

Eastside Neighborhood Employment Center

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Situation Description

Organization

Eastside Neighborhood Employment Center (ENEC) was founded in 1989 to address the fact that there was no currently existing employment center for the Eastside neighborhood residents. What separates ENEC from private agencies is the primary focus on serving the residents rather than the employers. ENEC has a hand in every aspect of the employment process, from training to job search to placement. ENEC also collaborates with a number of social service agencies and is a member of many different groups and associations (Lawrenceville Collaborative, Bloomfield-Garfield Corporation, Garfield Jubilee Association, Lawrenceville Corporation)

ENEC's mission is to improve the economic and social conditions of the residents of Eastside neighborhoods by providing quality services in the areas of job readiness, counseling, career development and job placement. ENEC services anyone who walks through its doors, offering training, job coaching, resume development, counseling, and providing job leads. With a budget of around \$100,000 because of various grants and donations, the ENEC is able to service around 500 people a year, seeing around 5 to 15 people every day.

Facilities

ENEC will be moving to a new location sometime in May due to the privately owned architecture business buying out the entire building. The new location will be likely be easy to access and will provide more space, allowing the Center to go through with a few new programs and ideas.

ENEC is currently located at 3400 Butler Street, in the lower level Suite D. The space ENEC is located in has become a prime example for neighborhood development. ENEC has developed the once run down space into a functional workplace and the space is soon to be bought out by a private architecture firm, allowing more private money to be brought into the area.

ENEC is essentially broken into a couple main areas, the offices and the main conference area. Mr. Horgan does most of his work in his office, and Mrs. Thompson-Pope does the majority of her work in her cubicle. The main conference area is where residents can do their work, such as training, filling out applications, and even finding job leads in booklets or on the Internet with the computers available.

Programs

The overall scope of ENEC is to help Eastside residents prepare for and find jobs. These are a few of the important programs that ENEC employs to fulfill that task:

- *Career Development* is one of the primary functions of ENEC. This deals with the ENEC's application process, providing of self-paced training CDs and videos, resume building, and career advising and tutoring. The self-paced multimedia training CDs are the only part of this program that is done on the computer.
- *Job Search* is another important service provided by ENEC. The Center gets a number of faxes with job openings. However, the majority of job leads come from the Internet (via e-mails, job search websites). ENEC has relationships with a number of businesses, and combined with the

wealth of job openings from faxes and the Internet, the Center is able to provide Eastside residents with a number of opportunities. Monthly, ENEC posts job leads into the local community paper, which has helped to increase the number of applicants every month. ENEC takes job leads and attempts to find good matches in its fairly large applicant pool.

Staff

ENEC is a fairly small organization, consisting of two full time employees and one part time employee. Mr. Jack Horgan is the Executive Director of ENEC and does a number of tasks. As Executive Director, Mr. Horgan sets policies, is heavily engaged in fund raising, finances, payroll, press relations, and overall administration of the Center. Mr. Horgan uses the computer mainly for Excel, creating statistical reports and spreadsheets used for reporting. In addition, he uses e-mail to correspond with other agencies and again report statistics. He is also involved in the programs to help the Eastside residents.

Mrs. Carena Thompson-Pope is the Job Developer/Career Development Specialist who is primarily engaged in the programs. Mrs. Thompson-Pope develops relationships with a number of employers, counsels and interviews the applicants, matches the two, and helps the applicants produce resumes. She uses primarily PowerPoint, Publisher, Word, and Excel to develop presentations to companies, print business cards and brochures, and help with monthly demographics reports.

Ms. Marian Clark is a part time worker who is actually paid by the Urban League of Pittsburgh. She currently helps ENEC with manual transcriptions in preparation for funding statistics reports; however, with the new database, her function may change.

Technical Environment

ENEC's computers are all funded by grants (government and employers) and donations. Mrs. Thompson-Pope uses an IBM 300 GL, which is a 333 MHz computer with 64MB SDRAM running Windows 98. In Mr. Horgan's office is a desktop HP Pavilion 8660C, which is a Pentium III 533 MHz system with 128MB SDRAM and a CD/CDRW/DVD also loaded with Windows 98. Both computers share a single phone line and Internet connection. Mr. Horgan also has a scanner, which is seldom used, and an inkjet printer. The conference area has 4 more similar desktop HP Pavilions. These 4 computers are connected using a WebRamp, which works as a LAN and allows all the computers to share single dial-up connection. A laserjet printer is networked with these computers. The Internet service provider ENEC uses is Stargate.

Technical Maintenance

An outside consultant helped to setup the networking and shared Internet connection with the 4 computers in the conference area. Mr. Horgan takes up the responsibility of managing the computers and doing whatever he can to maintain the computers. He has fairly limited knowledge about computers, but is very willing to learn more. ENEC has no contracts with anyone relating to the maintenance or troubleshooting of the computers, and there is no redundancy system worked out for the documents on the computers.

Problems and Opportunities Addressed

The problems and opportunities discussed and addressed during the consulting partnership dealt with the following: 1) File/Record System; 2) Statistics Labor Problem; 3) Website Opportunity; 4) Backup Issue.

1. File/Record System

Information recorded about clients, job openings, and employers was maintained only on paper documents. As a result, when a job opening was presented, Mr. Horgan and Mrs. Thompson-Pope would spend a significant amount of time filtering through applicant files to locate the best applicants. Also, updating applicant information was time consuming and delayed the job application process. The inability to match applicants to job openings efficiently and the inability to update records easily inhibited ENEC's ability to fulfill its mission of helping Eastside residents find jobs and tracking them through and beyond the job seeking process. To address this problem, the consulting partnership developed a database using Filemaker Pro, a database program already owned by ENEC.

2. Statistics Labor Problem

ENEC is required to submit statistical reports to various grants to secure funding. Originally, ENEC had application data transferred to handwritten spreadsheets, and for the various statistics required, Mr. Horgan manually counted the information, then his results were double-checked by Mrs. Thompson-Pope. If the numbers they came up with were not the same, then the checking went back and forth. As a result a lot of time was wasted, and there was also the possibility of inaccurate data. To address this problem, procedures for getting instant information using the new Filemaker Pro database would be developed so that reports could be generated quickly and accurately.

3. Website Opportunity

ENEC does not have a web site. A website for ENEC would serve to provide as a good centralized place for information on ENEC which could be updated easily, serving to educate the public and its supporters on ENEC's programs and success. Mr. Horgan and the student consultant started work on a webpage and looked into some free web space providers. With the development of an informative website and the creation of the database, ENEC can even go so far as provide the application online.

4. Backup Issue

ENEC has 4 computers available to Eastside residents to help them write resumes and search for jobs online. Also, on the 2 computers in Mr. Horgan's and Mrs. Thompson-Pope's workspaces, a large amount of important information is stored. However, there is no form of backup in case any of the computers crash. If any machines were to crash, resident resumes, cover letters, database information, statistic information, ENEC presentations, and any other significant documents would be lost. This is also true for the physical data as well, as paper files could be easily lost to fire, leakage, and any other physical damage. If any of the documents on the computers and within the ENEC were lost, the organization would be hard pressed to recover them, and it would give ENEC a bad reputation if it lost any work created by its clients.

5. Technical Sustainability/Support Issue

ENEC does not have any staff member well versed in technical maintenance and support. This follows close with the need for backup procedures. If any problems arise, Mr. Horgan attempts to resolve them, but has very limited knowledge in solving issues with the hardware. As a result, should any problems develop that Mr. Horgan cannot solve, ENEC would be unable to function smoothly and fulfill its overall mission.

Analysis of Outcomes and Recommendations

1. Problem – File/Record System, Solution Implemented

To address the issues with the previous paper *File/Record System*, Mr. Horgan and Mrs. Thompson-Pope created a database in Filemaker Pro that collects applicant information. They designed the fields, data lists, as well as the template layout views. All the current active applicant data is now centralized in the database. The database supports all the applicant data necessary for ENEC to match applicants to jobs:

- Basic Applicant Information (social security number, name, address, education level, transportation, needs, skills, specific work experience, work experience categories, gender)
- Funding Information (age, ethnicity, disability status, family type, family size, source of family income, level of family income, housing, receive food stamps)
- CareerLink Information (parental status, education level, veteran, similar to funding information)
- Field for information, comments, and notes on applicant activity

ENEC has developed a brand new paper application because of the implementation of the database. The new application contains all the fields required by the database, turning what was a paperwork application nightmare into a simple, readable application. Since the application was derived from the database, it allows translation into the database to be very simple. The staff also implemented security on the database so that applicants may complete the application themselves using a computer. The data entered into the computer goes directly into the database. Since the computers are networked, the database security options are consistent on all of the systems. Applicants are restricted, preventing them from accessing data other than their own, destroying records, and accessing other database functions. A resource document was prepared providing information on Filemaker Pro usage, as well as information on the new database itself, making it easier for Mr. Horgan and Mrs. Thompson-Pope to maintain it.

Major positive outcomes:

- Mr. Horgan is now able to design and create a database layout/template (in Filemaker Pro) and understands the benefits of moving away from a completely paper database
- Mr. Horgan and Mrs. Thompson-Pope are now able to store the applications electronically.
- Mr. Horgan and Mrs. Thompson-Pope can now search through the applications quickly and easily, providing for better resident tracking and more accurate matching with employers
- Applicants can enter their information directly into the database
- Processing time for both application and matching applicant to jobs was reduced to a matter of a few minutes

2. Problem – Statistics Labor Problem, Solution Implemented; Recommendation

Preparing statistical reports from paper files required manual counting and took days to prepare, and this information could be required at the last minute. The database layout was designed such that statistical reports could be easily compiled. For example, if all the male applicants need to be reported, instead of counting on a paper spreadsheet, all Mr. Horgan and/or Mrs. Thompson-Pope need to do is select the Gender field and search for all males, and the database will return the count of all males. Data does not need to be copied over to a large spreadsheet and the massive numbers of laborious counts do not need to be made; as can be seen, statistics can be compiled faster and accurately.

The database eliminates a significant amount of stress and hassle, and the necessary statistics reports will be compiled quickly and accurately. As long as the database is modified and updated according to what the funds and grants require, this new solution is easily sustainable.

Major positive outcomes:

- Mr. Horgan and Mrs. Thompson-Pope can manipulate, design and use the database's Find mode to quickly gather specific information on applicants
- Mr. Horgan and Mrs. Thompson-Pope can create report layouts that generate necessary statistical information
- Mr. Horgan knows how to translate the database information to a spreadsheet quickly

Recommendation

It should be noted that the newest version of Filemaker Pro is fully compatible with Microsoft Office 2001. ENEC uses Filemaker Pro 5.0, but does not have full Office integration and also has an older version of Microsoft Office. In order to create Excel sheets necessary to send to funders, staff needs to export the Filemaker Pro information into a Lotus 1-2-3 format and then have Microsoft Office convert the Lotus sheet. However, saving to Lotus then converting to Excel loses some formatting and requires a few minutes of adjustment to get the correct information.

Maintain Current Excel Spreadsheet Generation Procedures

- This is not too time consuming and is fairly simple to do. Also, generation of these reports will get faster with experience and more defined procedures. By maintaining the current software package, ENEC will not incur any new costs.

Upgrade Filemaker Pro and Microsoft Office

- Upgrading to the newest version of Office and upgrading Filemaker Pro to obtain the Office integration would eliminate the current hassle. However, upgrading both software programs would prove to be very expensive. For the little amount of time saved, it would not be of significant value to ENEC.

Resources

- www.filemakerpro.com will lead to the main homepage of Filemaker Pro, and even more information about the program can be learned here.
- There are a number of books on Filemaker Pro as well which can be found at bookstores or such sites as www.amazon.com.

3. Opportunity – Website, Solution Started; Recommendation

Mr. Horgan accomplished the following:

- Researched free web servers such as Three Rivers Free-Net, which provides free space to non-profit organizations.
- Mr. Horgan has created a basic web page using Trellix web design software to create a basic webpage
- Understands the basic steps to creating web pages and publishing web pages to a web server
- Identified information to including on the website
- Identified links to included on the web site, such as PA CareerLink

Recommendation

Software databases tend to be able to be configurable for a web interface, and Filemaker Pro is one of those database systems that have the ability. Given the functionality of Filemaker Pro, it is a possibility for ENEC to allow its applicants to apply on the computer. With the future development of an ENEC website, this would be the perfect ground to allow people to apply online.

Application Web Interface

Again, currently there is demand for the development of a purely informational website, providing people with information on ENEC's functions; however, there can be more to the site. Filemaker Pro provides for configuration of numerous layouts and restricted access and as a result, it would be possible to create a secure database, allowing people to either come into ENEC and apply on the computers available to them, or even go onto a website and enter in their information. Filemaker Pro is a fairly easy program to learn and configure and would simply require someone with at least basic knowledge of databases, network configuration, and security.

Resources

- <http://trfn.clpgh.org> is the main web site for Three Rivers Free-Net, and more about the organization can be learned here.
- www.geocities.com, www.fortunecity.com, www.angelfire.com are just a few of the many sites that will provide free server space and publishing for web pages. Using www.metacrawler.com and searching for "Free Homepage" or even "Free Web space" will come up with a number of other alternatives.
- http://seamonkey.ed.asu.edu/alex/computer/FMP/intro_FMP.html is a site with a significant amount of information on moving Filemaker Pro to the web. Again, using www.metacrawler.com and searching for "Filemaker Pro Web" will return a number of useful links on Filemaker Pro's web interface.
- Using the built-in Help in Filemaker Pro is also a simple way to learn more about configuring Filemaker Pro for the web.
- www.filemakerpro.com will lead to the main homepage of Filemaker Pro, and even more information about the program can be learned here.

4. Opportunity - Backup Issue, Recommendation

ENEC should develop a procedure for backing up relevant information. ENEC needs to ensure that its documents, spreadsheets, pamphlets, presentations, and the database are backed up in case of any loss. The staff at ENEC does know which files are important, such as the applicant resumes and the new applicant database. Since they do know what to backup, next is the issue of how. There are a number of solutions that can be implemented to provide backup of data, and a Media Backup would prove to be simple, low cost solution. Creating a Backup Server would require significant resources to setup and configure, but would save ENEC time and effort in the long run. Since ENEC is moving to a new location, this would make the installation, setup, and configuration of a network and Backup Server fairly easy as it could be developed concurrently with the network itself.

Backup Server

- By implementing a network and a dedicated file server, backing files up could be automated and would occur on a daily basis. As backup of massive amounts of information is not necessarily an issue many people think of, having an automated backup system would eliminate the worry and even the possibility of forgetting to backup the information. It removes a great amount of risk and only requires maintenance of a dedicated server computer.
- This solution is feasible for many reasons. As ENEC is moving to a new location and likely to get a DSL connection, people chosen by the board of directors will probably install a network. Having a backup server would require either converting one of ENEC's current computers into a stable server or an investment in another system configured for server status. It would also require a network, but again, computers at ENEC are already networked and that network will probably be upgraded with the installation of DSL.
- A number of issues need to be addressed with this solution: a server needs to be configured or purchased; preventative maintenance of the server machine needs to be performed; a stable

network between the computers needs to be installed; computers need to be configured to regularly back information up onto the main server.

- If the DSL connection will take care of the networking, then the only costs that would be incurred would be the purchase of a server (which can range anywhere between \$100 and thousands of dollars). For ENEC's purposes, a server that costs around \$500 would more than suffice, as Word documents, Excel spreadsheets, and the Filemaker Pro database do not require a significant amount of computing power or hard drive space. It should be noted that a DSL router with at least 8 ports should be implemented, which goes for around \$200. This would allow the computers to be networked as well as share the DSL connection (The router would be very similar to the current WebRamp ENEC uses)

Media Backup

- The relevant choices of media backup are Zip Disks and CDRWs. Mr. Horgan's computer is currently configured with a CDR/CDRW, but none of the computers are networked to it. However, in the future at the new ENEC location, it is likely that all the computers will be networked together.
- If the computers were networked, performing regularly scheduled backup onto CDRW would prove to be effective. CDRWs are fast, store a significant amount of information (650-700 MB of information), and ENEC already owns a drive. Again, if the computers were networked, this would allow ENEC to simply copy all documentation onto the CDRW computer, and then all that would be necessary would be to burn the documents onto a CDRW. CDRW (rewriteable) media is dropping significantly in price (about \$1), and it can be written onto multiple times, unlike CDRs (writeable), which is also around \$1. Again, this method is reliant on a network.
- Without the implementation of a working network, a portable Zip Drive would be a great solution. Zip Drives are reliable, portable, and relatively inexpensive, and the media too is reliable and affordable. By scheduling backups daily or weekly (going computer to computer and copying the relevant information), ENEC will save itself a lot of time in the future if a computer crashes. External USB 100 MB Zip Drives can be purchased for around \$60. 100 MB Zip media can be purchased for about \$5. The only real con to this method is that it requires going from computer to computer plugging in the Zip Drive and copying the information.

Resources

- www.techsoup.com is a useful site for non-profit organizations. Selecting "Hardware" and scrolling to the "Backing Up Your Data" link can find a significant amount of useful information. This provides a good cost analysis for the different forms of backup.
- www.pricewatch.com is a good updated site to check current prices of hardware (searching for DSL router and using the Systems-Servers link are the key areas of interest, as is searching for a Zip Drive).
- www.cnet.com and www.techreviews.com are great sites for reviews on any type of hardware, again from the networking hardware to CDRWs to Zip Drives.
- www.zdnet.com is another informative site. Searching for "Backup" will yield a number of useful articles, such as <http://www.zdnet.com/zdhelp/stories/main/0,5594,2704742,00.html> which talks about a number of redundancy solutions and preventative measures.
- Using any search engine (www.google.com, www.metacrawler.com, www.yahoo.com) and searching for "Network Backup Software" or "Data Backup Solutions" will give a number of companies and software solutions that will help backup important information on a network should the need arise.

5. Technical Sustainability/Support Issue, Recommendation

ENEC should also develop a technical support plan, creating documentation for maintenance and devising a preventative maintenance scheme would be key to preventing any major losses of information and functions of the organization. This will help the organization to continue function smoothly and prevent panic in times of trouble (e.g. a computer crash or Internet service provider loss). There are a number of ways to deal with technical support.

First and foremost, ENEC should attempt to develop its own capacity in order to solve its problems. Before looking for outside help, it is always a good idea to try to troubleshoot firsthand to learn more about the problem. Only after all information resources have been exhausted should outside consultants be contacted. Informational resources include manuals, Internet web sites, vendor/manufacturer web sites, and any other free forms of technical support and information.

Recommended is the creation of a technical support procedure document for staff to consult in case of problems regarding what to look for, a list of resources, and what steps to take before calling and hiring a technical support consultant. Also, storing all relevant documentation especially manuals in a centralized place is important for quick response to any problems. Even creating a database or a spreadsheet recording problems and steps taken to resolve the problems would prove to be useful, as it would serve as a way for the staff to analyze troubleshooting steps, and would be another resource for staff to consult.

Resources

- There is a wealth of information available on troubleshooting, especially on the Internet.
 - www.helponthe.net is a nice informative site with articles and forums regarding a number of problems that one might encounter.
 - <http://www.compinfo-center.com/support.htm> is another good site for information on troubleshooting and basic support on programs and hardware.
 - www.techsoup.com provides a significant amount of information for helping out nonprofit organizations regarding Technical Support.
 - Again, search utilities such as www.metacrawler.com, www.altavista.com, www.google.com, and www.yahoo.com will provide a number of are helpful for finding whatever is necessary.
- Contacting software and hardware vendors themselves is the next level of troubleshooting.
 - Finding the manufacturer's website and going to a support page will generally yield Frequently Asked Questions links, common problems and ways to troubleshoot them, and various other resources that could be important to solving the problem.
 - Before contacting the manufacturer, getting a good description of the problem is important. Describing the steps on how a problem is encountered and how it strays from what one would expect is important to figuring out a solution.
 - Also, with software, knowing what version a program is usually important. Generally with Windows programs, going to the "Help" menu and selecting "About" will tell the user what the version of a program is.