Administrative Assistant were to use Access' forms, the data for each table would be guaranteed to match. Furthermore, the Administrative Assistant would not need to enter in this data twice, nor would she have to go into two separate tables to enter in the data. All the data entry could be done by one form.

Steps

1. Evaluate the current data entry forms. Is it worth switching to an Access data entry form? The paper versions would still be around (because staff members would still need a way to get the Administrative Assistant the information). Decide on if the paper versions will need to be redesigned.
2. Design the forms; try to copy the formatting of the paper versions.
3. Begin using the forms.
4. Evaluate how well the forms have been used. Redesign forms if necessary.

Resources

Some suggested sources of information include:

- <http://databases.about.com/library/weekly/aa121000a.htm> is a webpage on how to create forms in Access.
- <http://www.fgcu.edu/support/office2000/access/forms.html> is another webpage that teaches you how to create forms.

About the consultant:

Crystal Hsiung is a junior in Computer Science with minors in Business Administration, Chinese, and Multimedia Production. She'd like to find some career where she'd be able to combine all three and do something fun.

APPENDIX A

How to edit the main page:

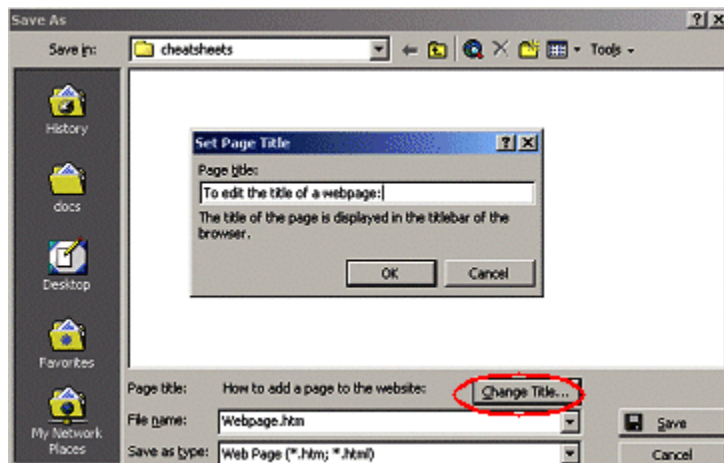
1. Browse to the webpage (<http://trfn.clpgh.org/pmc>)
2. In the URL window, add a forward slash (“/”) and “main.html”. This loads the right side of the main page.
3. Follow steps on how to edit a page on the website.



How to add a page to the website:

1. Browse to the webpage (<http://trfn.clpgh.org/pmc>)
2. Find a page with similar content. For example, a page with the same background image or a page with a similar title or format.
3. 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.
4. Once the page loads in the new window, click *File* and *Edit with Microsoft Word*
5. Make the necessary changes to the webpage.

Once all the changes have been made:

1. Click *File* and *Save As* to save the file.
 - a. **To change the title of the webpage:** click *Change Title*. In the *Set Page Title* box, type the title you want.



- b. Save it to the server (E:) and to the *webpage* directory. Do NOT keep the same name of the file.
2. Close Microsoft Word
 3. Open Internet Explorer  and browse to <ftp://username:password@trfn.clpgh.org/www>
 4. Open Windows Explorer  and browse to E:\webpage
 5. Click and drag the new file(s) from the hard drive (Windows Explorer) to the site (Internet Explorer)

6. Rename the new page on the site to contain the “l” at the end of the extension *i.e.* *staff.html*

How to remove a page from the website:

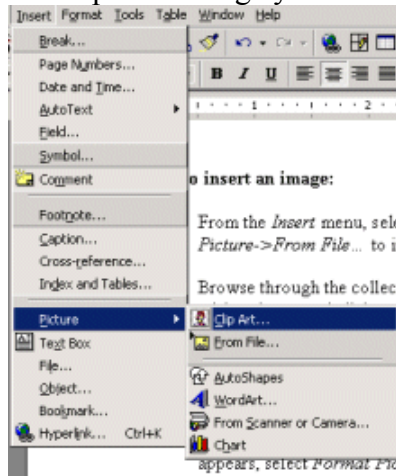
Note: Always remove the link to a page before deleting the page.
This prevents you from having a dead link on your website.

1. Browse to the webpage (<http://trfn.clpgh.org/pmc>)
2. Find the page with the link you would like to remove. This is the page you want to update.
3. 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.
4. Once the page loads in the new window, click *File* and *Edit with Microsoft Word*
5. Remove the link.
6. Follow the steps to upload the updated page to the server.
7. Delete the file you wanted to remove.

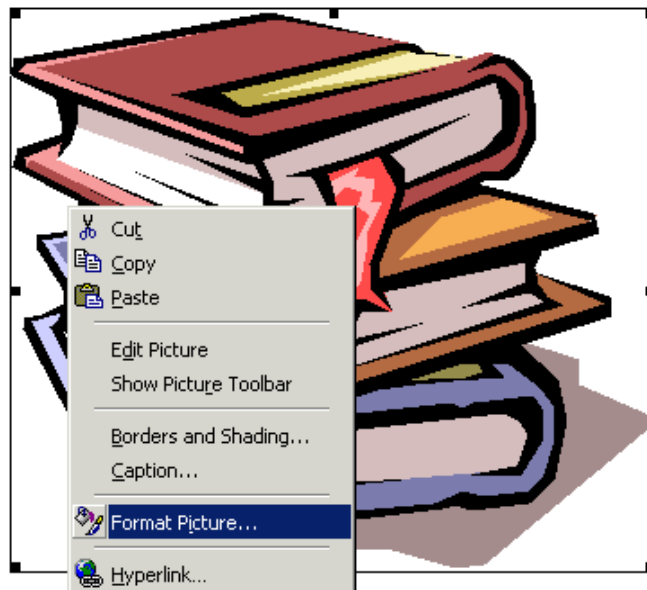
APPENDIX B

How to insert an image:

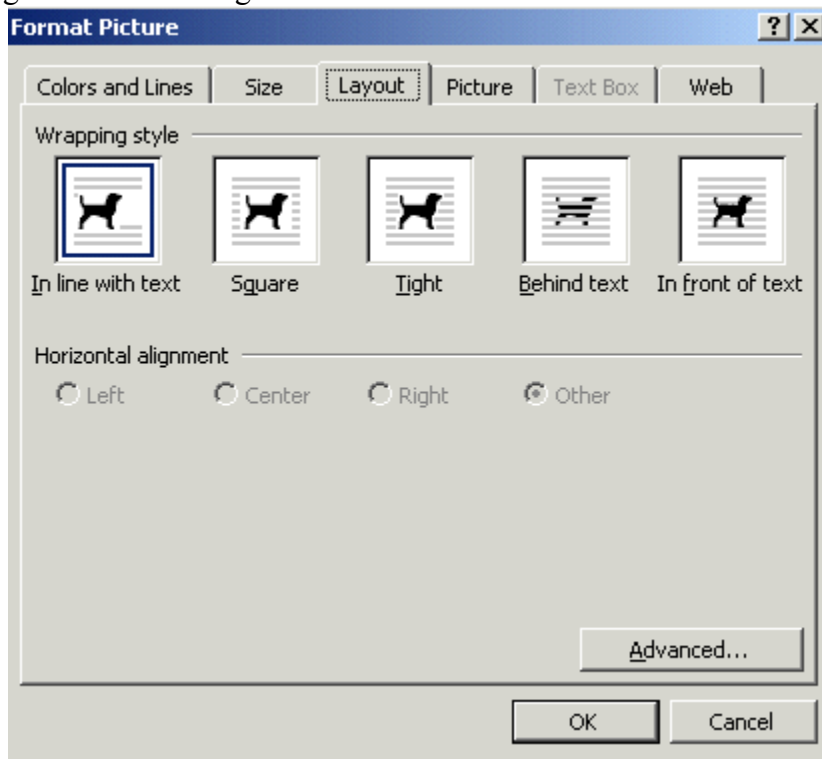
1. From the *Insert* menu, select *Picture->Clip Art...* to insert a ClipArt image. Select *Picture->From File...* to insert a specific image you have on saved on your hard drive.

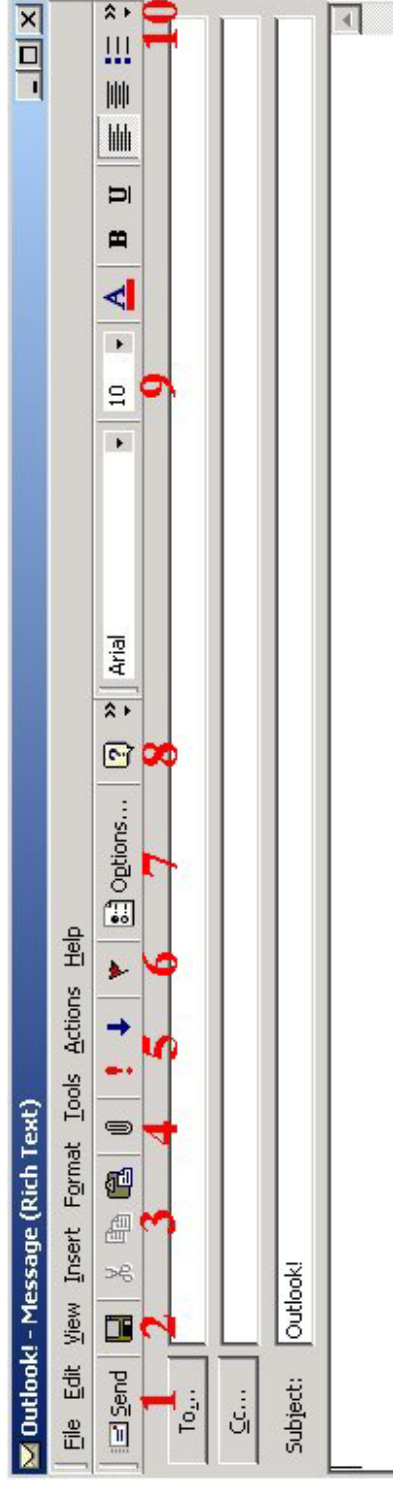


2. Browse through the collection of ClipArt or through your hard drive to find the file you wish to insert and click on it to chose it. The image should appear in your document.
3. Click on it to select it. A black line should appear around the image. Drag the image to the position you desire.
4. With the image still selected, chose its alignment- left, center, or right.
5. With the image still selected, you can resize the image by clicking on the little boxes and dragging it inward or outward.
6. With the image still selected, RIGHT CLICK on the image. In the popup menu that appears, select *Format Picture...*

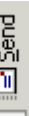


7. In the *Format Picture* menu box, select the *Layout* tab at the top. Select a wrapping style for text to go around the image.






1. Send

After you finish composing your email, click .

2. Save

If you want to save a draft of your email, click . Browse to the folder you want to save the email in and save under the desired name.

3. Cut, Copy, & Paste

Like the functions in Word, these allow you select certain text and either remove it (cut), copy it, or paste it to another location.

4. Attachment

If you want to attach a file, click . Browse to the file you want to attach and click on it.

5. Importance

If you want to mark this email as very important (high), click . If you want to mark this email with a low importance, click .

6. Flag for Followup

To mark an item to remind yourself that it needs to be followed up, click . Set the appropriate action you want to be reminded to do and the date by which it needs to be done and click *OK*.

7. Options

Click  for a menu of Message Options such as message importance or sensitivity, delivery or read receipt, setting delivery date and expiration dates, saving the sent message to a certain mailbox, etc.

8. Help



9. Font Type, Size, and Color, Decoration, Alignment, Bullets, Indentation

Use the options in the message body.

10. More

The appearance of this button on the side of the menubar means there might be additional functions being hidden (because the window size is too small for the whole bar to appear at once). Click on it to see what other options are available. If it says *Add or Remove Buttons*, this generally means you have all the available functions already visible.

APPENDIX D

How to add formulas to an Excel spreadsheet:

1. In the box you want the formula to be in, begin typing with an equal sign “=”.
2. Type the name of the function you would like to perform. Some common functions in Excel include:

Function	Example	Description
SUM	=SUM(A1:100)	finds the sum of cells A1 through A100
AVERAGE	=AVERAGE(B1:B10)	finds the average of cells B1 through B10
MAX	=MAX(C1:C100)	returns the highest number from cells C1 through C100
MIN	=MIN(D1:D100)	returns the lowest number from cells D1 through D100
SQRT	=SQRT(D10)	finds the square root of the value in cell D10
TODAY	=TODAY()	returns the current date (leave the parentheses empty)

3. Type a “(“ to begin telling Excel what boxes you want to perform the function on.
4. To tell Excel what box you want to perform the function on, you can either:
 - a. Calling the cell by just their column and row labels (such as "A1")
 - b. Click on the cell you want. Excel will automatically fill in its column and row labels.
5. Separate each box with either:
 - a. “,” – use this when you want to perform the function on certain boxes which may not be in a row or a column with each other. For example, =SUM(B1,C5,D9)
 - b. “:” – use this when you want to perform the function on certain boxes that ARE in a row or column with each other. For example, =SUM(B1:B10) will sum all the entries from B1 to B10. Similarly, =SUM(A1:D1) will sum all the entries across the 1st row.
6. Type a “)” to end telling Excel what boxes you want to perform the function on.
7. Hit enter. The results of the formula should be in the box.

Note: This is **relative referencing**. This means if you try to copy a formula using relative referencing from one cell to another, Excel does not create an exact copy of the formula. It will change cell addresses relative to the row and column they are moved to. For example, if a simple addition formula in cell C1 “=(A1+B1)” is copied to cell C2, the formula would change to “=(A2+B2)” to reflect the new row. To prevent this change, cells must be called by **absolute referencing** and this is accomplished by placing dollar signs “\$” within the cell addresses in the formula. Continuing the previous example, the formula in cell C1 would read “=(\$A\$1+\$B\$1)” if the value of cell C2 should be the sum of cells A1 and B1. Both the column and row of both cells are absolute and will not change when copied.

(Referenced from <http://www.fgcu.edu/support/office2000/excel/functions.html>)