

New Pennley Place

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1. Summary

The Community Builders mission is to better the lives of people living in the neighborhoods Community Builders develop. One way to attain this mission is to provide access to technological resources for the residents. Giving an opportunity for people of all ages, who typically lack access to computers, encourages them to learn, explore, and develop skills and self-confidence. Having technology skills and being able to use computers with confidence tremendously empowers people.

Barbra Moore is the resident service manager at New Pennley Place, a site being developed by the Community Builders. Her vision and activism has led her to want to provide a community computer cluster for the residence at New Pennley. As a consultant working with Barbra, I wanted to give her some skills that ultimately will make the community computer cluster a success and better the lives of the residents of New Pennley Place. There are several things we concentrated on. First, we created a database to store information about the residents. This enables Barbra to do statistical computations, write reports easier and faster, create better budget proposals, efficiently keep track of contacts with the residents and general information, and make better decisions. Second, we concentrated on improving Barbra's skills at using her computer. She now has more knowledge on how her computer works and how to manage it. Ultimately, this makes her able to make wise and informed purchasing decisions for cluster's computers and be able to do technical training. Third, I encouraged Barbra to make use of the Internet. The Internet can provide her with ideas on how to develop, finance, and manage technology. She can find many useful resources to help her job on the Internet. Visiting CMU campus clusters opened to Barbra the world of web pages and how much information they provide. Last, we worked on collaboration with other organizations so Barbra can exchange ideas and strategies for creating and developing her center. Visiting centers like Hill House, gave us useful information on designing and implementing programs, hiring staff, developing funds, establishing regular schedule hours for center activities, etc.

The next few sections of this report summarize the situation and some of the problems New Pennley and Barbra face. They also describe what Barbra and I accomplished together and some recommendations I have for Barbra.

2. Situational Analysis

ORGANIZATION

The Community Builders Inc. (TCB) is a non-profit, real estate service provider. There are two main parts to the company: property management and human services. Property management consists of builders and managers of affordable quality housing. Human services work on strengthening the community and developing neighborhoods in the areas where TCB manages buildings. People that live in their buildings are usually low-income families and many are not self-sufficient. TCB's goals are to strengthen educational and economic opportunities for

the people living in TCB communities. They help poor families achieve economic independence. The unique blend of these two parts of the company transform neighborhoods into safe and healthy communities whose residents are likely to grow and prosper. The mission of TCB is to build and sustain strong communities where people of all incomes can achieve their full potential.

TCB's headquarters are in Boston. The company started in 1964. It has around 300 employees. It has offices in about 12 neighborhoods (Boston, New Haven, Pittsburgh, Springfield, MA, Louisville, KY, Philadelphia, and Providence.) One of the difficulties it faces is finding funds required run programs needed to improve communities. The funding is received from federal, state and local funding sources including private and public debt, grants, public housing funds, and programs for first-time home buyers.

TCB came to East Liberty neighborhood a few years ago. A building with about 200 apartments was poorly managed and maintained and thus became "distress housing". A lot of residents moved into the building across the street (New Pennley Place, an apartment complex with 160 units). Most of residents are low-income families, senior citizens, people with disabilities, and people with mental health problems. Today, TCB is in the process of rebuilding the broken down building. This new building will have Section 8 apartments (government subsidized), 202 (for senior citizens), low-income, and market rate apartments (104 new units).

FACILITIES

New Pennley place is one apartment building of 4-5 floors (depending on tower). It has around 160 units (apartments). Barbara works in an office by herself on the first floor of the building. There are two desks and a small conference area. There is also a table with a computer. The property management office is next door. After giving a survey to the residents, Barbara found out that many want to learn how to use computers. An in-house computer cluster would be a great opportunity for New Pennley Place. Other TCB human service offices are planning to set up computer clusters in their buildings. Property management allocated a space (an apartment on the first floor) in which a computer cluster can be housed.

STAFF

Barbra Moore works for Human Services department of Community Builders Inc. New Penney Place location of Barbra's current office. Barbara Moore is the Resident Service Manager. There are also three people working in the property management office next door. Barbara works with the residents to help them with everyday needs like education, health, immediate help or referral. For example a person might be placed in the hospital and has no way to pay for it. Or a person has a job but has nowhere to leave their child. Or a person may lack food. Some people ask for help themselves. Some she finds about by speaking with property management about who is behind in rent or who went to the hospital. She also helps residents become more self-sufficient. Another part of her job is looking for funding since TCB is non-profit. She has worked at New Pennley Place office since June 1998.

Her everyday tasks involving the computer involve producing documents, labels, signs, and letters. Barbara learned to use the computer in 1985. She has a computer at home. She took some basic computer skills at a community college. She was taught Microsoft office applications (Word and Excel). She is learning how to use Access right now by herself. She has no one to ask questions if she runs into problems but she refers to a book on Access sometimes if

she gets stuck. If the cluster is going to be set up Barbara needs to learn how to install software and how to deal with hardware. She also might want to learn to use the Internet to improve communication with other offices and also increase ability to search for information on the Internet that could be useful to her job and to help residents find resources.

PROGRAM

Barbara runs a few programs to satisfy needs of the residents. For example, on-site day care for working parents so they can care and provide for children. Elderly and disabled residents need help finding health care and other services so they can live better and more independent lives; some just need counseling. At times Barbara helps residents develop skills and self-confidence so they can become more self-sufficient. She directs them to places where they can receive adult education or gives them job referrals. She also provides a newsletter for all the residents (a community strengthener). In general, she assists with any other needs residents might have.

One of the problems Barbara faces is the lack of a database with information about all the residents. The information she has right now is in the form of written surveys given out to all the residents by her a few months ago. Only about 60 (out of 160) have filled out the survey. A database would be useful because Barbara could find out how many people are unemployed, how many need training and what kind, how many have kids, etc. This information is vital for when she has to look for funding. Moreover, if this information was more readily available it could be useful to set up counseling, substance abuse assistance, classes/training, job fairs, and after school programs. Another possibility is to create a database with information about services in the neighborhood that residents could access on need bases.

A computer cluster will be a good addition to the program. In the cluster classes can be taught where residents can develop computer skills through which they can increase their income. The computers can be configured with resume, educational, and children programs. Coming to the cluster and learning how to use a computers with others will help build the community.

TECHNICAL ENVIRONMENT

There is one Pentium machine that has 16 MB RAM, 1Gbyte hard-drive, and Windows 95. It has two floppy drives and a CD-ROM. Some of the software on it is Corel office and Microsoft office. There is also a DeskJet color printer. There is no Internet connection. The hard-drive is almost full and the computer runs slow. Some possibilities are upgrading. Also, she can get an external modem or if one of the incoming computers has an internal modem, she can switch to using that computer. There are two phone lines in the office. Barbra might get another donation of computers for the computer lab. It is unknown what type they will, their condition, or what software can be run on them.

TECHNOLOGY MANAGEMENT

If a computer gets broken there is an off-site maintenance person hired by the company. So far he has never been contacted since he installed and set up the currently used computer. The funding wouldn't allow for any additional maintenance person or technician. Barbara will have to learn how to fix some every day problems. Also it would be too expensive to hire some one to help/teach the residents once cluster is set up so a possibility is to train one of the residents to maintain the cluster and help other residents.

3. Problems and Possibilities

RESIDENTIAL DATABASE

Currently, Barbra has no system of keeping information about the residents. She sent out some surveys to the residents with information that her manager needs to know but not all were returned. The questions on the survey relate to demographic, income, education, employment, and children information. The first priority was to compile this information she received and report it to her manager. I helped Barbra come up with a format to present the questions and statistics of the answers. We used Excel to create this report and Barbra for the first time created pie and bar charts to enhance her report.

Barbra also needs an easily accessible, updateable, efficient way to store the information she obtained or will obtain. This is needed to store data about contacts she makes with each resident that will be useful in her reports. It will also be very useful for funding purposes. Many companies who make donations request information about the families and residents.

The best way for Barbra to keep track of all the information is with a database. She has Microsoft Access currently on her computer and has started learning how to use it. We first sat down and discussed what are the main ways she will need to use the information about the residents. We created a list of tables and relationship for those tables. Using Access we set up the tables and fields depending on what information they will store. The next few steps included data entry, practice with writing queries, forms, and reports. Writing queries is a fairly complex process and I guided Barbra in writing a few simple ones. An important part about teaching Barbra how to design a database was to help her understand how relationships work between table. Barbra had to see why each individual has a unique ID but a few individuals could share a family ID that can be used to look up data on their family in the Family table. I also helped her learn about fields and in what form data should be stored in those fields. For example, the age field should be changed to date of birth.

Once the database is completed and data has been entered, Barbra can easily access any information she needs about a particular resident. Her database has three tables. The first, is a table that list all the individual residents with demographic information like name, age, marital status, income, education level, and a family ID. The second, is a family table that has info about number of children, total annual income, and number of bedrooms in the apartment. The third table holds information about each contact Barbra makes with a resident. It stores how Barbra helped or whom she referred the resident to. Using queries Barbra will also know what kind of programs she needs to run based on how many residents are currently unemployed, or how many after school programs are needed based on number of families with children. She will be able to answer question from funding agencies with more detail and she will be able to run her programs more efficiently.

Barbra is very excited about this project. She is learning access fairly quickly and is learning what it takes to set up a database. She hasn't devoted much time to entering in the data

but will do so in the coming weeks. Based on the information in the database and the statistics that can be computed from it she will be able to make better decision and the organization will be better of as well. Since the Community Builders are expanding the property owned now and constructing new buildings, Barbra will have maybe 5 times more residents. A database will allow her to store all the information about the new residents. Since she is learning about how to change, delete or add fields and formulas she will be able to maintain the database as well. Learning how to properly set up a database and manage it will also enable Barbra to create other databases she might need to in the future.

COMPUTER CLUSTER IN COMMUNITY CENTER

New Pennley Place does not have a computer lab in the building. If they had one, residents could use the computers to make resumes or search for information. Different programs could be run for training or just to teach residents computer skills. Barbra has some ideas about after school programs where kids could learn how to use the Internet or how to build web pages. Many residents have expressed a desire to learn computer skills. Also having knowledge of how to work with a computer will increase their chances of getting a job and become more self-sufficient.

The computers for the lab are being donated in the coming months. Four computers have arrived already but have not been set up: 3 are 486 and 1 is a 386. There are no operating systems on any of them and they have hard drives and floppy disks but no CD-ROM's. There is a possibility of Pentium machines being donated in a few weeks. Although because of the limited time I can't help Barbra set up the actual cluster, I wanted to give her a good start. Here are several steps in my approach. The first step was to make sure Barbra will all the arriving computers is inventory them. She has to find out what kind of CPUs, how many monitors, keyboards, and any hardware on the computers. From that she needs to evaluate what she has. Barbra will be able to see which computers aren't even worth restoring. She might not be able to use some because they won't be able to run the software useful for her residents. Since Barbra has no experience in setting up computers, she will need some help at first. For this part Barbra and I went to Goodwill, a used computer store in South Side. There we came in contact with a man named Jason, who has experience with putting together old computers and setting up clusters for non-profit organization. He evaluated the computers and installed operation systems and some basic word processing and spreadsheet app on the computers that worked. The next step for her will be to set up the lab itself. The apartment allocated for the cluster is a small room that at most will comfortable fit 8 to 10 computers. To get a more concrete idea about how to set it up, Barbra and I visited other clusters. We came to CMU campus and also visited the Hill House. It gave Barbra ideas about set up, which tables to get, which direction to face monitors depending on where the window is. For the future, after the computers can be put into the room and Barbra will have to decide on the operating system and software. She will also in the future have to decide if she wants the computers networked and have Internet connections. Another necessity for the lab is a printer. Applications like MS office, PhotoShop and Publisher as well as some programs for children could be installed. She installed software on her computer at her home but she never worked with hardware. Barbra will need to really understand that whole process because it will be useful for upgrading or expanding the lab later on.

Barbra is willing to put some work into this project since she wants residents to start using computers as soon as possible. It will be hard at first because the computers currently

available are very outdated and in bad condition and because Barbra has no experience with setting up computers.

To find out what programs to use, more centers in similar neighborhoods can be visited as well as the local library. Since Barbra is very busy with running programs and helping residents, a resident could be trained to run classes and maintain the computers. Once the lab is working, Barbra's residents can learn how to use them. With newly gained computer skills, the residents will be able to get better jobs, and become more self-sufficient which is one of the goals of the organization. And because Barbra will herself be involved in the process of setting up the lab, she will learn about how the computers operate and will be able to fix future problems.

MANAGING A PC

Barbra does not have enough experience or training on how to manage her computer. Most of her files were in the "My Documents" folder in no specific order. Although she does not have a lot of documents, they are still hard to find. Most of the documents also have names that are not descriptive enough. Similarly, there a lot of files that are old versions, copies, or not useful. Barbra has never deleted any files from the computer. Because of this there is almost no space left on the hard-drive. Although it could be because it is only 1GB, it is also because of the poor managing skills.

Barbra and I organized her documents into different folders. We deleted and uninstalled unnecessary files. We also discussed how to do backup. If there is a file she isn't sure about, she needs to know who or where to find out what to do. Further, she needs to learn about scan disk and daily maintenance of a PC.

There are many benefits to Barbra for learning how to manage her PC. First of all, her computer will be more organized and have less chance of getting broken. She will have more space on her drive for important documents. If something gets erased, she will have a backup copy and can restore it. Organizing her files will save her search time and will also let her see what kind of information she has available more clearly. Her every day work on the computer will be more efficient and much easier. Furthermore, once the computer lab is set up, these managing skills will be vital. Since Barbra will be in charge of the lab computers she will have to run backup and troubleshoot problems and the experience she got with her own computer will help prepare her for running the cluster.

INTERNET

Barbra does not have an Internet connection in her office. This causes a problem because it limits access to information. With the Internet, Barbra could more easily find information for services for residents. On the web she could learn what other companies in her field are doing. Even more importantly, there is a lot of online help she could use while working with unfamiliar applications. Yet most importantly, an Internet connection is vital for setting up the computer lab. Most information about software and hardware and where to find the best/cheapest is available only on the Internet. Further, the Internet will also speed up her communication. Instead of calling Boston office, which is also expensive, she could simply send an email. She will also be able to receive information from remote locations at a less expense. Internet access will also make her more organized. Programs like Microsoft Outlook can help her organize meetings and plan event better. The organization will be more efficient by using the web.

Ultimately by using the Internet Barbra will be able to make better decisions, eliminate errors, and run better programs with the new available information.

Barbra's computer doesn't have an internal modem. She will need to purchase and internal or external modem. She can get an ISP connection. The modem will cost the company under fifty dollars and the ISP connection, about fifteen dollars a month. As for an email account and web access, there are free accounts available. To get the modem, Barbra has to speak with her manager.

Overall, Barbra is very interested in getting Internet connection at the office. She uses email at home and likes the web and it's capabilities. She doesn't know how much good potential it will have on her work and what a huge impact it will make on her capacity.

4. Scope of Work

- Week 1 - Get to know each other. Talk about organization and goals. Evaluate technological knowledge and environment.
- Week 2,3 – Database: organizing information, designing, setting up tables and relationships, writing queries, doing calculations.
- Week 4 – worked on basic computer skills, organizing files, troubleshooting, naming documents, backup upgrading
- Week 5 – discussed what to do with the donated computers, worked on some complicated Access queries
- Week 7 – plans for going about making a computer cluster, hardware, software, network
- Week 8 – visited CMU campus clusters, visited Goodwill, got in contact with Jason who set up some of the computers, looked at the future room of the cluster
- Week 9 – installed windows on 386 and 486 machines, took a computer apart with Jason, evaluated and inventoried the donated computers
- Week 10 – PC management, building web pages, html, usefulness of Internet
- Week 11 – concentrated on finding software for the cluster, managing technological aspect of cluster, furniture
- Week 12 – visited Hill House Computer Center: to learn strategies, ideas, basic steps to set a community cluster from scratch

5. Outcomes

EVIDENCE OF EXPANDED CAPACITY

Staff

Barbra knows more about her computer. She knows how much space is available on her hard-drive and how to organize her files. At the beginning, Barbra wasn't sure how to rename documents, now she creates new folders and organizes her files. She is learning about backup and scandisk on her own.

Barbra barely knew how to set up Access tables. She now can think about relationships and unique ids as well as write queries and make forms. She also came up with her own database to store information about visits that residents make to her office. In the future when all data is entered into the database, Barbra will be able to pull out necessary information quickly, and do statistics.

Barbra only saw Windows OS. After I showed her Unix and Mac clusters on CMU campus, she said she never knew there was so much out there. She is now thinking of making a web page for herself and for New Pennley.

Technical Environment

We found out that two of the donated computers cannot function properly. One of the 486 has Windows running and has Word and Excel installed. Three 386sx have Windows 3.01 on them and no other software (one has less than 4 MB of memory the other a little less than 8 MB). Another 486 will have windows shortly running on it. Barbra has also purchased a modem and she will have access to the Internet very soon.

EVIDENCE OF SUSTAINABILITY

Staff

Barbra is more comfortable with solving problems with her PC. She has more confidence in installing applications or cleaning her folders. This means she is more ready with dealing with problems for the future cluster. Barbra knows much more about hardware. Being involved in setting up the donated computers gave her more sense on what a hard drive and RAM really are. She is now more ready to purchase what's needed for the cluster.

Technical Environment

Jason is a great resource to use in the future if any problems come up with the computers or any more are donated. He can consult Barbra with what hardware/software to purchase. He can guide her in fixing problems and help her with others. Jason is very involved with community centers and he can suggest other volunteers to help Barbra out.

6. Recommendations

TO PURCHASE A LAPTOP

Problem

Barbra told me that she doesn't have time to sit at her office computer and enter data. For instance, she has to enter information about every encounter that she has with a resident because she has to report on them every month to her manager. Right now she says she sometimes jots down the information while she is waiting at the hospital or for an appointment.

Solution

A laptop would be very useful to Barbra.

Benefits

Having a laptop would give Barbra the opportunity to use the computer at anytime. She will have an easier time accessing information about residents wherever she is because she can store a copy of the database on the laptop. This will also enable her to enter data right into the database without having to write it down and then having to type it in at a later time. Since Barbra also goes on many trips out of town as part of her job, a laptop will be very useful to keep documents she might be able to use on her trip. Communication is very important to Barbra's job. She has to keep contact with residents, service providers, other community organization, etc. A modem for her laptop will also make it possible to check her email while out of the office. Her time will be spent more efficiently and her job easier.

TO HIRE HELP

Problem

Barbra is a resident service manager. This means she already has a fulltime job and not as a computer lab coordinator. Thus she can't spend all her time working at the cluster, teaching programs, fixing problems, helping users, etc. She also doesn't have the time to enter all the data from the surveys into the database. There is a need for additional human resources for the emerging center

Solution

Hire a part-time worker. For example, Barbra can hire a high school student or a resident of New Pennley Place.

Benefit

Barbra will benefit a lot from having another person work with her. Barbra will still be ultimately responsible for making decisions about which software to purchase, what programs/workshops to run, scheduling classes, and training instructors. But the new workers responsibility would include maintaining the cluster on the daily basis. He or she would have to have good knowledge of hardware and be able to open up a computer, replace a part of hardware, install a video card, fix a printer, and basic maintenance things. This person could also help in teaching residents basic computer skills. These can include, using email, browsing the web, creating word documents, children's programs, and etc. This new person could be responsible for installing new software and fixing any problems that could occur with computers when residents are using them during the day. He or she can also help Barbra enter data into the database. She has a stack of surveys and will be getting more when new residents move in. The

part-time worker can spend time that Barbra doesn't have to type this data into the already set up database as well as update it as changes in the data occur.

This part-time worker can be low cost and it's a great opportunity for a resident or a high schools student to get involved with the community and help others. Many high school students who are interested in computers have the level of skill to do this job and are also very knowledgeable about new technology.

TO GET A GRANT FOR NEW COMPUTERS

Problem

Right now New Pennley Place has been donated a few 386 and 486. They basically have very little memory and are slow. Running windows takes up most of the space on these computers and if you add Word and Excel that's all the space. Residents have different levels of computer skills and they also have very varied computer needs. An older resident might need email to keep contact with grandchildren while a younger resident a math program to do better in school. The current computer although functioning can't provide the residents with these applications. Plus they are slow which could frustrate some new computer users.

Solution

New Pennley should get a grant for new Pentium computers with CD-ROMs, video and sound cards, a printer, and a scanner.

Benefits

Getting new computers would tremendously increase the value of the computer cluster to the community. Residents will be able to learn how to use applications that are not outdated. More workshops can be run because there is more software for new computers and Pentiums can run most of it. For instance, workshops on MS PowerPoint, Excel, and Word which 386 computers can't support. A printer is also vital for a computer cluster so users can print what they accomplished and bring it home with them. Having new computers for the lab would also make Barbra's job easier. New computers will be able to run more applications, and require less maintenance.

TO NETWORK THE COMPUTERS IN THE CLUSTER

Problem

Barbra is not planning and doesn't have the resources to network the computers in the cluster. The computers won't be connected to the Internet from all of them.

Solution

Network all the computers in the cluster. Set up LAN, Group Internet access (ISDN).

Benefits

Using the Internet is becoming very popular and very useful for most people. Internet provides people with help on how to use software, online training, communication with other through email, chat, ICQ, building own web pages, searching for jobs, looking up information on hobbies, and much more. A network and Group Internet access will allow each computer in the cluster to have Internet connection. Similarly, each computer can easily be connected to a server, printer, or scanner. Having the computers networked also can mean having Windows NT as the operating system, which will give the cluster more security. Having a server will enable Barbra to print reports on which applications have been used and how long.

7. Resources

STAFF

Barbra has expressed interest in making a web page for herself as well as New Pennley after she visited CMU campus and I showed her different web pages of people and organizations. Here are some resources she can use to help started:

- 1) She can learn how to use Microsoft Publisher that we installed on her computer
- 2) Books:
 - Creating Your Own Web Pages by Andrew Bryce Shafran, Andy Shafran
 - Creating Web Pages for Dummies (3rd Ed) by Bud E. Smith, Arthur Bebak
- 3) On line tutorials:
 - www.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html
This tutorial has lots of examples and talks about different terms that a person who knows nothing about web pages will find useful. It lists tags and explains them. It also talks about publishing a page that would be useful for Barbra as well.
 - www.weballey.net
This tutorial is also very friendly/easy to use.
 - www.hotwired.com/webmonkey/teachingtool/
Also it has graphics and many helpful links. If Barbra is interested in Java Script or DHTML she will be able to find it here.
 - www.davesite.com/webstation/html
Has lots of hints and it really starts from the beginner level.

TECHNICAL ENVIRONMENT

Barbra needs to get funding for the computer cluster. The computers that were donated are very old and slow. She will need to raise money to get new computers, software, and personnel.

- www.nng.org
Can get information about different grantmakers and also download an application that many of these grantmakers accept. It is set of guidelines for the creation of a fundraising proposal.
- fdncenter.org
Has a lot of information about steps to take to search and to get funding. Has links to non-profit resources. Describes government resources and has info about Private Foundations, Corporate Grantmakers, Grantmaking Public Charities, and Community Foundations.
- www.colemanfoundation.org
Foundation that gave money to YMCA last year for new facilities. The site describes application process and requirements.
- www.emkf.org
An operating and Grantmaking foundation that works toward the vision of self-sufficient people in healthy communities.
- www.ctcnet.org
This site has information on many organizations that have community computer centers. Barbra can get many ideas and support from this site.

PROGRAM /ORGANIZATION AND TECHNICAL ENVIRONMENT

For the new cluster, Barbra needs to know what software to purchase, prices, and general information. She could use help in finding free email/web pages for residents once the cluster opens.

Free email:

- www.hotmail.com
- www.yahoo.com
- www.netscape.com

Free web pages:

- www2.fortunecity.com/cgi-bin/homepage/estate.pl?referer=mainpage
- forfree.at
Provides a free email address and homepage.
- www.cybercity.hko.net

Software:

- www.anglia.co.uk
Has different CD-ROMs with different educational programs for children.
- www.lotus.com
Information about different software. Ability to download. News and descriptions of software.
- www.download.com
Can download different educational, kids, Internet applications.