

Hunger Services Network
Student Consultant, Chitra Kalyanaraman
Community Partner, Ann Mason

1. The Consulting Situation

About the Organization

Mission Statement: *At Hunger Services Network, we are committed to providing programs to alleviate hunger and promote self-sufficiency with dignity and compassion.*

Hunger Services Network (HSN) is a multi-county anti-hunger organization that serves individuals and food pantries in Allegheny County, as well as neighboring Butler, Green, Washington, and Westmoreland Counties. HSN has been serving low-income residents of Allegheny County since 1976. It is a direct service and referral agency for those needing food assistance. The organization has an annual operating budget of \$275-320,000. HSN partners with government funding sources for about 50% of its budget, and receives the rest from fundraising efforts and donations.

Ann Mason is the Executive Director of Hunger Services Network, and reports to a Board of Directors. In addition to Ann, there are six full-time and one part-time employee, as well as three part-time Urban League Seniors in Community Service workers.

Facilities

Hunger Services Network's office space is housed on 37th Street in the Lawrenceville section of Pittsburgh. HSN has been leasing this 2,264 square foot office space from Our Lady of the Angels Parish since 1995, although they are unsure if the parish will change the use of this space in the future. The space consists of two office areas, a copy room, and common space areas provided by the parish.

Programs and Services

Hunger Services Network provides a variety of direct and referral services to low-income residents of Allegheny County, as well as neighboring counties. In addition, HSN serves Pittsburgh food pantries, hopefully within the next few years, centralizing and tracking data on those served by the 300+ food pantries in Allegheny County.

Hunger Services Network's most established service is their Emergency Food Assistance Network (EFA), which was begun in 1979. EFA provides a countywide hotline for those requiring food assistance. HSN directs those in need to the closest available food pantry in their area, or provides food from their own emergency food pantry. Approximately 75% of the callers are directed to a food pantry, making EFA primarily a referral service.

Staff

Hunger Services Network employs six full time staff, as well as a part time employee, three part-time trainees through the Urban League Seniors in Community Service program, as well as many volunteers. Most employees are comfortable with the software they use daily, primarily for email and word-processing purposes. More specific computer use is noted below:

- Ann Mason is the Executive Director of Hunger Services Network, and oversees all HSN programs. Her computer use is fundamentally email and scheduling, word

processing, financial spreadsheets, and she is familiar with all the database and spreadsheets used by the organization.

- Louise Herring is the Program Director. She is in charge of the Emergency Food Assistance Network, and primarily uses the organization's Access database, and well as word processing and Excel spreadsheets.
- Alice Frank is HSN's Bookkeeper. She uses Microsoft QuickBooks 2001 for keeping financial records.
- Roy D. Twyman and Jim Jackson implement the Food Stamp Outreach and Enrollment Program. The Lotus and Excel spreadsheets currently used for the food stamp eligibility pre-screening were created and patented by a current staff member of the Heinz school, who worked with HSN to develop and update this software.
- Mike Jenkins is the Pantry Power Link Coordinator. The Pantry Power Link Project is a new endeavor to utilize technology to provide uniform data on area food pantry consumers, and eliminate individual manual record keeping methods used by local food pantries. He currently uses Access database of food pantry consumers, but is also looking at varied technology to improve the infrastructure of the system.

Current Technology Status

Technical Environment

Hunger Services Network currently owns 11 PCs, and is hoping to add five more in the near future. HSN's computers were purchased with a federal CDBG Grant (Community Development Block Grant) through the Allegheny County Department of Economic Development. Ten of the machines are Gateways, bought in November 1999. They are Intel Celeron processors with 64 MB of RAM. They all have CD-ROM and floppy drives. Ann Mason's computer, one of the Gateways, also has a zip drive, which is used for backup purposes. The eleventh machine is an Hewlett Packard Pavilion with Intel Celeron 700 MHz and 128 MB of RAM. All the machines run Windows 98, and are equipped with the Microsoft Office Suite. Other software, such as QuickBooks, is installed as needed on individual machines. All computers are networked to the server. HSN has requested five new Dell computers: Pentium 4 1.4 GHz machines with 512 MB of RAM, and Pentium 4 1.8 GHz computers with 256 MB of RAM. These computers are necessary upgrades for their Pantry Power Link Project.

There are five printers at the site, however only two are being used. Ann Mason has an individual HP 2100 printer and there is also a HP 2100 networked printer accessible to everyone in the office. The Emergency Food Assistance Program has a HP 4 printer, and Alice Frank has a Panasonic used only for printing checks. There is also a printer/fax/scanner that is used only for fax/scanner purposes. The fifth printer is not malfunctioning, and we are searching for the problem.

Technical Management

HSN's website (<http://www.hungerservices.org>) was created and is maintained by a volunteer for the organization. Employees first attempt any other technical support, and if they are unable to solve the problem, Phoenix Technologies is contacted for server issues.

Ann Mason backs up her C: drive individually through with her machine's zip drive. In addition, the organization uses a Veritas network backup system. A full backup runs weekly every Friday, and an incremental backup is performed daily.

Technology Planning

Creating a three-to-five year technology plan is one of the goals of this partnership, as the organization is working on expanding their use of technology. Primarily Ann Mason and Mike Jenkins, the Pantry Power Link Coordinator, would be ultimately responsible for the planning, budgeting and implementation of a technology plan after the partnership.

Internal and External Communications

All of HSN's computers are on a network, and the staff makes extensive use of its two shared drives. HSN's ISP is Stargate, but their email and website sits on the server of Phoenix Business Technologies Group (<http://www.pbtg.com>). HSN has hired Phoenix because Phoenix filters all spam email thoroughly, provides more complete virus protection, and offers some technical support. At the beginning of the partnership, all machines connected to the Internet through a 56K modem on a single second phone line. However, given that this can lead to slow connections, HSN switched to a DSL connection during mid-November. Inter-office communication is done via email and through use of the Shared Calendar feature in Microsoft Outlook, as well as through an intercom system.

Information Management

Hunger Services Network keeps the names of those served by its Emergency Food Assistance Program and Food Stamp Outreach and Enrollment Program in Access databases. All records of people they provide service to are recorded digitally. They use Microsoft Quickbooks 2001 for all financial data. HSN stores other information, such as donor or event information, in Excel spreadsheets.

The Consulting Focus

Task 1: Creation of a Technology Plan to Facilitate Coordination Between Food Pantries (Pantry Power Link Project Technology Plan)

Task:

HSN's mission is in part to promote self-sufficiency in low-income Pittsburgh residents who patronize area food pantries. Individuals who visit more than one food pantry make unfair use of pantry resources and build dependency on food relief aid. Consequently it would further the HSN's mission if pantries could share information about the people they serve efficiently and reliably. Currently each pantry has its own method of collecting information, and they are not methods compatible to sharing, as many used individual databases or paper records. There is no central, definitive source for such data. This could lead to incompleteness or inaccuracy of countywide data collection. Government policy makers may be receiving inaccurate information on the hunger situation in Allegheny County, leading to hunger relief legislation that may not address the problem as efficiently as possible. Another problem is the possible abuse of the hunger-relief system. For example, a person may visit multiple food pantries within a short period of time. With a common database, each food pantry would have the same patron information available, then this possibility could be avoided, as they would recognize if the person has visited a pantry already in the month. In addition, digitizing data collection will save time wasted in keeping track of data manually. Hunger Services Network has envisioned a uniform database that could be installed on the computers of other food pantries, thus simplifying data management, and allowing for more accurate analysis of hunger-relief trends in Allegheny county.

The Pantry Power Link Project is an attempt by HSN to create a unified database for the 300+ food pantries in Allegheny County. HSN has already committed to the Pantry Power Link Project, and has requested both governmental and private funding to complete it. While this is a multi-year project, and there is a staff coordinator already assigned to this project, a technology plan blueprinting the work necessary to achieve this goal would serve as a clear guideline. Therefore, the consulting task is to find the most maintainable and cost-effective way to deploy the Hunger Services Network's Emergency Food Assistance database to other, less technically capable, Pittsburgh area food pantries. A practical technology plan for the implementation of the project will be created, as well as documentation of the database for technical support and a user manual for future training of pantry employees.

Approach:

The actual installation of the database at local food pantries, and the training of pantry employees to use this database, will not begin until 2003, as the organization is waiting for the necessary funding. Therefore, the approach of this partnership is to prepare the database for distribution to local pantries, provide a technology plan for HSN clearly defining how the Pantry Power Link Project will be implemented and sustained, and create documentation for user training on the database. A breakdown of the tasks and time estimates can be found on the attached work plan. The approach to achieving this goal is as follows:

- Learn HSN's current database
- Develop survey to assess technical capabilities of other food pantries
- Develop technology plan to:
 - Install database at 4 -5 food pantries (would not begin until funding for the project is resolved and any technology issues at remote pantries are addressed – most likely by early Spring of 2003). Participating food pantries for the beginning of this effort have been selected for their high level of comfort with technology, and their ability to provide their own computer, as well as an existing relationship with Hunger Services Network and expressed interest in the Pantry Power Link Project.
 - Train 2-3 staff members at each pantry to use database
 - Update and maintain database
- Create documentation detailing database purpose and use for training pantry workers

Impact:

Organization:

HSN would benefit from working with more technically capable food pantries. Receiving regular information electronically from area food pantries would allow HSN to more accurately address the needs of those needing their service, and help to prevent abuse of the system.

Programs:

The Emergency Food Assistance Program (EFA) database will, at the end of the partnership, have taken the first steps in becoming more accurate and complete. Additionally, changes will have been made to the database that will assist pantry employees in entering data. For example, any major possibilities for user error will have been addressed and corrected, if possible. All other HSN programs remain unaffected.

Staff:

All Staff, with the exception of Ann Mason and Mike Jenkins, will be unaffected by the completion of this task. However, Ann and Mike will have added responsibility, as they will be responsible for the implementation of this technology plan, including the large burden of training staff at food pantries, and all future technical support. Documentation will be provided for the staff at local pantries to learn the benefits of having a database and how to use it.

Technical Environment:

There will have been no changes to HSN's technical environment. However, the organization will have a much better idea of the technical capabilities of Allegheny County food pantries. Pantries may purchase computers or improve their current equipment in order to participate in this project.

Technology Management:

At the end of this partnership, there will be a feasible and well-thought out plan to install and support database at remote food pantries. In addition, there will be clear documentation on the creation, installation, and support of the Emergency Food Assistance database.

Internal and External Communications:

Internal communications at HSN will be unaffected. However, external communications with Pittsburgh area food pantries will be greatly improved, as the pantries will be sending HSN more uniformly recorded information on those using food pantry services. HSN/Other pantries/Governmental organizations will be better able to track information about those serviced by food pantries in Allegheny County.

Information Management

At the end of the partnership, a technology plan will be created. The community partner will be able to implement the technology plan. In addition, the community partner will be able to update and expand upon the technology plan as needed and as the situation changes.

Task 2: Staff Technology Training

Task:

A small-scale computer training plan for Hunger Services Network could be very helpful. Although overall, the organization seems very technically capable, and all staff seem comfortable with the technology necessary for their job responsibilities daily. However, some staff members might better understand the potential of the computer they are using. Some topics that could use explanation include file structure (moving, copying, manipulating files, searching for files, fragmentation, etc.), Internet search and use, and various software, such as the capabilities of Microsoft Access or Outlook. Working with each employee individually would not be difficult, as there are less than 10 employees, and many are already fairly knowledgeable. Improved computer understanding would benefit the organization as staff will be more confident on their computers, and therefore more able to carry out their job functions, including entering and managing client data. Comfort with a more advanced use of technology allows a more convenient and less paper-based approach to providing hunger-relief programs.

The consulting task is implement small-scale computer training to Hunger Services Network staff on an individual basis. This will include training on basic computer concepts, Internet search and navigation, and the purpose and basic use of all products in the Microsoft Suite used by HSN, including Microsoft Word, Excel, Access, Outlook, and possibly Microsoft PowerPoint.

Approach:

The approach taken will vary between staff members, as all are at different stages of understanding. It will be tailored to each individual, which is a reasonable goal as there are less than 11 staff members who desire technology training. A breakdown of the proposed tasks and time estimates can be found on the attached work plan. The approach to this task is as follows:

- Answer any unique questions about office computer use – especially when troubleshooting.

- Interview each staff member and note their computer use and any areas in which deeper understanding could be helpful
- Create training plan based on weaknesses in computer knowledge (ex: obtain Windows tutorial if experience on Windows is limited, create database examples if questions about Microsoft Access)
- Work with staff individually to train in different areas, using prepared materials, focusing on how to solve problems/learn concept on one's own. This would address how to use help menus, software wizards to build documents from templates, and Internet search and Information retrieval.

Impact:

Organization:

Employees with better understanding of the how technology is used in the organization will be a benefit to the organization. In addition to more efficient use of the database, shared folders, and Internet connection, the staff will be in a position to learn more about what is possible to update in the future. They may be more excited, and therefore more inclined, to improve the use of technology beyond the limits and time-frame of this partnership.

Staff:

All staff undergoing technology training will be more satisfied with their understanding of the technology they are using at their job. The trained staff will be more comfortable with conceptual ideas of their computers, such as the file system, and their local network structure. Staff will be more confident on software they do not use daily for job responsibilities – although job may not require Internet proficiency, staff will be confident in using browser. Staff will be more confident in solving any computer problems they may encounter. Lastly, they will be more aware of what can be accomplished using the technology that they currently have.

Internal and External Communications:

External communications will be unaffected. Internal communications may improve as the staff becomes more accustomed to email. However, as the office primarily uses phones and intercoms to communicate internally, no significant changes may occur.

Information Management

The staff should better utilize databases and archiving/saving files on their computer to improve information management on an individual level. On an organizational level, individual training may have no significant result.

2. Outcomes and Recommendations

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The Pantry Power Link Project is an attempt by HSN to create a unified database for the 300+ food pantries in Allegheny County. HSN has already committed to the Pantry Power Link Project, and has requested both governmental and private funding to complete it. While this is a multi-year project, and there is a staff coordinator already assigned to this project, a technology plan can be developed to blueprint the work necessary to achieve this goal. Therefore, the consulting task is to find the most maintainable and cost-effective way to deploy the Hunger Services Network's Emergency Food Assistance database to other, less technically capable, Pittsburgh area food pantries. A practical technology plan for the implementation of the project will be created, as well as documentation of the database for technical support and a user manual for future training of pantry employees.

The actual installation of the database at local food pantries, and the training of pantry employees to use this database, will not begin until 2003, as the organization is waiting for the necessary funding. Therefore, the approach of this partnership is to prepare the database for distribution to local pantries, provide a technology plan for HSN clearly defining how the Pantry Power Link Project will be implemented and sustained, and create documentation for user training on the database

Outcomes

While this task is not yet completed, progress has been made to develop a technology plan for the Pantry Power Link Project. Both the consultant and the community partner have compiled a list of necessary updates to the database, improving the use of the database and reducing the risk of user error. This information will be sent to Phoenix Business Technologies Group, who made the recent modifications to HSN's database, and the updates will be made to the database before it is deployed to area food pantries.

Additionally, steps are being taken toward the creation of a technology plan. The consultant and Ann Mason have developed a guide for training pantry employees, both in introductory computer knowledge, and the structure and use of HSN's database. This manual will be distributed after the installation of the database on the food pantry site, facilitating the pantry's comfort in using the database. A survey to assess the technical capabilities of the food pantries and the final compilation of the technology plan has been created as well.

Hunger Services Network has also switched from a dial-up Internet connection to DSL. While this is unrelated to the creation of a technology plan, it is an important step in the actual implementation of the Pantry Power Link Project. A high-speed secure connection is necessary to allow the sharing of database information between remote sites.

Evidence of Sustainable Expanded Capacity

Hunger Services Network is committed to the Pantry Power Link Project and to that effect will make efforts to implement a technology plan to achieve their goals. Their commitment to the continuation of this project has been shown through:

- The hiring of a Pantry Power Link Coordinator, Mike Jenkins, who will install the database on site, and train pantry employees.
- HSN's requests for funding to carry out the proposed plan.
- The selection of 5 food pantries with which to begin the project. This is the first step in the implementation of the proposed technology plan.
- HSN's switch to DSL

Additionally, the community partner's familiarity with their database, and their continued use of it for three years suggest that they will be able to address any problems that arise. Phoenix Business Technologies Group can provide a level of technical support, if needed.

Recommendations

If a complete technology plan cannot be created within the time frame of the partnership, I would recommend that the community partner take efforts to complete it. A complete technology plan will provide structure to a large project like the Pantry Power Link project, which can easily go out of scope given its size. A good resource for creating a technology plan can be found at TechSoup.com (<http://www.techsoup.com>), a website dedicated to technology planning for nonprofit organizations.

Given the success of the project with more technologically capable food pantries, I would suggest distributing a training course for the Hunger Services Network database on CD. There are a great number of food pantries in Pittsburgh that have little to no technology familiarity, and training pantry workers, first in basic technology skills, and then in the use of the HSN database is a huge undertaking. A single coordinator would not be sufficient for a task of this magnitude. However, releasing a training program on CD would allow HSN to provide detailed information along with actual Access examples for how to collect and enter data on food pantry clients, and then send this information to Hunger Services Network. Distributing this information on a CD would not be an unreasonable expense, and could save much time training staff.

Task 2: Staff Technology Training

Task

The consulting task is to implement small-scale computer training to Hunger Services Network staff on an individual basis. The approach taken will vary between staff members, as all are at different stages of understanding. It will be tailored to each individual, which is a reasonable goal as there are fewer than 11 staff members who desire technology training. Some topics that could use explanation include file structure (moving, copying, manipulating files, searching for files, fragmentation, etc.), Internet search and use, and various software, such as the capabilities of Microsoft Access or Outlook.

Outcomes

Each staff member was interviewed as to their computer use in their job and their level of comfort in using their computers. Some time was spent with the staff addressing individual questions and concerns, and explaining certain concepts. Individual staff has expressed greater understanding of how to navigate the Internet and search for information, how to format Microsoft Word reports, and use different word processing software, and the use of Microsoft Excel. However, there is no concrete way of measuring an improved use, as their job-related use of computers were not in question, and are therefore unaffected.

Unfortunately, given the more immediate necessity of creating a technology plan for the Pantry Power Link Project, staff technology training did not become a priority of this partnership, and a comprehensive training plan was not created.

Evidence of Sustainable Expanded Capacity

The staff was very eager to learn more to improve their use of computers, and expressed a willingness to use their personal computers more.

Recommendations

I would recommend the use of training software, such as Video Professor, or the purchase of a book on an introduction to Microsoft Windows for interested staff members. These will provide a better understanding of file system structure, and will make it easier to save, access, locate, or otherwise manipulate files on Windows machines. An understanding of how data is stored on a computer and how to access it may provide greater levels of confidence in dealing with computers, and more independence in learning, as the staff member would be less afraid of deleting or altering necessary information on their machine.

Additional Recommendations

1. Setting up a Firewall

Hunger Services Network has switched from a dial-up Internet connection to DSL during the course of the consulting partnership. Because of this change, it is necessary to set up a firewall to protect the sensitive personal and financial information collected by HSN. HSN's transition to DSL means that their Internet connections will now be continually live and open, and therefore more susceptible to security concerns with client information, especially given the transfer of information that will result from the Pantry Power Link Project. HSN tracks both personal and financial records of clients, and this information could be damaged, stolen, or manipulated by malicious hackers or eavesdroppers. A firewall will help block unauthorized incoming traffic over the Internet, and will prevent unauthorized access of local network

Firewalls can be implemented both in the software level and in the hardware level. A hardware solution, such as a broadband router, may be simpler to implement, as it doesn't disturb the user experience. Alternatively, a software solution may allow for more customization.

If a broadband router were purchased, an additional consideration would be its wireless capabilities. As HSN may be buying laptops in the future, a router with wireless capabilities is worth consideration. Some companies that provide this technology include SMC or Linksys. One product worth consideration might be Linksys Wireless 4-Port Cable/DSL Router (<http://www.linksys.com>). This product sells for under \$100.

For a software solution, Zone Labs is a well-known firewall technology provider and ranks number one worldwide in personal firewall software. They offer extended support options for individual, small-business, and corporate purposes. Zone Alarm can be bought online at <http://www.zonelabs.com>

The following implementation should be taken to address this issue:

- Discuss the security needs of the organization, the level of security/encryption provided by Phoenix
- Research firewall solutions within budget

- Risk analysis where the relative costs of adding a firewall would need to be compared against the cost of the vulnerabilities associated with not using a firewall
- When product is purchased, install and customize as needed

Update: After discussion with Phoenix Business Technologies Group, the CP discovered that a DSL router had been installed at the time of the switch to DSL. Although this recommendation is no longer an urgent issue, it did bring the attention of the CP to security issues regarding the database of which they were previously unaware, and is worth mentioning.

2. Remote Access for Working from Home

The CP has expressed a desire to have some of HSN's employees connect to the Hunger Services Network database from home. Microsoft Windows is the most common home operating system, and remote access can be accomplished fairly easily with more recent versions of Windows 2000 and Windows XP.

An employee with a home computer running Microsoft Windows would be able to connect to the HSN network with some amount of configuration. While security is a concern, the dial-up connection can be configured to enforce various levels of network password authentication and data encryption.

Information about home office needs can be found at Microsoft's website (<http://www.microsoft.com>). Information on remote network access through Microsoft Windows can be found at Microsoft's TechNet, with recent articles on remote access. (<http://www.microsoft.com/technet/default.asp>). Additionally, software such as PCAnywhere (<http://www.symantec.com/pcanywhere>) could be used to connect remotely.

A good place for non-profit organizations to purchase software for discounted prices is TechSoup (<http://www.techsoup.com>).

About the Consultant

Chitra Kalyanaraman is a junior majoring in Computer Science and minoring in International Relations at Carnegie Mellon University. After graduating in 2004, Chitra plans to attend law school, and hopes to eventually pursue a career in Intellectual Property Law.