Executive Summary

The consultant, Steven Maher, worked with community partner, Sylvia Nanji, at Addison Behavioral Care, Inc (ABC). Sylvia is the Chief Operation/Fiscal Officer at ABC; her email is snanjji@abcpgh.org. ABC’s phone number is (412) 661-6636. Their website, www.abcpgh.org, provides more contact information.

ABC’s mission is to provide the highest quality behavioral health services with a specialty in substance abuse prevention, intervention and treatment. They offer a wide variety of programs, such as the In Home Services program, the Outpatient Treatment program, support groups, and summer camps, to community members to support their mission.

The scope of work involved developing a billing database and updating the website. The consultant worked with Florence Amandong, the billing specialist, on developing a billing database for ABC to manage all of their information on clients, services offered, and counseling sessions. The intent of the database was to allow an easy way for this information to be gathered, analyzed, and reported. The consultant also worked with Florence, Sylvia, and Talissa on updating ABC’s website, www.abcpgh.org, to make it look more professional and provide more accurate information. The intent of the website was to better publicize ABC to its potential donors and clients.

Although the billing database and website are not completely finished, increased capacity within ABC was still achieved. Florence's capacity as a database developer has been increased. Florence knows how to create tables, queries, forms, and reports in Microsoft Access and has done so herself. Florence now knows how to export her old billing data from Microsoft Excel to the database. Once completed, this database will allow ABC to make its billing information more easily queried to provide statistical information for purposes of tax audits and general information. Before this database can be sustainable, it needs to be finished. Florence knows how to finish it, but just needs the time to do so. After its finished, this database will be sustainable as long as Florence doesn't leave ABC and her replacement does not know how to use Microsoft Access. If this does happen, it is recommended that the new billing specialist be trained to use Microsoft Access.

ABC’s capacity for updating their website has also increased. Florence, Sylvia, and Talissa all have successfully downloaded, edited, and uploaded a page on the website. Florence and Talissa have fixed some of the incorrect picture links and inserted the logo as a header on a few of the pages. Sylvia is aware of why she needs to update the content on the website and how to do it. In order for this outcome to be sustainable, all of the remaining pages need to be updated. Sylvia and Talissa will need to finish updating all of the program descriptions so that visitors do not become frustrated with the lack of information and give up. Florence will need to finish editing the pages to include the header on all of the pages and to update the links sidebar to be uniform. Once these updates are completed, either Sylvia, Florence, or Talissa will only need to make small updates about once a month. It is recommended that making these updates be added to one of their job descriptions to ensure they are done.

It has also been recommended that ABC creates a technology plan to help them expand the role...
that technology can play within their organization, since they are currently lacking any type of technology plan for the future. Recommendations related to finishing the billing database and the website can be found in the full report.

**The Consulting Situation**

**Organization**

Addison Behavioral Care (ABC) strives to empower all individuals to become stable, self-reliant people who have spiritual values and enjoy a sense of happiness, hope, and pride. Their mission is to provide the highest quality behavioral health services with a specialty in substance abuse prevention, intervention and treatment. ABC was founded in 1982 as a community-based nonprofit 501(c)(3). ABC provides multicultural substance abuse services to youth and their families. These services are provided through youth programming that promotes personal growth and development, family empowerment, and treatment services.

**Facilities**

ABC has two offices, one is in East Liberty and the other is in the Hill District. The East Liberty office handles most of the outpatient programs and administrative tasks with its 10,000 square feet of office space. This space is equally split between two separate offices on the second floor of an office building. Both offices share the same Verizon DSL Internet connection and are within 40 yards of one another. One side of the office is mainly for dealing with patients and the other one is mainly for administrative work. The Hill office is much smaller providing most of the youth programs and camps with only 400 square feet of space.

**Programs**

ABC offers a wide variety of programs to community members. For a more detailed description visit their website at [www.abcpgh.org](http://www.abcpgh.org). ABC’s programs include:

- The In Home Services Program - provides intense crisis intervention and follow up services to families within the area who were at imminent risk for removal of their children
- Daily Living Support
- Drug and Alcohol Prevention Activities
- The Outpatient Treatment Program - provides outpatient alcohol and other drug treatment services
- Educational Workshops/Seminars
- Family Intervention
- Individual and Family Counseling
- Referrals and Resources
- Respite Care Services – for those desiring alcohol or drug treatment or experiencing other family crisis including parental hospitalization for medical or psychiatric care, or incarceration of a parent and needing temporary childcare
- Summer Camp
- Support Group for Women
- The Co-Dependency Interventive Support Group - for women experiencing problems with co-dependency, needing additional support in substance abuse recovery or desiring support for differing reasons.
- Youth Development Groups
• New Image Program - a holistic culturally specific rites of passage program for youth aged 10 to 18
• Student Assistance Program - provides school based prevention and intervention student assistance services with them
• Youth on The Road to Success – enables youth to begin development of attitudes and behaviors which better enable their procurement, retention, and satisfaction of employment

The program that I worked with, the Outpatient Treatment Program, runs out of the East Liberty office. This program receives referrals for alcohol, drug, and family counseling from parole offices, other social service agencies, and walk-in clients. It treats approximately 300 clients a year for alcohol and other drug treatment.

Most of ABC’s funding for programs comes from grant writing through the federal government. Federal law requires each agency receiving federal funding to complete an audit every year. Other funding comes from private donors and organizations like the United Way.

Staff

ABC has 15 paid staff members, along with 2 youth work employees and 5 college interns. My Community Partner (CP), Sylvia Nanji, is the Chief Fiscal/Operations Officer. I also worked closely with ABC’s billing specialist, Florence Amandong. Florence and Sylvia split the billing work for the office, with Florence doing the most repetitive parts of it, including the auditing. According to Sylvia, Florence is only able to do 10% of the billing while Sylvia can do 90% of it. Florence is currently a full-time employee and is taking graduate classes at Carlow University for her Management & Technology masters degree. Florence and Sylvia are adept at using the technology they work with on a day-by-day basis, such as email, Microsoft Office, and webMD for doing some of the billing. I also worked with Talissa Burnett, who is in charge of Human Resources. Bernard Ott is the executive director of ABC. He has worked with interns to some extent with the website in the past, but is unsure how to do the work by himself. Talissa and Bernard are fairly competent with using Microsoft Office and email.

There are 3 main departments at the East Liberty office: Youth Services, In-Home Services, and Outpatient Treatment, each division has about 4-5 staff members on it. These staff members are not particularly adept at working with technology. However, they are not required to be for their jobs, since most are counselors. As Bernard puts it, “they chose to work for ABC to interact with people not with computers”. Their interpersonal skills are far better than their technical skills.

There is no IT staff on board at ABC, they currently have a contract with Time Business Solutions to manage all of their IT work. Time Business Solutions is under a $70 per month service contract where they monitor the server remotely and are responsible for keeping the local area network running. They are paid an hourly rate to help solve other technical problems, such as fixing a printer or clearing up a virus on a computer. There are two employees with Time Business Solutions who usually come in a few times a month to do technical support related work, such as updating anti-virus software on the desktops or reconfiguring the server.

Technical Environment

ABC at East Liberty has 17 desktop computers, one is running Microsoft Windows 2000 and 16
are running Microsoft Windows XP. All the computers share a Verizon DSL connection. All of them have Microsoft Office and are mainly used for administrative purposes. The staff has email accounts through their web provider Stargate. Besides checking email, the staff uses computers for word processing to create fliers, grant applications, reports, etc. Most of the staff members can do their counseling work without Internet access and use it mainly to surf the web as a leisure activity. Only Sylvia, Florence, and Bernard really need the Internet to do their work. Sylvia and Florence do online billing with webMD and all three of them need it to email other stakeholders, such as organizational partners, funders, and donors.

A small amount of technical training is available for employees through various conferences available in Pittsburgh. These conferences are either a day long or only a few hours at a time. They are aimed specifically at helping non-profits. ABC receives between $700 and $2,000 a year per staff member to pay for staff development at these conferences. Maybe one of the 20 hours of training each staff member receives at these conferences is devoted to technology, the rest of it is mainly devoted to other areas such as counseling, interpersonal, and communication training. Staff members are encouraged to attend free conferences at CCAC and other locations on Microsoft Word, Access, and Excel and a few of them do.

The server is password protected and only Bernard and Time Business Solutions know the password to log onto it. Time Business Solutions set up the server with Microsoft Windows Server 2003. The server assigns IP addresses to the other desktop machines and is the only gateway to their Verizon DSL connection. Time Business Solutions monitors the server remotely from their off site office. They also purchase new software, such as Symantec Anti-Virus, from Techsoup and install it for ABC.

ABC’s website, hosted by Stargate, is also password protected and no one knows the password to update it. It has been built from a variety of interns over the past few years. No staff member is familiar enough with website development to know how to update it, so it hasn’t been recently updated.

Technology Management

Bernard is the unofficial head of technology at ABC. The company has an informal hierarchy where if something breaks or doesn't work, the information eventually gets to Bernard and then he calls Time Business Solutions.

Time Business Solutions has been hired to manage the technology, since Bill their old technology person left the company a year ago. Time Business Solutions is sometimes slow to fix problems, because they moved out of the building six months ago. For example, it took two weeks for them to get in touch with Verizon and to fix their DSL connection. Time Business Solutions is responsible for installing new virus updates and software.

Employees save files to the server to back them up. However, Bernard, Florence, and Sylvia are the only ones to use this on a regular basis. There is no off-site back up.

Technology Planning

There is no official technology plan at ABC. There isn’t a technology committee or even anyone in charge of technology planning. The technology budget is whatever is left out of the
equipment maintenance budget of $10,000 a year. Almost all of this money goes to Time Business Solutions for their work. Time Business Solutions does make recommendations for new software, such as Symantec Anti-Virus, and installs it on the computers, so they are not strictly for technical support.

**Internal & External Communication**

Internal communication at ABC is done via phone and face-to-face conversation. The department staff has weekly meetings. All ABC employees from both offices meet once a month.

External Communication is done via phone, fax, and email. The website also acts as an external link to the rest of the world. Many of their clients are referred to them, so ABC does not do extensive publicity. They pass out fliers in the community and go to schools, but they mainly rely on their relationships in the community like with the parole officers, the United Way, and other rehabilitation centers to attract clients. Many of the donor contacts are communicated with through email.

**Information Management**

The staff has a shared drive on the server to share documents and files on. However most of the information is stored on the local computers and is not backed. The only backup data they have is on the server, a few compact discs and floppy disks. Various amounts of case data, donor data, and contact data that is electronic is stored on personal computers throughout the office. A lot of this is also stored in paper form in files. There is no single database or document with all the donor information. However, most of it is stored in emails in Bernard's Microsoft Outlook program, which only he has access to. Sylvia is afraid of security with her billing information and for that reason does not put any of her information on the server.

**Consulting Task 1: Develop a billing database**

**Problem**

ABC’s mission is to provide the highest quality behavioral health services, however an unorganized billing method is wasting them a considerable amount of both money and time. For example, Florence has to search through files of written documents from years past to find when a client's initial meeting was. She also has to refer to these paper documents during the billing process for client information such as social security number and address. This superfluous effort is taking resources away from their ability to offer the highest quality health services. They also are not able to quickly view client information to determine, etcetera. They cannot query the billing information making it difficult to tell:

- what services they have already offered him
- when was the last time he had a counseling session
- how much money is still unpaid
- how many people were in for a certain service

This is making it difficult to offer the highest quality behavioral health services, since the counselors don’t have all the information about a client available when he comes in for a visit and have to rely on personal memory.
Florence is responsible for the billing of the Outpatient Treatment program, which accounts for only 10% of the total billing ABC does. However, because the billing for the Outpatient Treatment program is so tedious it takes one full-time staff member to do it. Sylvia is able to do the other 90% of the billing by herself, because it requires much less paperwork and filing. Both Sylvia and Florence do some of their billing online through webMD and some of it through the mail. In order to keep track of all the billing information at ABC, Florence enters it into Microsoft Excel spreadsheets sorted by month. Florence has to look up a client's ID number by using webMD to search for the client. She then is able to tell if the client is billed through the Allegheny County Drug & Alcohol program or through the Community Care Behavioral Health Organization. Then she fills out the data onto either paper to send to the county or an electronic form to send it to webMD. A majority of the data she enters, such as the client name, the type of service, the cost for the service, is redundant.

**Opportunity**

The opportunity identified was to create a billing database using Microsoft Access with Florence, who already took a class in Microsoft Access at CCAC a few years ago, giving her more time to work on other tasks, like updating the website. Florence was very enthusiastic about working on the database, which was why she was chosen by Sylvia to work on developing it.

**Approach**

- Designed and drew out the Entity-Relational diagram and tables that represent the database with Florence
- Created the database using Microsoft Access
- Worked with Florence on creating the tables and relationships
- Worked with Florence on importing data from Microsoft Excel into the database
- Created queries with Florence that determine various things from billing information, such as how many units of service were received in a particular year
- Created forms with Florence for future data entry
- Created reports with Florence that generate the data from the queries
- Taught Sylvia how to use these forms and reports so she can use the database in the future

**Outcome**

Florence created the skeleton (tables, queries, forms, and reports) of a Microsoft Access database to manage the billing information at ABC with consultant assistance. The ER diagram of the database, showing the three major tables, Client, ClientService, and ServiceType, along with a few lookup tables can be found in Appendix A. The Client table holds address and personal information about the clients. The ClientService table stores the information on each service a customer has, such as John Smith had a Group Therapy Session on 7-5-2005. The ServiceType table holds information about the services that ABC's Outpatient Treatment program offers, such as the service name, code, price, and number of units. This table can be found in Appendix B. A form created by Florence for inserting a new client can be found in Appendix C. The current state of the database provides concrete evidence of this outcome:

- Florence was involved in the development of the database
- She helped create the ER diagram for the database
- She created 5 tables, 3 queries, 2 reports, and 1 form using the keyboard and mouse herself; I offered advice, asked her questions to make sure she understood, and corrected
her mistakes

• She was able to create a table, a query, and a report during her own time
• She made fewer mistakes as time went on; she showed more comfort with Microsoft Access with each new table, query, form, or report she created
• She asked many questions and created a few pages of documentation for her to recreate the processes in the future

Florence exported some of the billing data from Microsoft Excel into the database

• The consultant demonstrated how to format her Microsoft Excel spreadsheets so that Microsoft Access would accept them and she carried out the process herself

Over 100 records were created by Florence for Clients, Client Services, and Services

• All of the current Services' data such as service names, codes, time durations, and prices were entered into the Services table.
  • Florence knows how to add, delete, and update new records if prices or other information changes.
• All of the Clients' Services from July 2005 were imported after formatting the Microsoft Excel spreadsheet to be compatible with the Microsoft Access table. This data contains the records for each client's service, linking the Client table with the Services table
• Florence entered about 75 Clients' information into the Client table from various sources, such as Microsoft Excel and handwritten files

The current state is an improvement over the past state without a billing database. The past state included:

• Typing up repetitive data into an Microsoft Excel spreadsheet and manually counting the records for information
• Data filled with typos from Microsoft Excel not verifying data types and data fields with existing ones
• Data disorganized in paper form in file folders throughout the office

Florence was not be able to get all of the billing data into the database as it would require many hours of data formatting and entry. She also was not able to finish all of the queries and reports necessary for gathering the information that ABC requires. This suggests capacity “yet to be reached”, because not all of the current clients, queries, and reports are in the database. If Florence needs any of this information she will be in trouble and have to resort to old methods.

Florence's capacity has been increased as a database developer, as she is now more familiar and comfortable with creating one. She understands the steps necessary to build one. Florence's increased capacity as a database developer may lead to creating other databases which help ABC accomplish its mission of providing the highest quality behavioral health services.

The most important sustainability risk is that if Florence is not able to finish getting all the data into the database within 6 months she may just give up on the whole project and return to her old methods. There is also a risk that this outcome is not sustainable if Florence decides to quit ABC and her replacement is unfamiliar with Microsoft Access. However, it has been suggested that when Sylvia hires a new billing specialist she looks for someone with Microsoft Access experience or has that person trained to work with Microsoft Access. This is to prevent them from having to start all over again.
Florence has demonstrated that the database is sustainable in that she knows how to create new tables, queries, forms, and reports. It is difficult to predict all of the reports and queries that Florence will need to generate in the future, but with a working knowledge of Microsoft Access she should be able to create them. Florence has saved the database on the server and her desktop computer so she can make backups if the data on one device is destroyed or erased. Florence also has access to a CD burner on her laptop and plans on making another backup copy of it. She plans on backing up her data on the server at the end of every day and onto a CD every month to prevent it from being corrupted or destroyed.

This outcome has supported their vision that ABC can do more with their current employees. Sylvia is looking at making Florence's job as a billing specialist easier so that Florence can devote more of her time to updating the website and doing other technology-related tasks.

**Recommendation**

**Rationale**

Although the billing database was not completely finished, it is still worth pursuing. Working 3 hours per week for 10 weeks was simply not enough time to import all of the old billing data and create all of the queries, forms, and reports needed. Florence was able to set up all of the tables, and create at least one query, report, and form. Florence has shown that she is capable of developing the database by creating some of these on her own, but simply does not have the time to do all of them. Every week she tells me how she would love to work on creating the database, but with all her other work she doesn't have time to do it.

Once finished, this database will help Florence do her billing work more efficiently and give her more free time to work on other things such as the website. According to Florence, some examples of useful queries and reports that could be generated from the database are all the outstanding payments, all of the services a particular patient has had, the totals for each service for the year, and the most popular service for the year. Bernard is also interested in patients' zip code distribution, age distribution, completion rates, drugs of choice, gender distribution, and race distribution, which could be determined from database queries and reports. Without the database, Florence would have to manually count up all of this information from the data, wasting hours of time, but she could gather this information within minutes from the database. These queries and reports would help ABC achieve their mission of providing the highest quality behavioral health services by making more efficient use of their resources (people and gathered information).

Although Florence is more comfortable now working with Microsoft Access then she was before, she may become intimidated to develop the database on her own, if she is away from Microsoft Access for a few weeks. A refresher course from Robert Morris University or another local university would help her gain the confidence she needs to finish the database. Bernard mentioned that she could possibly be trained by Time Technical. Enrolling in one of these courses will provide more examples for Florence to learn from, so that she is more comfortable working with Microsoft Access by herself.

Another recommendation is that using Microsoft Access should become part of the billing specialist's job description to ensure that the database is sustainable. If a new candidate does not know MS Access, he or she could be trained at a local college in how to do so before starting. This is to prevent all the work that has been done with the database from being lost.
Steps

1. Have Florence attend the 5-day seminar on Microsoft Access held by Robert Morris University in the early spring to give her more confidence with database development.
   - She will need to sign up for this course sometime in the next month
2. Make sure that Florence has the time to work on completing the billing database.
   - It will take her about a month of full-time work or 3 months of part-time work; roughly 160 total hours.
3. Afterwards, Florence can focus more on other forms of technology for ABC as her billing role will take less time
   - Her job description could be expanded to other areas, like managing technology and updating the website.

Resources

- The Microsoft Access seminars held by Robert Morris University's Bayer Center for Non-Profit Management.
- Their website is www.rmu.edu/bcnm
- Their contact information can be found at http://www.rmu.edu/OnTheMove/findoutmore.open_page?ipage=547.
- Check out the current courses within the next month to see the Microsoft Access courses available during the spring.
- For more information contact, Jeffrey J. Forster at forster@rmu.edu or (412) 227-6812.
- The Microsoft Access forum for technical support at http://www.access-programmers.co.uk/forums/. Florence may search it for answers to questions she cannot find in her Microsoft Access Bible. She can also post her questions to it for answers.
- An online Microsoft Access 2000 tutorial can be found at http://www.fgcu.edu/support/office2000/access/. This site has screen shots of how to create forms, queries, reports, etc. if Florence can't find the instructions in her Microsoft Access Bible.
  - This page can be used as another resource to search error messages or for information on how to implement new functionality.

Consulting Task 2: Develop a simple website for stakeholders to view

Problem

ABC’s mission is to provide the highest quality behavioral health services, however without proper funding it is difficult to provide these services. According to Bernard, ABC’s current and potential funders and also their referring agencies often look at or have asked to look at their website for information about what services ABC offers before donating. An outdated website with poor functionality and usability does not make a good impression on these potential donors and Bernard is embarrassed to let some of the donors look at. The website was so difficult to navigate and read that Bernard felt they were missing out on many new clients. No employee at ABC knew how to update the current website to make it better.

Opportunity

The opportunity identified was to update the current website for the donors and referrers to use
as a resource for information. All of the staff had access to Microsoft FrontPage and it had been used to develop past websites, so it was used again. Along with updating the website, training in updating the website was just as important.

**Approach**

- Discussed the current website with Florence, Talissa, and Sylvia
- Updated the website pages in Microsoft FrontPage with Florence, Talissa, and Sylvia
- Worked with Florence on fixing pictures
- Showed Florence, Sylvia, and Talissa how to upload new program descriptions and information to the website
- Had Florence, Sylvia, and Talissa take turns between using the keyboard and mouse and writing documentation

**Outcome**

The consultant demonstrated how to update the website to Sylvia, Florence, and Talissa. Florence, Sylvia, and Talissa have updated a few of the pages with a new header, links sidebar, and program information and plan on continuing this process with the other pages. They have a list of all the web pages and their directories that need to be updated. They also have participated in removing or renaming missing images, changing colors, editing tables, and inserting pictures. They know how to and have documented the process of transferring and updating files via FTP (File Transfer Protocol). Florence, Sylvia, and Talissa have each updated a section of a page on their own. Florence has completely updated one page by herself (www.abcpgh.org/Programs/New Image.htm) and is looking forward to duplicating the process with the other pages. Sylvia and Talissa have edited the program information on a few of the links on their own and will continue updating them.

The current state of the website provides concrete evidence of this outcome:

- More professional look and feel on several pages, including the home page, the Programs page, and the Student Assistance program page
- No more scrolling marquee links, sample pictures, out of place color schemes, backgrounds, and random design
- Header loads with a plain links sidebar appearing on the left
- A screenshot of the updated Programs page can be found in Appendix D
- A few of the program descriptions are shorter yet more informative
  - Target length is 1 paragraph or 2 for each
  - Provide more details about the contact person of each program and the program's specifics (such as cost and time)
- The website directory on the FTP server is more organized
  - Images are in the images folder
  - Unused pages and images have been removed

The current state is a vast improvement on the state of the website before the consulting partnership began. The past state included:

- A disorganized look and feel
- There were missing images on almost every page
- Many links didn't work
- The link sidebar changed on every page
Many different types of backgrounds and layouts
It appeared very unprofessional
Many fake sample pictures and clip-art
Scrolling text on various pages for no apparent reason
Program descriptions didn't provide any real specifics, such as time, location, cost, or contact information, on the program and took 10 minutes to read
Disorganized website directory on FTP server had hundreds of unused files and images

Florence is still working on updating the layout of all the pages as she has not had the time to finish doing all of the pages. All of the program descriptions were not updated, since Sylvia and Talissa were very busy and did not have the time to redo all of them. This suggests capacity “yet to be reached”, because even with the website being easy to navigate visitors will not use it if the content is difficult to read. Visitors may become frustrated with the lack of information and give up.

For now, ABC has the increased capacity to update and maintain its current website without being dependent on interns to do it. For the first time, they are able to update it themselves. ABC's current knowledge of website design will help them to meet their mission of providing the highest quality behavioral health services by allowing them to publicize their name and programs to potential funders and clients.

The biggest risk to this outcome not being sustainable is if the website is never completely updated and ABC just gives up on the whole project. Once finished, this outcome is expected to be sustainable for at least the next 18 months, since 3 staff members at ABC know how to update the website to keep the information on it current. Florence, Sylvia, and Talissa all have updated a page on their own and are familiar with the process. In addition, they each have documented the process so that they can recreate it in the future. Florence, Sylvia, or Talissa will have to update it maybe once a month to make sure that it is current. The risks of it not being sustainable are if all 3 staff members leave ABC without training a new employee (not likely) or if none of the staff members update it, because they feel someone else will do it or don't take the time to do it (more likely). One suggestion is that updating the website becomes part of one person's job description.

This outcome has supported their vision that ABC can reach out to more clients than they currently are and that if they let referring agencies know more about them they will get more referrals. Sylvia has realized that the website should have more specifics on the dates, times, costs, and dynamics of the programs ABC offers, instead of just a long, vague description about it to increase potential interest in ABC's programs. Therefore, she is working hard to finish updating these program descriptions. The more people they are serving the more they are meeting their mission of offering the highest quality behavioral health services.

This website also supports their vision of raising more funds for ABC, which is constantly engaged in fund raising. Bernard believes the website will give potential donors more of a reason to donate to ABC.

**Suggestion** (This is more of a suggestion than a full developed recommendation)

**Rationale**
To further increase the capacity of website development, ABC should acquire more resources to learn more about HTML and web design. Although a substantial amount of material was covered
during the weekly meetings, additional knowledge could help when troubleshooting and adding new pages and functionality. It would also be helpful to have more employee input from within ABC on the website. Online fundraising could also be incorporated into the website by creating a link to www.justgive.org. Justgive.org provides a free piece of software for non-profits to receive online donations in the form of either Paypal or credit card. All the non-profit has to do is set up the link following the directions on the justgive.org website.

Once the consultant leaves, ABC is left without a resource to help it troubleshoot any problems and add new functionality. Although, Florence, Sylvia, and Talissa can update the website they are not as comfortable with adding new functionality and troubleshooting. When a problem occurs, hours of time could be saved with the right resources and a better understanding of how websites work. The Microsoft Access Bible has been helpful to Florence when creating forms and reports on her own.

Additional knowledge in a more advanced web design tool can increase the level of functionality that ABC has on its website. If ABC decides they would like to do more than list information on their website, like create forms or list information from a database, it will be very difficult and time consuming to do with Microsoft Frontpage. Macromedia Dreamweaver is a more advanced piece of software for adding this new software. It is the most popular piece of software amongst Carnegie Mellon Information Systems students for creating websites.

More employees at ABC should have input into the program descriptions and pictures on the ABC website. Specific program employees would know best what to put on the website for their program and if they are involved in the process they will be more inclined to tell people about the website.

One of the reasons for updating the website was, according to Bernard, to get more donations. By providing a convenient link on the website, it gives people an opportunity to donate directly to ABC without having to call or donate through the United Way.

Steps
- Create a website committee (Florence, Sylvia, and Talissa would suffice for this since they know how to update it) in charge of gathering input from employees at ABC
- Departments can submit photographs and descriptions to the committee to be put up on the website
- Departments can offer suggestions to the committee for more information that should be on the website
- Create online fundraising functionality on the website by linking it to justgive.org. Directions for how to do this can be found at http://www.justgive.org/html/nonprofits/NonProfit.html.
- Make sure that the website is current and up to date, check it at least once a week for accuracy
- Purchase one or more books on website development, it is recommended that one is purchased for each piece of website development used (currently only Microsoft FrontPage is used and the details of this book are found below).
- Take courses on HTML and web design available in the Pittsburgh area, if more comfort with technology is necessary.
- For more substantial changes and functionality, acquire a more advanced tool, such as Macromedia Dreamweaver, as well as documentation for that tool.

Resources
- Below are resources that can be helpful in accomplishing the previous steps:
  - Much of the information for this recommendation was pulled from a peer consultant's, Guillaume Pignol's, report for the American Association of University Women (AAUW), since ABC has similar needs in terms of website development as the AAUW does. Please refer to
An HTML tutorial website that provides examples and allows the user to practice coding HTML while viewing the results in real time can be found at: [http://www.w3schools.com/html/html_intro.asp](http://www.w3schools.com/html/html_intro.asp).


The Bayer Center for Non-Profit Management at Robert Morris University offers website development courses. Courses are done in one time sessions which cost $50. Customized sessions can also be organized for groups of more than 6 people. Refer to [www.rmu.edu/BCNM](http://www.rmu.edu/BCNM) and Current Courses for more information. For more information, contact Sallie E. Wormer at [wormer@rmu.edu](mailto:wormer@rmu.edu) or at (412) 227-6823.

Macromedia Dreamweaver can be purchased from TechSoup for $35, which is over $350 off its normal cost. Only one unit per year can be purchased by non-profits. The software can be ordered from [http://www.techsoup.org/stock/default.asp?cg=header&sg=stock&visit=1](http://www.techsoup.org/stock/default.asp?cg=header&sg=stock&visit=1) by searching for “Dreamweaver”.

### Additional Recommendations

#### Recommendation #1: Create a Technology Plan

**Source**

The technology plan was not created during the consulting partnership, because of time constraints for working with Sylvia and Bernard, the executives at ABC, to create one. It was the first problem to be identified during the initial assessment, because they were lacking one.

**Rationale**

ABC’s current attitude towards technology does not allow for them to make any improvements or stay current with the technology available to them. As a result, many of the machines are outdated and staff is unsure on how to use technology to improve their work. To ensure that ABC can offer the highest quality behavioral health services, according to their mission, I recommend that they embrace a new technology plan.

ABC should develop a more comprehensive technology plan to expand the role that technology could play within their organization. Technology can help address many of ABC’s current problems, such as being understaffed, not having enough publicity and funding. Bernard has agreed that technology can help address these problems by increasing worker efficiency through time savings and making it easier, in both time saved and money saved, to raise funds and publicity. In order to have the most efficient use and greatest return on investment from technology, ABC should have a technology plan. Without a plan, ABC will continue in its current state of only fixing broken software and not really using technology as a tool to achieve their mission. This plan should include technology education for the staff, a budget for technology, and a board member in charge of technology. The plan should also outline the technology goals of ABC for the next three years, including new software and hardware.
Steps
The following are my recommendations for sections of the plan:

- Elect a committee to be in charge of creating the plan (I think Sylvia, Florence, and Bernard would be a good fit for this, though someone from the board of directors or a volunteer from the community could also be helpful)
  - Schedule weekly meetings to create the plan
  - Schedule monthly meetings to discuss the progress of the plan
- Name a Head of Technology in charge of ABC's technology (I think with Florence's background and interests she would be a strong candidate for this)
- Identify Goals and Objectives for the plan
  - Goal should be to better accomplish their mission of providing the highest quality behavioral health services
  - Objective should be to find ways to use technology to meet their goal
- Perform an assessment and inventory of current technology at ABC (this can be found in the Context Analysis Section of this report)
  - There is an online form available for completing this at http://www.nyfa.org/files_uploaded/TechInventoryAssess.pdf
- Perform research on what other organizations are doing and identify needs
  - Sources for this information are Tech Soup's news section at http://techsoup.com/news/index.cfm?cg=header&sg=news, board members and volunteers with expertise in technology, and vendors and colleagues in other nonprofit organizations
- Decide on new software and hardware for the computers. The following are my recommendations:
  - Install more RAM (random access memory) on slower machines, increasing to 512 MB for $30 will greatly increase computer response time
  - Install the Google Toolbar on everyone's computer (Florence and Talissa know how to do this). Employees at ABC are getting tons of popups and it is slowing down their productivity. A five-minute download/install would prevent pop-ups and give them an easy way to search.
- Create a technology training schedule for employees
  - The Bayer Center for Non-Profit Management at Robert Morris University offers classes and seminars on various technology topics for relatively cheap prices.
  - Have the head of technology host a training session for employees on how to save files to the server, backup files, and other topics of concern
  - Publicize CCAC's technology courses to staff and make recommendations based on their need
- Establish a formal hierarchy within the office for technology-related questions, first ask Bernard who then asks Time Business Solutions if he can't answer
- Re-evaluate the effectiveness of the relationship with Time Business Solutions and possibly look to other organizations for tech support.
  - Are they worth the money?
  - Do they meet the needs of ABC?
  - Is there someone else in the community or within ABC that could replace them?
- Decide on how other forms of technology could be used and taught within ABC. The following are my recommendations:
  - Compile a digital list of all of the donors and other contact information and place it on the server for everyone at ABC to reference
• Develop an action plan with a time line
  • Keep this plan under two years, as technology quickly changes
• Evaluate the technology plan
  • Does it make sense?
  • Will it achieve the goals and objectives?
• Identify costs and budgets
  • Estimate how much it will cost in terms of both employee time and monetary amounts
• Use the plan and keep it current

Resources
For reference on technology plans, please see the following article on how technology saved Arts/Boston [http://www.techsoup.org/howto/yourstories/techplan/page1458.cfm](http://www.techsoup.org/howto/yourstories/techplan/page1458.cfm) Arts/Boston had a similar technical environment to what ABC has now. A technology plan was able to save them from disaster, by providing a budget and a timeline for new technology to be implemented. This article describes how a technology plan is more about planning than technology. Their final technology plan serves as a model for ABC's technology plan and can be read at [http://spiderschool.org/workshops/kit_buffalo_01/artsboston/index.html](http://spiderschool.org/workshops/kit_buffalo_01/artsboston/index.html).

Refer to the Minnesota Department of Education John See's “Developing Effective Technology Plans” for more guidelines at [http://www.nctp.com/john.see.html](http://www.nctp.com/john.see.html). The main points being keep it short term (1 year at a time), make the plan outcome-based not input-based, and include technology more than just computers.

A template for a technology plan can be found at [http://statelibrary.dcr.state.nc.us/hottopic/techplan/tplan04.doc](http://statelibrary.dcr.state.nc.us/hottopic/techplan/tplan04.doc). This will need only slight modifications as it deals with libraries, but just by replacing the word “library” with “ABC” the document it is an excellent place to start.

After the technology plan has been created, it should be evaluated using the questions at [http://www.nsba.org/sbot/toolkit/atp.html](http://www.nsba.org/sbot/toolkit/atp.html).

About the Consultant:
Steven Maher is a Junior at Carnegie Mellon University studying Information Systems and minoring in Business Administration. He aspires to continue doing consulting work, especially related to business strategy or technology. He loves to travel and is looking to work internationally.
Appendix B

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Appendix D

PROGRAMS

Youth Services
- New Image Program
- Student Assistance Program
- Summer Camp
- Youth on The Road to Success

Adult and Family Services
- Family Empowerment Program
- In Home Services Program
- Respite Care Networks

Other Services