Part I. The Consulting Situation

ABOUT THE ORGANIZATION

Organization
Hunger Services Network (HSN) is a nonprofit, multi-county anti-hunger organization. HSN serves low-income residents of the Greater Pittsburgh Area, including Allegheny, Butler, Greene, Washington and Westmoreland Counties.

HSN’s mission statement is to:
“Provide programs to alleviate hunger and promote self-sufficiency with dignity and compassion.”

HSN was originally founded in 1976 as Hunger Action Coalition (HAC) and has been providing a variety of direct and referral services for those who need food assistance in Allegheny County and neighboring counties. It also acts as a fiscal agent for two food pantries in the City. Since 1976, HSN has served more than 650,000 people and will continue to serve an average of 12,000-15,000 people each year through the following three programs: Emergency Food Assistance (EFA), Food Stamp Outreach & Enrollment (FSOE) and the Food for Early Development Program (FED). HSN usually has an annual budget of $300,000–400,000. It partners with government funding sources for about 50% of its budget, and obtains the remaining amount from funding efforts, targeted grants and the generosity of church, corporate, foundation, and individual donors. Further information can be found on http://www.hungerservices.org

Facilities
HSN’s office is located at 204-37th Street in the Lawrenceville section of Pittsburgh. Since 1995, HSN has been leasing a 2,264 square foot space from Our Lady of the Angels Parish, in addition to some free space included as food pantry and storage area. The office space is well designed such that every employee has a comfortable personal space in which to work. The space includes two separate rooms with a small space in between for supplies and the copy machine: one with a meeting area with a conference table and a television, a working area for EFA operations partitioned off, and the second for administrative personnel space, plus the reception and food pantry areas, two bathrooms and the pantry storage area (a large kitchen).

Programs
HSN provides a variety of direct and referral services to low-income residents in Allegheny County, as well as neighboring counties. HSN’s most established service is the Emergency Food Assistance (EFA) Network. Started in 1979, EFA provides one county-wide hotline for people needing emergency food assistance and serves an average of 300 to 450 families each month. Currently, HSN has about 250 pantries in its network, to which it can refer people for service. HSN takes demographic and financial information on every household, enters the data into its Pantry Power Link Project (PPLP) database, then calls food pantries near where they live for them to receive a 3-7 day supply of food or serves them directly from HSN’s in-house pantry on an emergency basis. About 75% of EFA clients are referred while the other 25% are served by HSN directly. An EFA work process diagram is included in Appendix A.

Another major program is the Food Stamp Outreach & Enrollment Program (FSOE). HSN has recently changed its processes since becoming an official Community Dashboard Partner of the PA Department of
Public Welfare. FSOE staff primarily complete people’s applications for food stamp benefits online using the COMPASS system (Commonwealth of Pennsylvania Access to Social Services). Now in about 20 minutes, the application can be completed. It is then downloaded within 24 hours by the correct County Assistance Office and then they have the client(s) come in to verify their identify and information. (This is an improvement over the previous system where a paper application was sent and had to be filled out.) In Allegheny County, people can call 412-681-1943 for this service which includes referrals for other social services needed. The average benefit level of everyone who calls HSN for help continues to be more than $150 per month in food stamp benefits. The Allegheny County Assistance Office is willing to verify that every year families receive approximately $250,000 in food stamp benefits to purchase food at area grocery stores. An FSOE work process diagram is included in the appendix.

Staff
HSN has five full time employees and a part-time intern from the University of Pittsburgh and is looking to employ a full-time administrative assistant. HSN has had volunteers from the Heinz school in Carnegie Mellon University to create some of the programming for the PPLP database for HSN. All employees have a personal computer and an email account and are comfortable with the IT applications being used daily, such as Microsoft (Ms) Word, Ms Excel, Ms Access, Ms Outlook, and QuickBooks.

1. Ann Mason is the Executive Director and she reports to the Board of Directors. She is responsible for obtaining the funding to run HSN’s programs and overseeing all HSN programs. She uses her computer frequently for email and scheduling, word processing, mailing lists and financial spreadsheets. She is comfortable with MS Software, Quickbooks and is getting more comfortable with the Access database.

2. Louise Herring is the Program Director. She works closely with Ann and the Assistant Program Director to administer the EFA program and uses Access database frequently. She does some word processing and statistics reports in Excel spreadsheets.


4. Roy D. Twyman was promoted to Assistant Program Director in January, 2004. He assists Louise in overseeing the EFA program, completes FSOE work and supervises Jim Jackson in the FSOE program. He is familiar with Lotus and Excel spreadsheets and currently uses Excel and COMPASS for food stamp eligibility pre-screening and applications online.

5. Jim Jackson is the Food Stamp Enrollment program worker. He works closely with Roy to run the FSOE program. He is also familiar with Lotus and Excel spreadsheets and now primarily uses the COMPASS online system to submit food stamp benefit applications for FSOE.
### Technical Environment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Features</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gateway Server</td>
<td>(changing to work station with new Dell server hooked up to all computers)</td>
<td>For staff members’ use and to apply for food stamps online in HSN’s office, using the Commonwealth of Pennsylvania Access to Social Services (COMPASS) program. The zip drive is used for backups.</td>
</tr>
<tr>
<td>11 Desktop computers</td>
<td>11 Gateway computers with: a) Intel Celeron processors b) 64 MB of RAM c) CD-ROM and floppy drives d) a zip drive (only in 1 computer)</td>
<td></td>
</tr>
<tr>
<td>One Hewlett Packard Pavilion with: a) Intel Celeron 700 MHz b) 127MB of RAM.</td>
<td>Software: Microsoft Small Business Server with a Windows NT platform (98), equipped with Microsoft Office Suite. QuickBooks is installed only on Alice’s and Ann’s computers.</td>
<td></td>
</tr>
<tr>
<td>1 new Dell Server</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 new Dell Desktop computers</td>
<td>Five Dell computers with: a) Intel Pentium 4 processor at 2.20 GHz b) 256 MB RAM c) floppy drive d) CD-RW drive e) other accessories</td>
<td>One for Ann Mason. Four for the EFA program.</td>
</tr>
<tr>
<td></td>
<td>Software: Windows XP Pro, equipped with Microsoft Office XP Pro and Norton Anti-Virus.</td>
<td></td>
</tr>
<tr>
<td>5 Printers, 1 Fax Machine, 1 Scanner, 1 Photocopying Machine, 1 new server and 1 Dell projector.</td>
<td>For general office use.</td>
<td></td>
</tr>
</tbody>
</table>

All computers are currently connected to each other and networked to a server. HSN uses Veritas backup system, with a consistent daily backup and a full weekly backup. HSN’s computers are connected via DSL connection and its Internet Service Provider (ISP) is Nidhog. They outsource the maintenance of their website and emails to Phoenix Business Technologies Group (PBTG). Their information can be found at http://www.pbtg.com
Technology Management
HSN has a relatively small internal technology management compared to its dependency on external technology management. Alice backs up the financial accounts in QuickBooks once a day to disks, one of which is left at HSN and she takes the other home. The Veritas backup system takes care of both Quickbooks and the rest of the system data. Other than that, HSN outsources all its technology management to PBTG. PBTG is responsible for website maintenance, email accounts, server maintenance, virus protection and other minor computer problems. There have been no major software or hardware problem so far and HSN is in good communication with PBTG.

Technology Planning
HSN usually submits proposals to the Allegheny County Department of Economic Development to request technical equipment grants a year in advance, as needed. The government sector pays for all the technical equipment needed, which may include 12 more new computers and a digital document imaging system later in 2004 and a small amount for more programming for the Pantry Power Link Project (PPLP) database (used for EFA). Besides the external support for technology planning from the government, HSN had some internal technology planning from its board of directors who designed a strategic plan in 2002.

Internal and External Communication
HSN has good internal communication among its staff because the office space is a reasonable size for six employees and all employees work on the same level. In addition, each employee’s personal computer is connected to every other via two shared drives, which are backed up by the server. The K drive is available for everyone to share their documents while the H drive serves as the network drive on individual computers. Furthermore, each desk is equipped with telephone and voice mail and each employee has a personal email account. The photocopying machine also helps to duplicate and to distribute hard copies of documents around so that all employees receive the same information and are frequently updated. In addition, there is an HSN Master Calendar in Outlook that can be viewed and edited by everyone. This ensures that every employee is aware of everyone’s working schedule and appointments. HSN also has good internal communication between its staff and the board of directors. They have constant communication via phone, email, and mail. To maintain active internal communication, the board of directors meets every other month and a staff meeting is held at least once a month. Ann Mason, the Director of HSN, meets with Louise, the Program Director and Roy, the Assistant Program Director every week to keep everyone on track and to supervise the programs run by HSN.

On the other hand, HSN also has organized external communication between HSN and clients and between HSN and donors. HSN prefers to have phone conversation with clients, especially for the EFA and FSOE programs while HSN often communicates with donors via fax and direct mail. HSN has a website and it is currently a good tool for more efficient external communication with potential donors, and volunteers.

Information Management
HSN manages most of its data and information electronically. When clients call for EFA, employees input client’s data into the computer and print hard copies of it. The same goes for the FSOE program. All personal computers in HSN have shared and individual drives for employees to save and to keep track of their documents. Access rights are set so that no one except Ann and Louise have administrative rights to make any necessary changes. For instance, there are a few levels of access in the Pantry Power Link Project (PPLP) so that no employee can change anything major by accident and so that it is easier to keep track of the database. Information is carefully managed and precautions are well taken so that HSN does not lose data easily. Backups are frequently made on tapes and servers in the office.
MAJOR CONSULTING TASK - 1
Name of task
Updated Website to Improve External and Internal Communication

Problem or Opportunity addressed
There was no staff member who knew how to maintain and update a website. There were two occurrences when the press (radio and newspaper) was informed of the launching of a major fundraising event and requested to publish it to inform the public, but the website was not updated to reflect the program or event. A frequently updated website would be able to improve HSN’s external and internal communication. For instance, updated fundraising events, names and positions of staff on the website would increase participation by receiving constant comments from staff members about the website, besides increasing credibility and trust of the media, sponsors, donors and volunteers. In addition, a functional and popular website with good annual financial reports and newsletter would be able to impress and attract the Board of Directors to be more enthusiastic and involved. HSN’s external communication would also be enhanced because the website is a good source of information and would certainly increase HSN’s visibility to potential volunteers, donors, media, other agencies, government, educational institutions, and potential board members.

Approach/ Solution
1. Explained the importance and benefits of a current website to the organization.
2. Presented an overview of the website.
3. Identified at least one permanent employee, if possible, who was capable of and enthusiastic about learning and maintaining the website for HSN. Ann Mason, the Executive Director volunteered and she was the most suitable person to work on the website because she was a permanent staff member, she had worked with the previous HSN web designer and she understood clearly the need to fully utilize the website because she oversaw all programs in HSN.
4. Explained the importance of secure file transfer to web server and explained the appropriate and preferred features of File Transfer Protocol (FTP) software and how to get them for free.
5. Showed partner how to use online resources to get exposure for various good websites that serve the same purpose as HSN such as using search engines like Google and how to use online resources to trouble-shoot problems. Showed partner how to view their source codes from any internet browser and what are the features being used by other websites that can be considered as alternative(s) for HSN.
6. Went through a basic process of updating the website with my Community Partner: how to upload and download files from server, and how to edit web pages. Explained how software like Frontpage and Dreamweaver were user friendly and how good and convenient they were in converting designs and editions into HTML codes. Showed how to get free software for nonprofits from techsoup.org
7. Explained to Community Partner and made sure she understood the structure of a webpage; explained what HTML was and what the tags or source codes meant and demonstrated how they were directly related to the output so that partner understood HTML and was able to fix simple syntax errors. Also, explained the usage of scripts in HTML to make website more interactive and dynamic instead of static.
8. Let partners edit old pages on her own, while the consultant will give guidelines and comments along the way. Drafted systematic agenda for the whole semester to cover important topics of creating webpage and included interactive sessions to make sure
partner had increasing self-esteem and excitement. Planned a weekly assignment for Ann to create a simple webpage every week and reviewed it during each regular meeting.

9. Implemented guidelines and procedures for editing and maintaining websites, such as, creating logs to keep track of each file transfers and creating periodic file backups.
10. Explained why pdf format is more appropriate to be posted on the website instead of word documents and show how word documents can be converted to pdf format before posting them on the website.
11. Created complete manual and documentation along the way for sustainability.
12. Allowed three weeks for partner to review the documentation.

**How this opportunity would support the mission of the organization**
A frequently updated website would provide useful information and increase visibility of the organization besides improving credibility and making a good impression on the press, donors, board of directors and volunteers as explained above. This opportunity supported HSN’s mission directly because increasing funding, volunteers and board members makes it possible for HSN to provide more programs to alleviate hunger and promote self-sufficiency with dignity and compassion.

**How the task would impact the:**

**Organization**
The task would improve internal communication within the organization, among its staff, volunteers and board of directors, making HSN an even better nonprofit organization to work for/with.

**Program(s)**
It would be easier, faster and more effective to spread the word about fundraising events by referring donors, sponsors and volunteers to the website via phone calls, direct mail and email. The reason is that a website could be accessible anywhere and anytime and would have useful information and attractive features like pictures and banners to encourage visitors to participate more in events. Hopefully, with increased funding and more staff, the programs would be able to help more people and be conducted more efficiently and professionally. With more funding and expertise, the programs could also evolve to be more functional and helpful to more people and could even expand beyond Pittsburgh and the five-county area presently served.

**Staff**
The task would increase staff morale besides getting them to be more involved. Putting staff pictures on the website would really encourage staff to ask the friends, family and networks to visit the website. Partner would be able to learn new knowledge by getting more in-depth and first-hand information in technological applications. Staff would have more control over their operations and external communication instead of depending on a volunteer.

**Technical Environment**
The task would induce more technical and IT awareness in the office because updating and maintaining a website is no easy task and doing it themselves would give them more insight into the expanded uses of technology in general.

**Technology Management**
The task would help HSN to better understand technology management for the agency. A good website would also give a good start and strong foundation for managing other technology issues.
Technology Planning
The task would make the website more of a central feature of external communication because it is worked on internally.

External and Internal Communications
The task would enhance external and internal communications as described in the opportunity addressed section.

Information Management
The task would help the staff to manage information better from logging experience, systematic backups and conversion of editable format (word documents) to non-editable format (pdf) of files to prevent others from copying HSN’s materials.

Feasibility of the work
Time management and work plan
There would be enough time to complete it as long as there was thorough planning for and regular meeting agendas with partner and both the consultant and partner adhere to the agenda and schedule. Both must be aware of the limited time they had with each other and only work on feasible changes on the website by estimating a realistic time frame for each change.

Partner’s response
Partner has a very enthusiastic and passionate response to learn and to do homework for review during each regular meeting with consultant.

Availability of required resources
HSN has everything needed except Macromedia Dreamweaver. Student consultant and community partner decided to use Dreamweaver instead of Ms FrontPage, due in part to the advice provided by PBTG staff who maintain HSN’s website and email on their server.

Relevance to consultant’s skills
Student consultant has experience in creating, updating and maintaining website as she has had a personal website since 2001.

Relevance to partner’s skills
Partner had some surface level experience in website design and was able to contribute good ideas that could be implemented.

Work sustainability
The task would be sustainable because consultant would not produce any files for partner, but would only guide and give suggestions along the way. Furthermore, consultant would focus on getting partner to be independent by getting help from the online resources and manuals would be documented after each regular meeting.

Risks
Partner would be the sole person involved at the moment and any unexpected disruption throughout this semester would have an undesirable effect on the task.
MAJOR CONSULTING TASK - 2

Name of task
Created a standardized format for mailing lists in Ms Excel for modularization and built a simple relational database in Ms Access to link mailing lists from Excel spreadsheets.

Problem or Opportunity addressed
HSN’s mailing list is the lifeblood of the organization in terms of:

1) Soliciting Donations for
   a) Magical Jazzical (Sponsors, Patrons, Silent Auction, Ads, Contributions and Invitations/ Tickets)
   b) Holiday Appeal Letter
   c) Corporate Appeal Letter
   d) Athletes Against Hunger
   e) Newsletter/ Annual Report

2) Communication/ Education for
   a) Media – broadcast and print
   b) Politicians—elected officials, government agencies (Allegheny, Butler, Greene, Washington, Westmoreland Counties)
   c) Newsletters
   d) Food Pantries in Allegheny County
   e) Volunteers
   f) Awardees
   g) Professional Colleagues/Other social service agencies and/or their individual staff

3) Others

The task would save a lot of redundant work because HSN has many mailing lists and more than 7000 individuals and/or organizations were involved. Employees were spending a lot of time updating mailing lists manually in Excel spreadsheets. Furthermore, lack of the query feature made it very hard for employees to search through each mailing list manually and more importantly, not able to extract useful data easily. A standardized format would be created to avoid confusion and prevent data from being lost in the long run while a relational database in Ms Access would be useful to fully utilize the mailing lists by making it easier to query related information and to generate reports. With standardization and organization of the mailing lists, HSN’s mission would be directly supported, as the organization would be able to keep an updated record of donors’ information and extract related information easily.

Approach/ Solution
1. Discussed and identified specific problems with the current mailing lists with second Community Partner.
2. Understood and identified history of each current mailing list in Ms Excel.
3. Performed categorization and data classification.
4. Designed a few relational databases in diagrams and discussed with partner which would be more appropriate and which could be easily changed to be more robust in the future.
5.Introduced partner to Access features and explained how Access could help to create a simple yet useful database. Got partner to be comfortable and like working on Access.
6. Decided on a simple, but yet useful database and completed thorough planning for each regular meeting. Focused and worked on the decided design and avoid adding features. Understood the structure of the database.
7. Created a simple database for an illustration.
8. Implemented guidelines and procedures for creating the database, such as, creating logs to keep track of each level of implementation and creating file backups.
9. Worked on every level and every part of the implementation with partner.
10. Created complete manuals for general database user after the database has been completed for sustainability purposes.
11. Allowed two weeks for the community partners to review the documentation.

**How this opportunity would support the mission of the organization**
The task directly supports the mission of the organization because it would help make HSN’s programs operate more efficiently. It would improve the effectiveness of managing mailing lists and make it more efficient for HSN to keep track of financial sources and people who have given to HSN. Since the database can be customized to generate statistical data, HSN would be able to make analyses and presentations much easier and more convincing to the Board of Directors, staff, volunteers and donors.

**How the task would impact the:**

**Organization**
The task would add to another organized database in Access owned by HSN, making the organization better geared toward utilizing IT to help staff work more efficiently. It would have impact on the organization’s IT literate culture.

**Program(s)**
The Access database would save staff time during work process for the major fundraising mailings such as the Holiday Appeal, Annual Report and Magical Jazzical mailings. In addition, the programs would depend on accurate and updated mailing lists to get funding.

**Staff**
The task would get rid of unnecessary trouble taken by staff to frequently update the mailing lists manually. Staff would have the ease of using Access database to edit information on mailing lists and they could focus on other more important work process such as funding events to get more money to help more people. Furthermore, staff had been using Access database for other work process and they were familiar with it. Partner would be able to learn and understand the underlying structure besides broadening partner’s perspective on Access for future applications of Access.

**Technical Environment**
Since the task would add on to another IT application in the work environment, more work would be done using computers and this would make the organization builds a good and efficient technical environment.

**Technology Management**
The task would help the organization to use the technology that they had more efficiently. In other words, the available technology is put to good use.

**Technology Planning**
The task would also help in future technology planning because it could build on the simple Access database for more robust mailing database. In addition, if the IT resources were used more efficiently, it would greatly enhance direct mail and emails.
External and Internal Communications
The task would create better internal communication as staff would be less likely to complain over the inefficient mailing list update and instead have more time for productive work. On the other hand, the task would also create better external communication with the donors who would not receive duplicate mailings because their information in the mailing lists was very likely to be updated immediately as Access is much easier to use compared to Excel spreadsheets.

Information Management
The task would help HSN in managing information by keeping better track of donors and potential donors. In addition, the database could be a good tool to query useful information as a strong support for requests for funding from government, foundations, corporations and individuals.

Feasibility of the work
Time management and work plan
There would be enough time to complete the task as long as there was thorough planning of regular meeting agendas with partner and both consultant and partner adhered to the schedule. Both must be aware of the limited time they had with each other and focus only on the decided design of the database.

Partner’s response
Partner was passionate and happy with the task because she agreed that the new database, although small, would save a significant amount of time formerly needed to update and organize mailing lists. Furthermore, she believed that the design of the database would be simple and small but yet expandable and not difficult to create.

Availability of required resources
HSN had everything needed to create a relational database in Ms Access because all the current computers had Ms Office Professional running.

Relevance to consultant’s skills
The consultant had almost no prior experience dealing with Access or databases but she was positive that it would be a good learning experience. Furthermore, she has reasonable computer science knowledge, had training in Access a few years ago and thus can pick up Access quickly.

Relevance to partner’s skills
Partner has no prior experience in designing and creating a database in Access, but she is familiar with other databases in Access such as HSN’s current EFA database.

Work sustainability
The task would be sustainable because partner would work on the database with the help of the consultant and manuals would be documented along the process. Furthermore, HSN has employed an administrative assistant and she could learn how to manage database in Access.

Risks
The work on the database would be maintained if it is used frequently and sustainability risks would be minimized as long as there was complete documentation for the database. However, a
bigger risk would be to choose the wrong design that did not meet the needs of HSN for creating it in the first place.

Part II. Outcomes and Recommendations

I. Results of Consulting Work

A. Task 1 - Updated Website to improve External and Internal Communication

The task is to create client’s capacity to update website in order to improve external and internal communications of the organization. A frequently updated website provides useful information and increases the visibility of the organization in addition to improving its credibility and creating a better media impression for the press, donors, board of directors and volunteers. This task supports HSN’s mission directly as the website can provide increased publicity, potentially help get more funding from successful fund-raising events, and help recruit well-informed volunteers and board members who together, make it possible for HSN to provide more programs to alleviate hunger and promote self-sufficiency with dignity and compassion.

1. Scope of Work Task 1:

   a. Outcomes

   1. Three outcomes:

      1. HSN’s external and internal communication ability is enhanced because the website is able to serve as the central feature of external communication because it is worked on internally and can be updated regularly, instead of waiting for volunteers to have time to do it.

      2. The task of updating a simple website which reflects the organization’s latest activities is possible because Ann is capable of maintaining and updating the website quickly at anytime and anywhere, without paying and/or depending on a third party.

      3. The first-hand experience of updating a website has expanded Ann’s thinking horizon pertaining to how technology can help HSN. It has helped her generate creative ideas or solutions to obtain more funding using the Internet and to run and supervise all programs better using technology. This further leads to a new vision of how technology can support their mission.

   2. Concrete evidence of the outcomes:

      Since Ann updated the website all by herself using her own content, she knows very well what is published on the website. Thus, she is able to inform and elaborate more confidently on the current events to the Board of Directors during board meetings, to donors and to the press. She is thrilled with her ability to edit and publish the website. With a higher confidence, her enthusiasm is naturally increased when managing events. She looked very happy and excited after she edited each webpage.

      Ann is aware of free software sites such as www.download.com. She searched for sharewares such as free FTP (File Transfer Protocol) programs available in the site, downloaded the software called WS FTP on her computer and installed it. She selected the FTP program after discussion with the student consultant and installed the program smoothly without asking much as the installation wizard is self-explanatory. The installation process and usage of the FTP software will be sustainable because a thorough documentation has been produced in case she or any staff member needs to replicate the process.
Towards the end of the consulting task, the student consultant suggested to Ann a better FTP program, called SmartFTP because of the complete documentation that is provided. The sustainability of finding and installing a software became very clear after Ann installed a different FTP program, called SmartFTP\(^1\) without any help or questions. This showed that Ann learned how to install any FTP program from her past experience of installing WS FTP and no longer needed assistance from a third-party or any consultant.

Ann also knows how transfer files using the FTP program, from her local disk to PBTG’s (Phoenix Business Technologies Group) server. She did it with guidance from the student consultant the first few times using WS FTP. Towards the end of the consulting task, Ann was capable of transferring files using the new software, SmartFTP on her own with no help from the student consultant. It was observed that she remembered to refresh the FTP program and Internet browser and saved the files before the file transfer. This is good because she was comfortable in using either software to transfer the files and thus, increased her flexibility while decreasing her dependency on one FTP software. However, there was a minor mistake, that is, she transferred the file (with the same name, but from a wrong local directory) to the Phoenix server and had to redo the file.

Although Ann edited the HTML pages with the student consultant sitting next to her, she had full control of the keyboard and mouse. She did it comfortably, just as she would edit Ms Word documents. For instance, she cut, copied and pasted text from Ms Word to Dreamweaver, changed the size and font of the text in Dreamweaver, removed images from the HTML pages, searched and inserted new images. She was aware of some of the features in the HTML files before the student consultant by pointing out that they are tables. After the basic web editing, Ann asked advanced questions regarding how to make the website looks professional and attractive. Her questions suggest that she has found what she learned to be helpful and is motivated to continue using Dreamweaver.

Ann also edited an HTML file using Notepad without help from the student consultant. To be more specific, Ann used the “view source” to open the HTML codes in Notepad and used the “find” function in Notepad to look for keywords. This gives Ann an alternative to use Notepad instead of Dreamweaver and decreases her dependency on one web editing software.

After the FTP program was closed, Ann was able to replicate the updating process for other HTML pages. Ann reopened the FTP program, retransferred HTML files from PBTG’s server to the organization’s local server, opened the files in Dreamweaver, edited the files and transferred the updated HTML files back to PBTG’s server.

In addition, Ann was able to solve error-prone HTML pages created by the student consultant. For instance, Ann troubleshot and recognized if the HTML file contained error resulting from missing HTML tags, such as “</b>”. She took notes, learned and was able to differentiate the functions of common HTML tags such as “<br>”, which means a new line and “<p>”, which means a new paragraph. She used short-cut keys such as Ctrl-c, Ctrl-v, Ctrl-x, and Ctrl-s.

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\(^1\) [http://www.smartftp.com](http://www.smartftp.com)
Ann also filled in the web logging file in an Excel spreadsheet created by the student consultant so that she could remember the content of the HTML pages that had been updated and uploaded and thus, able to reverse the process and remember to make backups.

Although Ann had done the entire static HTML updating herself, she did most of it when the student consultant was around and it is not certain that Ann will be able to replicate everything on her own. Note that she did edit the file in Notepad by herself and just had a little prompting from the student consultant to upload the file to Phoenix server. However, documentation has been created to help Ann review and search for answers to her questions in the future. The documentation can also serve as a manual for other staff members who need to install the FTP program on their own computers in the future and as a step-by-step guidance on how to use the FTP program. All documentation have been made available on the organization’s shared server, burnt on CDs to be given to Ann and her husband (HSN volunteer) Dr. Major Mason while hardcopies are to be kept as records.

3. Comparison to what the state was before the consulting partnership began.
There was no staff member who knew how to maintain and update a website. They had not used any FTP program nor had they used MS FrontPage or Dreamweaver to edit webpages. There were two occurrences when the press (radio and newspaper) was informed of the launching of a major fundraising program and requested to publish it to inform the public, but the website was not updated to reflect that program. In addition, there were other programs that were no longer active, but were not updated on the website. Besides that, the names and positions of board and staff members were also not updated. All these certainly reflected badly on the credibility of the organization both externally and internally.

4. Concrete evidence of outcomes that has not been observed.
It was mentioned that Ann has started using Windows short-cut keys more often when updating webpages. So, Ann is likely to do the same when working on MS Word documents or Excel Spreadsheets. Although this outcome has not been observed, it is very likely that Ann will be able to increase her personal work efficiency when dealing with mundane and tedious work and more importantly, able to use the time saved to plan for more fundraising activities to expand the organization’s capacity.

So far, all the website updating tasks involved only static webpages (such as text, images and links) and it is not clear how Ann is able to visualize how dynamic programming works when the organization needs it in future. In addition, it has not been observed that Ann is able to solve error-prone HTML pages without the student consultant.

5. Sustainability and risks
Ann will be able to update the website to reflect the most current activities anytime for the next six to 12 months. For the task to be sustainable, Ann just needs a computer with Dreamweaver software and an FTP program. There is no risk that the outcome may not be sustainable as long as Ann continues working in the organization as she is the only staff who currently knows how to maintain and update the website. Thus, it will be a good idea for Ann to train other staff members to perform these tasks. Fundamental capability that depends on one person in an organization is risky.

However, it is positive that this outcome is sustainable because Ann will have regular practise as she needs to update HSN’s website almost monthly (before every new fundraising event and
whenever there is a change in other information in the organization). In addition, the HTML editing procedure is very similar to using a Microsoft Word software because it involves only static webpages (texts, images and links).

6. Increased capacity to meet the organization’s mission
By updating the website on her own, Ann has started to discover the economic and marketing potential of a website. For instance, Ann is interested in Google Grants, an adjunct to Google’s AdSense contextual advertising program, currently in beta release. More online publicity worldwide would definitely increase the visibility of the organization beyond the county and increase the donors’ confidence, besides upgrading the organization’s credibility for potential board members and volunteers.

In addition, she will be able to evaluate better software to use in the future by having the experience and flexibility of using two FTP softwares, not only for website updating tasks but also for other software that could be needed for future tasks. Since she is aware of the online resources of free shareware such as www.download.com, Ann will be able to search for needed software for other tasks.

This task has also demonstrated an increase in Ann’s morale since she can use technological advances to increase her work efficiency. Ann is thus a better-informed leader of the organization by getting more in-depth and first-hand experience from dealing with more technological related applications. Staff members now have more control over their operations and external communication instead of depending on volunteers.

The task has certainly introduced more technical and IT awareness into the office because updating and maintaining a website is no easy task and doing it themselves successfully gives Ann and HSN more insight into technology in general. The task has also helped them to better understand technology management for the organization. A good website is a good start and a strong foundation in managing other technology issues besides training the staff to manage information better from logging experience.

As the organization is now able to communicate better externally and internally, this opportunity supports HSN’s mission directly because it helps to increase funding coming from well-organized fundraising events, and potentially increase volunteers and board members coming from better visibility of the organization, which all directly support the organization’s mission to provide programs to alleviate hunger and promote self-sufficiency with dignity and compassion.

7. A new vision of how technology support the mission
Ann exhibited interest in creating a fancier website as a tool to promote the organization to attract more donors, board members and volunteers. She is always very excited and motivated to discover what is beyond static web functions whenever there is a discussion about online donations and a password-restricted part of the site for board members.

Since Ann worked on the website updating herself, she now has first-hand experience using IT to support and increase work efficiency. Adding this to her experience using Access databases, she will be able to generate new ideas for future projects by broadening the technological vision of the organization. For instance, she can outsource any project that involves dynamic webpages such as accepting online donations as the organization grows.
b. Recommendation 1 – Use intermediaries to promote more visits to website

Link HSN’s website with:

1) (Potential) Partners/ County websites
   (i.e. Community Partnership at Senior Health Services of the Western Pennsylvania Hospital, the Department of Human Services section of Allegheny County’s website, Pennsylvania Hunger Action Center website)
   i) The Hunger Site

2) Popular search engines or other non-profits search engines
   i) Google - Get Google Grant to obtain free Google AdWords™ advertising for non-profit organizations
   ii) Idealist.org – Where the Non-Profit World Meets
   iii) Non Profit Search Engine Positioning
   iv) VolunteerMatch

1. Rationale

A good and frequently updated website, which is not linked or publicized well will only be of limited use to those people who are directly involved with HSN, who are either local Pittsburghers or County residents. Since HSN is now ready to provide a frequently updated website, it is time to promote HSN beyond the county and the state by linking HSN’s website to (potential) partners or county websites and popular search engines like Google and other search engines for nonprofits.

Not only will it increase the visibility of the organization beyond Pittsburgh, it would also serve as a good incentive to update the website frequently, and therefore, ensure sustainability of the website updating task. This recommendation works in parallel with the second recommendation to create a web portal and online donation capability. There is no doubt that the Internet gives a promising return with support of good search engines like Google. With increased traffic to the website, the organization will attract more online donors, potential volunteers and potential board members. It will naturally impress the media, politicians, professional colleagues, other social service agencies and their staff to collaborate or support the organization.

In addition, HSN will increase its credibility by linking HSN’s website to other hunger related nonprofit organizations like The Hunger Site. Besides that, HSN can create a close relationship with its partners by linking its website to its partners’ websites such as the Western Pennsylvania Hospital Community Partnership at their Senior Health Services. HSN already has established relationships with many social service organizations. This network is important in order to get more funding and to gain the trust of more donors, politicians, board of directors and the media to support the organization. Eventually, the positive network effect will be tremendous in the long term as HSN keep expanding its network.

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2 http://www.seniorhealthservices.com/hunger_services.htm
3 http://www.thehungerite.com/
4 http://www.idealista.org/
5 http://www.nonprofitsearchpositioning.org/
6 http://www.volunteermatch.org
7 http://www.seniorhealthservices.com/hunger_services.htm
Impact of using intermediaries to promote website:

With more money, credibility, trust and visibility, there is no doubt that HSN will be able to provide more programs to meet its mission. Therefore, HSN will be able to expand its capacity to help more people in need. With such positive impact on the organization, the recommendation will naturally have a good impact as well on the staff members, programs, technology management, technical environment, technology planning, information management, and internal and external communication.

For instance, with a strong network and visibility, HSN will be well-known, and thus is likely to have a wider pool of volunteers/interns and able to increase its staff. In addition, the current staff members will be more knowledgeable about utilizing the Internet to meet their mission. Also, with more funding and increased IT capacity and utilization, HSN will be able to provide better quality programs to alleviate hunger and promote self-sufficiency with dignity and compassion.

Since it is vital to have a frequently updated website, HSN will need to manage its technology well with the help of PBTG. HSN’s major source of funding may come from the Internet in the future, its staff members will need to learn how to use the technological related applications in order to do their work. Therefore, the technical environment in the organization will improve naturally.

In addition, this recommendation certainly requires good technology planning to make sure the website is running well before going all out to get publicity and funds from the Internet. As time goes on, technology planning will be essential to the organization. For instance, a disaster recovery plan will be needed if the website does not work temporarily. With more data flowing in and out of the organization as a result of good publicity, HSN will need to manage its information better and thus, increase the efficiency of information management.

Last but not least, it is also clear that HSN can improve its internal and external communication by expanding its already-strong network by making it easier for the public to find and work with a local hunger services nonprofit.

Proofs of Google Grant’s effectiveness/impact on nonprofits can be obtained from news.

Although the evidence below shows only Google’s effectiveness as a popular search engine, and not other search engines, it is positive that the result will be similar when HSN is linked to other search engines.

1. VolunteerMatch:
   “The Google program has really been incredible for us”, Jason Willett, director of communications at VolunteerMatch.org, told this publication. "Since October, nearly 35 percent of our traffic has come directly from the VolunteerMatch ads on Google.”

2. America’s Second Harvest:
   America’s Second Harvest has also benefited greatly from Google's benevolence. It runs an AdWords ad that reads: "Create a hunger-free America. Your donation will help feed millions." According to Gabriela Fitz, online strategist/project manager for America's Second Harvest, Google Grants referred 12,000 visits to second harvest in December alone. That number represents 8 percent of the total visits to the site from any source and

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8 http://www.internetnews.com/ec-news/article.php/3303971
is at least a 300 percent increase over the "regular" referrer numbers from the traditional Google search queries. Google is the third largest referrer to the site, trailing only direct URL entry and the global hunger site (www.hungersite.com). "Google has consistently been our largest referrer, Fitz told this publication, "but honestly the AdSense ad has been terrific. We've seen it in a lot of places where people come to us and say, we found you through a Google ad."

2. Steps to follow
a) How to get Google Grant to obtain free Google AdWords™ advertising for non-profit organizations:

Screenshot of free Google Adwords™:

![AdWords Screenshot](http://www.google.com/grants/index.html)

Figure 1: Obtained from http://www.google.com/grants/index.html

Description of current situation:
Currently, when Internet users search for "hunger" on www.google.com, The Hunger Site appeared as the first search result. Only when people search for "hunger services" did the HSN website appear as the first search result. HSN can try to get a Google Grant to promote its website to the public. In addition, HSN can also add its links to The Hunger Site to increase HSN’s visibility on the Internet and promote online donation for HSN at The Hunger Site while introducing the web portal.

Program Information to apply for Google Grant – quoted from:
1. Contact Information: googlegrants@google.com
2. Update Information: googlegrants-updates@google.com
3. Eligibility:
   “Your organization must have current 501(c)(3) status to be eligible for our program. Google is focused on organizations with a strong mission to help the world, including areas such as science and technology, education, global public health, the environment, youth advocacy, the arts, and groups sharing our philosophy of community service. Please note that religious or political

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9 http://www.hungersite.com
10 http://www.google.com/grants/index.html
11 http://www.google.com/grants/details.html
organizations are not eligible for our program. Selections are made at Google’s sole discretion and decisions regarding award recipients are final.”

4. Application Process:
   a) Prepare your application for success by understanding the AdWords program
      “In your application, you’ll be asked to provide sample ad text, keywords, and a brief statement about how your organization will benefit from the Google Grants program. To make your application as compelling as possible, please prepare yourself for creating sample ad text and selecting appropriate keywords by reading our information sheet.º For a printed version of the application to assist you in filling out our online form, please see our printer-friendly application page.”
   b) Submit your application to the Google Grants committee
      “A committee of Google employees is responsible for selecting award recipients. Selection criteria are based on confirmation of your 501(c)(3) status, the content of your application, and the potential benefit that your organization and the public will receive from free Google Adwords advertising. Once we have selected our award recipients, all applicants will receive an email notification regarding the status of their Google Grants applications (please note that because of the high volume of interest in our program, we are unable to respond to requests for information about the status of individual applications). If you are selected for a Google Grant award, you will receive detailed instructions for setting up your account, and contact information for a Google Grants Specialist, who can answer your questions and provide you with assistance to help you make the most of your award. Please note that if you do not create an account or decide to cancel your Google Grants account, any unused portion of your grant will be forfeited.”

b) How to link HSN’s website to other related non-profits’ and partners’ website:
   1. (Potential) Partners/ County websites
      i) The Hunger Site – quoted fromºº
         “The Hunger Site was the first online activism site on the Web. To date, more than 200 million visitors have given more than 300 million cups of staple food. The staple food funded by The Hunger Site is paid for by site sponsors and is distributed to those in need by Mercy Corps and America’s Second Harvest. 100% of funding from sponsor banner advertising goes to our charity partners. Funds are split between these organizations and go to the aid of hungry people in over 74 countries, including those in Africa, Asia, Eastern Europe, the Middle East, Latin America and North America. With over 3.5 million unique visitors each month, The Hunger Site has become one of the most trafficked sites on the Internet. Its grassroots popularity has been recognized with prestigious Web awards in the activism category -- the 2000 Cool Site of the Year Award and the People’s Voice winner at the 2000 Webby Awards.”

HSN can try to apply to be a local food distributor in Pittsburgh for The Hunger Site just like Mercy Corps and America’s Second Harvest. HSN can also learn how The Hunger

ºº http://www.google.com/grants/information.html
ºº http://www.google.com/grants/print.pdf
ººº http://www.thehungrersite.com
Site links itself to its partners by creating banners and buttons – from Contact Us in The Hunger Site’s website.

2. Popular search engines or other non-profits search engines
   i) Idealist.org - Where the Non-Profit World Meets - quoted from[15]

   Why use Idealist?
   Idealist enables organizations - whether they have a Website or not - to enter and update information about their mission, services, volunteer opportunities, internships, campaigns, upcoming events and any resource they have produced. All this is free for any organization. Idealist is visited by over 25,000 people every day, with an average of 1,500,000 page-views every week. In addition, all new listings on the site are emailed automatically to tens of thousands of subscribers 48 hours after they are posted here.

   Programs:
   HSN can add its related listings to Idealist.org by filling an online form on their website.

   Examples of listings:
   1. Organization
   2. Consultants
   3. Jobs
   4. Volunteer Opportunities
   5. Internships
   6. Programs
   7. Events
   8. Campaign
   9. Resources

   ii) Non Profit Search Engine Positioning – quoted from[16]

   “Because most Internet users employ search engines and directories to look for information, effective positioning within these portals is a great asset for any successful web site. We will optimize pages in your site for better search engine placement in search engines like Yahoo and Google. Where necessary, we’ll create new pages targeted at specific keywords targeted to your website.”

   HSN can apply to get free web positioning from Non Profit Search Engine Positioning by filling the form online at http://www.nonprofitsearchpositioning.org/free.html

   There is no catch and no cost as long as HSN qualifies as a non-profit or charity. However, once approved, HSN will have to link to Non Profit Search Engine Positioning’s website and recommend their commercial services to commercial clients seeking their type of services.

   iii) VolunteerMatch – quoted from[17]

   VolunteerMatch matches volunteers to volunteer opportunities at over 26,000 organizations. News about VolunteerMatch partnering with Google[18].

“VolunteerMatch is the nonprofit, online service that helps interested volunteers get involved with community service organizations throughout the United States. Volunteers enter their ZIP code on the VolunteerMatch website to quickly find local volunteer opportunities matching individual interests and schedules. This simple, effective service has already generated hundreds of thousands of volunteer referrals nationwide.”

HSN can register to be a member of VolunteerMatch at http://www.volunteermatch.org/ to increase its visibility and expand its contacts.

3. Resources

Contact Information for:

a) The Hunger Site

One Union Square
600 University Street, Suite 1000
Seattle, WA 98101-4107
U.S.A.

b) Idealist.org
Include email address and phone number when writing to Idealist.org

Action Without Borders, Inc.
79 Fifth Avenue, 17th floor
New York, NY 10003
Tel: 212-843-3973
Fax: 212-564-3377
Email: Lea@idealist.org (to add HSN into Idealist.org)

c) VolunteerMatch

Email : support@volunteermatch.org
Phone
  Main Office : (415) 241-6868
  Client Service / Technical Support : (415) 241-6872
Fax : (415) 241-6869
Mailing Address : VolunteerMatch
  385 Grove Street
  San Francisco, CA 94102
B. Task 2 - Create a standardized format for mailing lists in Microsoft Excel for modularization and build a simple relational database in Ms Access to link mailing lists from Excel spreadsheets.

The task is divided into two parts:-

- a) create a standardized format for mailing lists in Ms Excel for modularization.
- b) build a simple relational database in Ms Access to link mailing lists from Excel spreadsheets.

HSN’s mailing lists are the lifeblood of the organization in terms of soliciting donations, communication and education. A standardized format needed to be created before it gets harder to standardize when there are more mailing lists in future and to avoid confusion and prevent data from being lost. A relational database in Ms Access is useful to fully utilize the mailing lists by making it easier to query related information, keep changing information updated and to generate reports. With standardization and organization of the mailing lists, HSN’s mission is directly supported, as the organization is able to keep an updated record of donors’ information and to extract related information conveniently.

1. Scope of Work Task 2:
   a. Outcomes

1. Four outcomes:
   1. Increased work efficiency by eliminating redundant and mundane work of updating contact information more than once in many Excel spreadsheets.
   2. Get a head start in organizing and linking various mailing lists in Excel to ensure all information is well kept and sustainable as the organization grows over time.
   3. Maximized usage of the contacts and information from all donors since 1983 by making querying for various needs much easier. Build and strengthen the close relationships among donors and the organization.
   4. The database leads to a new vision of how technology can better support their mission.

2. Concrete evidence of the outcomes:

One staff member of the organization, Ann Mason and one volunteer (her husband), Dr. Major Mason, were aware that their mailing lists are very important for various events and people. They identified current problems with the unorganized mailing lists in Excel spreadsheets that contain important data and foresaw opportunities for the organization once the mailing lists are linked.

Dr. Major Mason created the layout of the Overview and Research Design for the Access database manual two years ago. However, HSN only adhered to the layout for a short period of time as the staff did not understand the purpose and process of the whole underlying system. This resulted in the disorganization of the mailing lists. In order to avoid history repeating itself, Dr. Major Mason and the student consultant worked together to standardize the mailing lists and improved on the design of the project to link all the needed Excel mailing lists in the Access database by simplifying the complicated layout architecture - making it more user friendly in terms of editing and querying the mailing lists. Dr. Major Mason discussed and edited the Overview and Research Design of the Access database manual with the student consultant. Therefore, he understood fully the underlying concept and would be able to explain it to the staff members of the organization.

The standardization would be sustainable because it would need to be done only once. Furthermore, Dr. Major Mason completed almost 80% of the standardization process on his own.
The student consultant then built a simple relational database in Ms Access with the help of Corrine Harkins, from Computing Services at Carnegie Mellon University (CMU) without the presence of Ann or Dr. Major Mason. There was not enough time for Dr. Major Mason and Ann to test the simple database although examples of queries, forms and reports have been created in the database. Thus, it is not clear how Dr. Major Mason or any other staff member of the organization will be able to replicate the task although they have been shown briefly how to create a simple database in Ms Access.

However, a thorough documentation on how to import Excel spreadsheets, create tables, queries and reports has been created to help Ann and Dr. Major Mason review and search for answers to their questions in the future. The documentation can also serve as a manual for other staff members who would like to create an Access database for other purpose on their own in future. All documents have been made available on the organization’s shared server, burned on a CD to be given to Ann and Dr. Major Mason while hardcopies will be kept as records. In addition, two Ms Access tutorials, for Beginner and Advanced, from the Computing Services Department were lent to Dr. Major Mason as a complete guide for all functionalities needed in Ms Access.

3. Comparison to what the state was before the consulting partnership began.
HSN has been creating mailing lists in Ms Excel for fundraising events and for different years and more than 7000 people/ organizations were included since 1983. Because of many duplications and redundant data, Ann had spent a lot of time updating mailing lists manually in each Excel spreadsheet whenever donors’ information needed to be updated. Furthermore, the lack of query features made it very hard for the organization to keep track and to search through many mailing lists. For instance, the staff had to search through all the mailing lists one by one to extract the data that they needed.

4. Concrete evidence of outcomes that has not been observed.
It has not been observed that the organization is following the format and using the Access database frequently. There is some risk of going back to the old methods of creating a separate mailing list in Excel instead of utilizing the database. The administration should use the database frequently, get familiar with it and improve on it from time to time to obtain the full value of it. The implementation of the database should certainly be enforced to ensure sustainability.

In addition, many more queries should be created as needed to help maintain the close relationship with its donors who have donated for more than two years since 1983. This data query from Access can be exported to Excel’s Mail Merger to make it more convenient to print donors’ addresses and Thank-You cards.

Creating a master list is actually the first step before the relational database is built. Diagrams and ideas have been discussed, but unfortunately, there was not enough time to implement it.

5. Sustainability and risks
This outcome is likely to be sustained in the next six to 12 months because Dr. Major Mason will continue to contribute to increase the work efficiency in the organization. Being an expert in Ms Excel and an intermediate user of Ms Access, Dr. Major Mason is capable of improving and encouraging Access database usage in the organization.

Although the database is functional and user-friendly, there are still risks that the database will not be updated frequently and improved on by adding extra features according to the
organization’s needs. However, there is no doubt that the outcomes of this task would be sustainable if the staff members would make good use of the tutorials given by the student consultant from the CMU Computing Services Department to create and link more tables and queries.

6. Increased capacity to meet the organization’s mission
By eliminating redundant and mundane work of updating contact information more than once in many Excel spreadsheets, staff members are able to spend more valuable time in fundraising programs and obtain more donations to help more people. This will also improve the technical environment of the organization, making the staff members more tech savvy by being Access users.

The simple yet functional database gives a good head start in organizing various mailing lists in Excel to ensure all information is well kept and sustainable as the organization grows over time. Staff members are now able to create their own simple Access database by referring to the documentation provided.

Founded in 1976, it is vital for HSN to keep all their donors’ information properly as these are HSN’s priceless assets. The reports generated from the Access database serve to increase the credibility of the organization, to generate more support and recognition from the Board of Directors, government, companies, press and individual donors. With queries built into the Access database for various usages, the organization is able to build and strengthen the close relationships between donors and the organization since 1983.

7. A new vision of how technology supports HSN’s mission
The outcomes have supported a new vision of how technology can support HSN’s mission by giving the staff members a first-hand experience of creating and using the database to obtain more donations to fulfill their mission.

It is hopeful that the staff will realize how useful and convenient it is to use the database instead of going through the hassle of updating the information manually in each mailing list. Therefore, the person in charge needs to dictate the use of this technology application and convince the rest of the staff members that it is vital to their long-term success.

The relational database in Access can serve as a sample technology solution in the future as it clearly improves the information management, technical environment and technology planning of the organization. With an updated record of donor details, HSN will be able to get more funding and thus increase its capacity to provide programs to alleviate hunger and promote self-sufficiency with dignity and compassion.
II. Additional Recommendations

1. Name of Recommendation 2 - Create a web portal

Definition of web portal - quoted from:
A one-stop client-oriented web site that personalizes the portal’s tools and information to the specific needs and characteristics of the person visiting the site, using information from organization’s databases.

Examples of web portals can be obtained from:
Go to http://directory.google.com/, then Folders: Computers > Internet > On the Web > Web Portals

1. Rationale
HSN was originally founded in 1976 and has been keeping donors’ information since 1983. It is indeed a competitive advantage to have such a large customer base, but wasteful if there are no measures taken to get them into HSN’s active network. It is time for HSN to put all its direct contacts into a large network. A web portal serves as a good medium to keep all of HSN’s donors connected at one point. The targeted customers or users are current and potential: donors, volunteers, board members, staff, church, corporate, and foundation donors and the media.

The web portal is aimed at establishing a loyalty network among HSN and its individual donors, volunteers, board of directors, politicians, media, professional colleagues, other social service agencies or their individual staff, churches, and foundations by creating a personalized page for each of them in order to serve as a good medium to ensure everyone in the organization’s network gets the most updated news concerning the organization.

Benefits/ Competitive advantages for owning a web portal:
1) Able to keep and expand a large customer base beyond the county.
2) Much cheaper, easier and quicker to send emails to more people than to send direct mail.
3) Focus on customer intimacy by having donors’ updated personal information such as mailing address and birthdates so that HSN can send Thank-You and Birthday cards to donors as a token of appreciation, with a positive hope that they will continue to donate and promote the organization to their friends.
4) Everyone who is directly connected to HSN is informed of its latest fund raising activities or initiatives.
5) Expand online donors from locally to the whole of US and Canada - by Paypal/ check. This is because paper-based payment systems tend to be local, but interstate payments tend to be electronic.
6) Be able to keep track of active donors and less active donors by the frequency of surfing the page. Once the users are detected as inactive, HSN can send direct mail to tighten the relationship again.
7) Be able to get feedback easily and know what customers think. This shows how HSN concerns about what their friends think and gives the impression that the organization is always positive and always aim for improvement.
8) Encourage more donations in small amounts - using Paypal

19 http://my.hungerservices.org
20 http://www.usask.ca/
21 http://directory.google.com/Top/Computers/Internet/On_the_Web/Web_Porrtals/
Statistics\(^2\): The majority of money exchanges in the US were made for small amounts. About a third of checks written in the U.S. in 2001 were for less than $50, and almost half were for less than $100.

**Impact of the web portal on:**

1. **Organization:**
   There is no doubt that HSN will be able to provide more programs to meet its mission when it has established a close tie with its donors, board of directors, volunteers and the press. With more donations and manpower, HSN will be able to expand its capacity to help more people. HSN could be a pioneer to be the first county-level non-profit that owns a web portal.

2. **Staff members**
   With a strong network and visibility, HSN will be well-known, and thus is likely to have a wider pool of volunteers/interns and able to increase its staff members. In addition, the current staff members will be knowledgeable and have a wider perspective on how technology can help them fulfill their mission.

3. **Programs**
   With more funding and food supply, HSN will be able to provide better quality programs to alleviate hunger and promote self-sufficiency with dignity and compassion.

4. **Technology management**
   Since it is vital to have a functional and frequently updated portal, HSN will need to manage its technology very well with the company that it decides to outsource the web portal project to.

5. **Technical environment**
   It is clear that HSN’s technical environment will improve vastly because a web portal is no small project and requires a lot of technical support to maintain it. HSN may even need to hire a technology consultant in the future to take care of the website and the portal when they get larger. Therefore, the technical environment in the organization will improve naturally.

6. **Technology planning**
   This recommendation certainly requires good technology planning to make sure the web portal is running well before going all out to get previous donors to join the network. As time goes on, technology planning will become essential to the organization. For instance, a disaster recovery plan will be needed if the web portal does not work temporarily and data recovery needed to be done to retrieve users’ information in the web portal.

\(^2\) PayPal - Case Number: EC-27 from Graduate School of Business - Stanford University
7. Information management
With a lot of data flowing in and out of the organization from the web portal, HSN will need to manage its information better and thus, increase the efficiency of information management.

8. Internal and external communication
It is clear how HSN will be able to improve its internal and external communication by having a strong network with everyone who is directly related to it. Furthermore, as the web portal is worked on internally (although it can be outsourced to a third-party), it would be more flexible for HSN to change its publicity strategy as time goes on using the web portal.

**HSN’s Loyalty Network Diagram**

2. Steps to follow
HSN can try to get a large one-time funding from a foundation or an influential individual or organization to support this web portal project. The web portal is more likely to be successful if it is robust and being out-sourced to a company that creates and maintains it. It will also be a good idea to hire a technical/software consultant in order to maintain the website and the web portal.
An overview of a web portal – quoted from\(^{23}\):

1. What a portal does:
   - Enables universal login
   - Handles both structured and unstructured data
   - Facilitates multi-channel consistency
   - Facilitates messaging and notification
   - Automated tuning: pervasive content can be tuned based on personalization, location, browser, etc.
   - Integration to other systems

2. Key features of portals:
   - Security
   - Access different data
   - Transactions
   - Search
   - Publish Content
   - Personal Content

3. What a portal is not:
   - It is not just a Website (which is usually characterized by static information)
   - It is not just a personalized intranet
   - It is not just a personalized extranet
   - It is not just a personalized front end for business applications
   - It is not just groupware
   - It is not just a personalized knowledge management solution
   - It is not just a sophisticated search engine
   - Instead, a portal is nothing less than just one personalizable, browser based user interface to all the components mentioned above.

FAQ:
This information will be helpful when discussing the features and implementation of the web portal with the software developer(s) – refer to\(^{24}\) for more information:

1. What are the Major Functions of Portals?
   According to the analyst and consulting company Ovum - as described in their study "Enterprise Portals: New Strategies for Information Delivery", 2000 - the ideal portal is based on eight functionality areas:
   a) search and navigation
   b) information integration (content management)
   c) personalization
   d) notification (push technology)
   e) task management and workflow
   f) collaboration and groupware
   g) integration of applications and business intelligence
   h) infrastructure functionality

2. What are the major portal types? Which one should HSN adhere to?
   Specialised or public web may be suitable for a nonprofit.

![A hierarchy of portal types](http://www.sapdesignguild.org)

Source: Ovum (Enterprise Portals: New Strategies for Information Delivery/Chapter C)

3. Who are the Major Portal Contenders?
   Exemplary portal sites:
   - AltaVista
   - Excite
   - Infoseek
   - iView
   - Lycos
   - Microsoft’s Internet Start
   - Netscape’s Netcenter
   - Oracle Portal Studio
   - Plumtree
   - Yahoo

4. What is the Future Trend?
   The hype cycle graph below shows which emerging technologies should early adopters be examining for competitive advantage and how technology planners should identify the technologies and applications that will generate maximum benefit for the organization. However, what is certain for now is, “No portal plan today can fail to take into account the boom in wireless devices and mobile computing.” By implementing this web portal, HSN is very likely to be the first non-profit that will gain the competitive advantages and promising returns.
5. How would users sign up for the web portal?
Users apply and fill in personal information online via a one-page simple registration. Username and password will be sent to user’s email. HSN would give an option to online users to allow HSN to send emails about their fund raising activities.

6. What are the features that should be included?
**Recommended features of personalized pages for:**

**a) Board of Directors:**
1) Meeting minutes
2) Financial reports
3) History of events, achievement
4) Submit feedback - will be emailed to contact@hungerservices.org
5) Submit query/question will be emailed to contact@hungerservices.org
6) All features for (Potential) Donors, Volunteers, Staff, Press and Foundation:

**b) (Potential) Donors, Volunteers, Staff, Press and Foundation:**
1) About HSN
2) Weekly Online Newsletter
3) Calendar: Table of Fundraising Events
4) Post-fundraising event information such as description, results and pictures of fundraising events
5) Total amount that has been donated to HSN
6) Submit Feedback - will be emailed to contact@hungerservices.org
7) Submit Query/Question - will be emailed to contact@hungerservices.org
8) Publicity/Marketing – for users to refer friends
9) Address change - to be integrated into the mailing list relational database in Access.

Purpose of the special features:
1) Prompt for birth dates - send personalized birthday cards to build customer intimacy
2) Prompt for emails, updated address, phone numbers – send direct mail to update and inform donors
3) Post interesting pictures of events, reports of events to encourage more people and organizations to participate in HSN’s fundraising activities
4) Publish Annual Financial Reports and Fund Raising Results to increase transparency, trust and credibility
5) Include links to actual press appearances in newspaper, magazines, radio, county website and partners’ websites to show HSN’s impact and marketing efforts.
6) Show Total Account - total money that has been donated so that HSN is able to keep track of who donates what.
7) Donate in a click! – a simple but effective online donation using PayPal to encourage donations from non-local donors
8) Provide alternative feature where donors fill in form, preview it online, print it out and mail the donation form with check to HSN.
9) Portal Suggestions to accept feedback for improvement and to know what others think.
10) Referral feature - email friends to increase visibility

7. Which online donation services should HSN use?
HSN should consider using PayPal.
About PayPal:
HSN can sign up for a Premier/Business Account. It is free and able to accept credit card payments. There are over 40 million member accounts worldwide and PayPal currently supports sending and receiving payments in five currencies: U.S. Dollars, Canadian Dollars, Euros, Pounds Sterling, and Yen. More information can be obtained from PayPal’s website.

Four reasons why PayPal is safe:
1. PayPal enables any business or consumer with an email address to securely, conveniently, and cost-effectively send and receive payments online. The PayPal network builds on the existing financial infrastructure of bank accounts and credit cards to create a global, real-time payment solution.
2. The credit card information is transmitted securely directly to PayPal via 128 bit encryption. No third party (including Overseas Match) has access to any credit card number.
3. PayPal has long been established and is the trusted company for sending payments over the internet.
4. After PayPal’s acquisition by eBay, it’s fraud level has decreased from 0.5% to 0.3%, currently the lowest fraud level held by any financial services that provides electronic transactions. This percentage is much lower than any credit card’s fraud level.

25 http://www.county.allegheny.pa.us/dhs/Newsletters/Mar02/DHS%20Achievements.htm
26 https://www.paypal.com
3. Resources

a) To hire oncall student consultant to fix simple trouble-shooting problems:

Federal Community Service Work-Study Program (FCS)\(^{27}\)

This is a program where a community organization hires a college student as an intern (on a work-study basis). In the FCS program, HSN only needs to pay 25% of the total gross wages paid to the student and the remaining amount would be paid by the Federal Government. Most Pittsburgh colleges and universities participate in this program, including, but not limited to, Carnegie Mellon University (CMU), University of Pittsburgh, and Duquesne University.

| Contact: |
|-----------------|--------------|
| 1. Patricia Kravetz | Coordinator of CMU’s FCS |
| Email: pk13@andrew.cmu.edu | Phone: 412-268-7052 |
| 2. Email: wrkstdy@oafa.pitt.edu | Contact information of the Federal Work Study Office at the University of Pittsburgh. |
| 3. Pennsylvania Higher Education Assistance Agency (PHEAA) | Information on how to apply as a work-study employer through PHEAA can be obtained at the link. An employee guidelines and work-study program employer application are available at the website. |
| Website: http://www.pheaa.org/employers/ |

b) To get small group of bright student IT consultants to complete a major pilot IT related projects:

| Contact: |
|-----------------|--------------|
| Professor Joe Mertz | Professional/ Service Project Instructor |
| Masters in Information Systems Management (MISM) | Carnegie Mellon University |
| Email: joemertz@cmu.edu | Phone: (412) 268-2540 |
| Mailing Address: Heinz School, Carnegie Mellon University, Pittsburgh, PA 15213 |

\(^{27}\) Information about FCS is taken from Sandra Gani, a student consultant in Spring 2003, and taken from Angela Ho, a student consultant in Spring 2003.
c) To hire professional IT consultants:

<table>
<thead>
<tr>
<th>IT Consultants</th>
<th>Recommended by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelle Hines</td>
<td>UCP of Pittsburgh</td>
</tr>
<tr>
<td>Community and Technology Coordinator</td>
<td></td>
</tr>
<tr>
<td>Prime Communications</td>
<td></td>
</tr>
<tr>
<td>275 Curry Hollow, Road, Pittsburgh, PA 15236.</td>
<td>4638 Centre Avenue</td>
</tr>
<tr>
<td>Phone: 412-650-6000 ext. 124</td>
<td>Pittsburgh, PA 15213</td>
</tr>
<tr>
<td>Emails: <a href="mailto:msembrat@primecomm.com">msembrat@primecomm.com</a>,</td>
<td>Phone: 412-683-7100 ext. 362</td>
</tr>
<tr>
<td><a href="mailto:msembrat@adelphia.net">msembrat@adelphia.net</a></td>
<td></td>
</tr>
<tr>
<td>Karl J. Mormer</td>
<td>Paula J. Pagnotta</td>
</tr>
<tr>
<td>Consultant</td>
<td>Office Manager</td>
</tr>
<tr>
<td>Logix Computer Services</td>
<td>Jewish Residential Services</td>
</tr>
<tr>
<td>6331 Waldron Street, Pittsburgh, PA 15217-2518</td>
<td>Phone: 412-422-5560</td>
</tr>
<tr>
<td>Phone: 412-422-2200</td>
<td>Fax: 412-422-5567</td>
</tr>
<tr>
<td>Email: <a href="mailto:karl.mormer@logixcomputer.com">karl.mormer@logixcomputer.com</a></td>
<td>Email: <a href="mailto:ppagnotta@jrspgh.org">ppagnotta@jrspgh.org</a></td>
</tr>
</tbody>
</table>

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28 Information about all IT consultants are recommended by other non-profits who are taking part in this course and compiled by Sandra Gani, the Teaching Assistant for this course.
c) Links for Nonprofit Technical Assistance/ Professional Volunteers

**Description**

1. Nonprofit Technical Assistance Directory  
   http://www.clpgh.org/locations/foundationcenter/techassist/

   “The Nonprofit Resource Directory lists services available to nonprofit organizations in Southwestern Pennsylvania. Services include technical assistance in all aspects of running a nonprofit, including management, finance, law, marketing, communications, and computerization with a special emphasis on fundraising. Also included are organizations that provide training, educational programs, volunteers, or interns in these areas.”

2. List of local computer consultants  
   http://www.google.com/lochp or http://www.google.com/local  
   Search Item: computer consultant  
   US Address, City & State or Zip: 15201

   “Find local businesses or services on the web.”

3. List of computer consultants from Yellow Pages Directory to Pittsburgh, PA.  
   http://www.pittsburgh.net/yellow_pages.cfm?CtgID=29&GrpID=10

**About the consultant:**
Hui Lin Chin is a junior in Computer Science, with a double major in Business Administration. She has strong interest in business planning and may consider pursuing a career in non-profits.
APPENDICES

1. HSN’s Website Screenshot - edited by Ann Mason:

![HSN's Website Screenshot]

2. HSN’s Access Database Screenshot:

Example of a query that shows 1220 donors for code IHSN:

![HSN: Select Query]

Record: 11 of 1220
A table in Access called More Info:

<table>
<thead>
<tr>
<th>ID</th>
<th>First Name</th>
<th>Last Name</th>
<th>Street Address</th>
<th>Zip</th>
<th>City</th>
<th>State</th>
<th>Total Donation ($)</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>David</td>
<td>Eckard</td>
<td>4400 Great Street</td>
<td>15220</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>120 IHSN</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>James</td>
<td>Lamont</td>
<td>246 Benard Street</td>
<td>15210</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>20 IHSN</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Randy</td>
<td>Tan</td>
<td>27 Lucina Avenue</td>
<td>15790</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>250 IHSN</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Randy</td>
<td>Grant</td>
<td>100 Summit Street</td>
<td>15131</td>
<td>McKeesport</td>
<td>PA</td>
<td>50 IHSN</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Eric</td>
<td>Zering</td>
<td>163 Center Avenue</td>
<td>15219</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>80 IHSN</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Simon</td>
<td>Brauff</td>
<td>170 Butler Street</td>
<td>16001</td>
<td>Butler</td>
<td>PA</td>
<td>50 IHSN</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Jason</td>
<td>Ruxton</td>
<td>481 Fifth Avenue</td>
<td>15215</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>1000 IHSN</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Adison</td>
<td>Chan</td>
<td>778 Bucks Street</td>
<td>19342</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>1250 IHSN</td>
<td></td>
</tr>
</tbody>
</table>

An example of a query of “More Info” table, called IHSN in design view:

Below is an IHSN Query table which corresponds directly to the above query. Notice that the total IHSN donations are above $100 as indicated in the design view above.
An example of Access report (sorted by Last Name, then First Name, then Street Address):

**HSN’s Master List**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Street Address</th>
<th>Zip City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruff</td>
<td>Simon</td>
<td>120 Butler Street</td>
<td>18001</td>
<td>PA</td>
</tr>
<tr>
<td>Chan</td>
<td>Aaron</td>
<td>778 Bucks Street</td>
<td>15342</td>
<td>PA</td>
</tr>
<tr>
<td>Eckard</td>
<td>David</td>
<td>4400 Great Street</td>
<td>15220</td>
<td>PA</td>
</tr>
<tr>
<td>Grant</td>
<td>Randy</td>
<td>100 Summit Street</td>
<td>15301</td>
<td>PA</td>
</tr>
<tr>
<td>Lambert</td>
<td>James</td>
<td>246 Bennet Street</td>
<td>15210</td>
<td>PA</td>
</tr>
<tr>
<td>Rotton</td>
<td>Jason</td>
<td>461 Fifth Avenue</td>
<td>15223</td>
<td>PA</td>
</tr>
<tr>
<td>Tan</td>
<td>Randy</td>
<td>27 Lusano Avenue</td>
<td>15780</td>
<td>PA</td>
</tr>
<tr>
<td>Zang</td>
<td>Eric</td>
<td>166 Center Avenue</td>
<td>15219</td>
<td>PA</td>
</tr>
</tbody>
</table>

Note: All names and addresses were made-up and meant to illustrate how the actual queries and reports looked like.

3. Web logging example extracted from Excel spreadsheet:

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Event/Tasks</th>
<th>Author</th>
<th>Pages Updated</th>
<th>Other Docs Added</th>
<th>Pages Uploaded</th>
<th>Backups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb</td>
<td>20</td>
<td>Download everything to new Dell Computer and the server</td>
<td>Ann</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>in K server</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Edited pages</td>
<td>Ann</td>
<td>index.htm</td>
<td>None</td>
<td>index.htm</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aboutus.htm</td>
<td></td>
<td>aboutus.htm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New.htm</td>
<td></td>
<td>New.htm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Programs.htm</td>
<td></td>
<td>Programs.htm</td>
<td></td>
</tr>
<tr>
<td>…</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>12</td>
<td>Change dates in TestJazz04 and names of person involved</td>
<td>Ann</td>
<td>TestJazz04.htm</td>
<td>None</td>
<td>TestJazz04.htm</td>
<td>in K server</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>