

Hill House Association
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The Consulting Situation

About the Organization

Introduction

The Hill House Association (HHA) is a non-profit organization in the Hill District area of Pittsburgh and is located at 1835 Centre Avenue. The HHA was formed in 1964 through the merger of three long-standing Hill District agencies. It was the first agency in one of the low-income African-American community in the city of Pittsburgh to provide health, welfare, recreation, and community programs.

Its “values of life” are: *Love and Respect, Self-Esteem, Self-Confidence, Self-Persistence, Self-Reliance, and Learning Orientation*

The Hill House Association’s goals are tightly connected to the community of the Hill District. It mobilizes to improve the quality of life of the residents through direct services, to stimulate the economic and social development in the community, and to provide culturally sensitive services such as child care, youth development, family support, and senior citizen programming.

The organization realizes the importance of the technology in its daily life, and always wants to be up to date in order to take benefit of it. They have many different projects but sometimes an unclear vision on how to realize them.

Facilities

The facilities of Hill House Association consist of four major buildings situated in Hill District. The main building is the Hill House Center. This is a shopping mall of different agencies. HHA administration occupies the second floor which is completely renovated, with well designed offices in modern style and very good integration of technology.

The Blakey Center houses all the services for youth development programs. There is a Robotics lab, a computer lab and other facilities for children to develop technical or design skills. The computer lab, the Digital lab and the Robotics lab are quite large and well lit.

There are two other program-based buildings, the Kaufmann Center, which houses the workforce development program, and the Senior Services Center, which houses the senior citizen programs. For our consulting tasks we were working at the Hill House Center and Blakey Center as they were the places where the majority of the technology was managed.

Programs

HHA offers a variety of programs to the community of Hill District. There are 6 major program domains and each domain has a variety of sub programs. The programs include workforce development, senior services, youth development, early childhood, and summer camps. The workforce development programs include services such as helping young mothers, expecting mothers, or fathers who are the non-custodial parents of children who receive welfare benefits. For example, the Fathers program helps young fathers to become more effective in raising their children. The program also offers housing assistance and has a website with lots of useful information for fathers.

The youth development program provides life skills, educational training, employment. It is also meant to provide opportunities and programs for academic enrichment using science, math, and technology. An initiative is the Digital Newsletter program which is intended to teach children literacy through technology.

Staff

We were working with Stephen MacIsaac who is the Director of Operations¹ and Ed Jackson who is the Technology Coordinator of HHA. They both closely collaborate on different projects related to improve the technical environment of HHA. They both have personal computers in their respective offices, are connected to Internet, with all necessary software to meet their needs.

Mr. MacIsaac manages the daily operations of the HHA. His key responsibilities are addressing the needs of the organization through the grant community. His job involves identifying technology needs, overseeing implementation, and assuring that technology is effectively used.

Mr. Jackson manages technology decisions for the HHA, is aware of most of the recent technology developments, and has ideas about what is useful for the association. His job involves also scheduling the utilization of the computer labs according to the needs of the different programs offered by HHA.

During our consulting process, we also worked closely with two other employees of HHA: Terrance Mattox, Program Assistant of the Fathers program and Keith Williams, an Americorp technology-savvy consultant.

Technical Environment

As per a community organization, Hill House is one of the preeminent examples of a technical environment. Nearly all staff has a computer on their desk, with over 160 machines in the organization. In addition, while all the machines are on networks, because of the spread of the organization over multiple buildings over a large span of area, not all the machines are on the same network. This introduces some challenge when sharing data and information from one site to another, the details of which will be mentioned later.

The organization uses Microsoft Windows XP primarily for their desktop computers and Microsoft Office for productivity. In addition, there are a few Macintoshes in the organization, with a few more to be deployed, serving largely the purpose of a digital video and imaging editing machines. The machines are networked to printers and have full access to the Internet. The Internet access is provided through a 10 megabit/sec wireless Internet connection on the roof of the Blakey Center. This connection is shared to the main Hill House Center and the Kauffman center through fiber optic wiring. The Senior Service Center has its own access through DSL. All members have Hill House provided e-mail addresses, allowing business communication.

A central server room in the Hill House Center shares the broadband connection to the employees in the building, in addition to providing network sharing and services and a backup solution for data that is on the network. However, no backup system is in place for data and documents stored on the computers of individual employees.

Technology Management

¹ During the consulting term, Stephen MacIsaac left HHA to pursue opportunities elsewhere. His position has been taken by Tony Bell.

There are several layers to the technological management at the HHA. The first two layers are managed in house, and the final layer is managed externally. Mr. Jackson does the first layer of technical problem solving in the organization. As Steve describes it, “Ed can take care of the first three steps, and then Brandon takes over.” Brandon Pamplin, a technical specialist who has been with the organization since he was a student, initially as a volunteer and now as a part-time employee, is responsible for maintaining and expanding the network, along with problem solving with Ed. Finally, if a problem cannot be solved in-house, then Information Renaissance, a non-profit organization, which provides its technical expertise to community organizations, is called upon to provide technical support for the problem.

Technology Planning

While the HHA does not have a clearly written technology plan, most of the technology initiatives come implicitly through grants or donations, which often either entail certain products or services. Through these events, Steve and Ed create the best use of the donations and grants, realizing the present needs, and hence a plan is created. As such, there is not a separate budget for technology expenditures; it is generally driven by various donations and specific technology funding programs such as the Digital Divide Initiative. These grants are typically applied for by HHA to address problems and technology opportunities for the organization. If however a technology need is created, either the technology is purchased from the general budget or a grant is applied for.

Internal & External Communications

The organization does have a website (<http://www.hillhouse.org/>), but no longer has a newsletter, as it once did in the past. The website is used to convey basic information about the HHA. However, different services within the HHA have their own website, such as the Father’s program, which help give specific information about those programs to the community.

Information Management

The HHA has to collect donor, client, and case information to maximize the efficiency of their services. However, very little of the information was managed electronically; the most significant information such as donor information, participant data, and contact management was managed on paper. An organization-wide data management solution did add much clarity to the organization, as there was a lot of paper clutter, making it difficult to absolutely identify information such as how certain services are performing, or which partners may need more funding. All in all, while the organization is quite large and with lots of programs and services, there was very little electronic continuity to data and information management.

Consulting Tasks

1) Develop Capacity to Update and Maintain Fathers Program Website

Description:

The Fathers program had previously received a new website, developed by the School of Design at CMU. The program was evolving quickly and needed to perform a certain amount of updates on its website. The website has a good user manual which gives basic instructions on how to modify and update critical information about the program. The program had exceeded its budget for the website and couldn’t afford to pay for its maintenance. As a result, some important parts of the website did not work properly such as the bulletin board and some of the information on the website was obsolete and needed to be changed.

Description of the consulting task:

The consulting task was to develop the client's capacity to maintain this specific website and at the same time, provide valuable information about what web maintenance is and how to achieve it efficiently.

Approach:

Start with general overview of the Web

Understand the web page creation principles and practice web page creation with simple text editor

Learn how to load the Fathers program's website in Macromedia Dreamweaver MX and perform changes using the user manual already in place, while, concurrently improving the manual with visual concrete examples.

Learn how to publish the updated website using the FTP publishing tool in Macromedia Dreamweaver MX

Repeat the updating process multiple times in order to achieve efficiency and better understanding of the different steps involved

Mission

The problem described above is tightly connected to the mission of HHA and especially to the Father's program which is, to provide useful information for fathers on how to deal with problems related to child's growth. It should be achieved through discussions on the bulletin board, exchange of electronic mail, and reading articles on the website. The website is intended to improve the ability of fathers in dealing with problems, which is included in one of the primary goals of HHA: child care, youth development, and family support.

Impacts/Outcomes:

Organization

The organization as a whole will benefit from the success of the program and will improve its image in the Community of Hill District. Fundraising for other HHA programs is likely to become easier.

Program

Having the ability in-house to make changes to the Fathers program website will not increase the shortage of money and allow the program to be up-to-date on Internet. This would create a richer community which provides valuable health resources for fathers.

Staff

The staff in charge of the Father's program would be able to follow easily the progression of the program and take measures to improve it, if necessary.

Internal & External Communications

Better communication between staff members involved in the program might occur thanks to the information flow from the website.

2) Unified Database solution for all the various HHA programs

Description:

HHA previously maintained all the thousands of information on the users of its services by paper. None of the information from all the different HHA programs was connected to each other, which introduced problems when trying to track usage by community members. In addition, when preparing for application for grants, HHA had to go through a long arduous process involving getting together all the paper work to apply properly for the grant. A database solution helped unify all the data from the programs and tie together user data across programs.

Description of the Consulting Task:

The consulting task was to create a database using information from program managers and creating a front end for easy entry and access. This was done with Mr. Williams.

Approach:

Examine various options for database-based solutions

Meet with program managers to see what data needs to be entered and how it will be accessed

Select a database product and set up required fields for entry

Have HHA staff members key in the required data

Present final environment to community partner for examination and training purposes

Mission:

Through a database that manages all the client information, HHA clearly and easily is able to identify which programs are being successfully used, and who is using the programs. In addition, they are more effectively able to track clients. Henceforth, they are better able to provide programs to the community, based on results they can extrapolate from the database. Also, the process of applying for grants has been expedited, improving services that the HHA can provide for the community.

Impacts/Outcomes:

Organization

The database is beneficial to the HHA and is used for all future client maintenance and for donor applications.

HHA is better able identify itself to charities such as the United Way for donations.

Programs

By tracking usage across programs, HHA is able to identify those who use multiple services, and hence provide better services in the future.

Staff

Employees benefit from a single repository of information about the people who use the services. The process of looking up information has been greatly expedited.

Information/Technology Management

The database will be self-reliant after consultant leaves the site. The database is able to handle the thousands of entries required for all the users of HHA's services.

3) Auditing and Implementation for Wireless Internet Project for Community Agencies

Description:

HHA, being the lead community organization in the Hill District, looks after other community organizations in the area, assuring that the best services are being provided. As part of the Digital Divide program, community organizations in the Hill District are being examined for potentially being donated high-speed wireless Internet connectivity, through the means of a dish, that will be centrally connected, and hence user information can be centrally maintained. As part of this program, the HHA set up an audit to examine the needs and the ability of the infrastructure of these community organizations to have deployed these technologies.

Description of the Consulting Task:

The consulting task was to create an audit that can be used as the various community organizations that measures the ability of the organization to acquire such a service and in addition, examines the needs of the organizations for having this service. In addition, once an organization passes the audit, the next task would be to implement the network for the organization, giving them the ability promised in the Digital Divide grant.

Approach:

Create an audit based on research and consultant's previous knowledge

Visit a sample site to examine the audit and make any necessary changes

Create a pricing chart for various implementations for the community organization (wireless internal network versus wired, server technology, etc.)

Install the necessary hardware and launch the network if an organization is approved

Provide short-term support to the organization for initial hiccups

Mission

By providing internet access for community development to various community outreach organizations in the Hill District, HHA will greatly benefit members of the community, such as by providing job training or after school programs through these organizations.

Impacts/Outcomes:

Organization

HHA will have the vital information necessary to measure where the Hill District community goes for community services and what services are used the most, being able to in the future provide better and more-focused services back to the community.

Community organizations that pass the audit and are eligible for the Digital Divide grant will have high-speed Internet access.

Programs

Through the internet access, more programs will be able to serve the community, such as by providing job-training information online, giving kids access to online encyclopedias, etc.

Technology Environment/Technology management

The community organizations will be tied together and ultimately, tied to the Hill House on a common network for optimal resource and information sharing.

The network should be self-reliant and fully-functioning, and used for the good of the community, once the Consultant leaves.

4) Set up Physically a Digital Lab

Description:

The Hill House Association had started a new program part of the “Digital Divide Initiative”. It had also been donated of seven Macintosh computers and intended to use three of them to create a new digital lab. The main goal of the lab is to teach children literacy. Children will learn how to make small video clips using the Mac software “iMovie” which came with the Macintosh computers.

Description of the consulting task:

The consulting task was to help HHA find a good physical place for the future digital lab, give ideas about how to wire the lab, connect the computers, install and test the software needed for the program.

Approach

The consultants and Mr. Jackson make a deeper look on the current space available and try to determine definitely the right physical place for the future lab

The consultants and Mr. Jackson make a brainstorming on how to arrange the three Macintosh computers in order to provide maximum functionality and exciting ambiance (e.g. additional furniture may be needed, etc.)

The consultants and Mr. Jackson discuss on different possibilities to wire the place

A group from the Pittsburgh Job Corp will be solicited to wire the place

The consultants and Mr. Jackson connect the computers and test the overall working

The consultants and Mr. Jackson install the needed software and test it

Mission

The opportunity is tightly connected to the mission of the Hill House Association which is to promote youth development through technology. Creating a new digital lab would attract lots of children and help to increase the popularity of HHA among young people. The digital lab would become a place of new discoveries and meetings between young people. It will also help increase literacy among children.

Impacts/Outcomes:

Organization

The organization will increase the number of programs which utilize technology

Program

Set up physically the Digital Lab will give HHA the opportunity to continue developing the “Digital Divide Initiative” with hiring and training the staff who will be in charge of the program.

Technology Environment/Technology management

Adding a new computer lab would increase the complexity of the technical environment at HHA. The technology coordinator’s responsibilities will increase.

Outcomes and Recommendations

Analysis of Outcomes

Outcome 1: Develop Capacity to Update and Maintain the Fathers Program Website

The School of Design at Carnegie Mellon University designed a website for the needs of the Fathers program. The consultant task was to build capacity inside HHA to update the content of the website.

Results/Outcomes

- Mr. Mattox and the consultant worked together in identifying what was needed to update and maintain the website. They made a list of all the tasks needed to build the desired capacity
- The consultant and Mr. Mattox used an eMac computer in HHA with all necessary software to learn how to effectively manage the website
- The consultant and Mr. Mattox downloaded the entire website from the remote web server and performed the necessary configuration of the software available on the eMac computer in order to make a comprehensive working environment
- Mr. Mattox created backup versions before uploading new changes on the website
- The consultant performed corrections on the discussion board of the website. As a result, the discussion board got back to its proper behavior
- Mr. Mattox and the consultant registered the website in the twenty biggest search engines
- During the training process the consultant and Mr. Mattox worked closely together to elaborate a final document which contains all the work done in the past 3 months of training process. The

document contains every single step of the updating process illustrated with screen shots realized by Mr. Mattox and diagrams realized by the consultant

Outcome Evidence

During the consulting process the consultant observed some concrete examples of the outcomes of the training work. During the updating process Mr. Mattox learnt how to create images from digital movies using iMovie and iPhoto. The movies were previously recorded during sessions of the Fathers program using digital camera. He developed capacity to create interesting testimonials of young Fathers, import them with iMovie, modify them according to his needs and make them available online as QuickTime movies. New testimonials from the last graduation of fathers from the program now appear on the website completely realized by Mr. Mattox.

As the term has progressed, the errors on the website disappeared. An example of an important error identified by Mr. Mattox was the wrong behavior of the discussion board. A user who sends a message on some of the discussion groups was not able to see the message afterwards due to an error of configuration of the discussion board software DCForum. The error has been successfully found and corrected and as a result fathers can now successfully send and receive messages using the discussion board.

Evidence of Expanded Capacity

As a result of having achieved the goal of the consulting process, the community partner is able to update the website with new information, links to useful websites, images and testimonials of fathers of the program. He is also able to successfully manage the discussion board of the website. This has made the Fathers program more interactive and interesting. Performing updates such as making new articles, images and testimonials available online during the progression of the Fathers program provides the young fathers with invaluable resources in dealing with problems when raising their children, which is the primary goal of the program.

Evidence of Sustainability

The community partner Mr. Mattox worked hard during the consulting process in trying to fully understand and perform properly the updates demonstrated by the consultant. He developed the necessary understanding of how to make concrete updating tasks such as creation and insertion of images, articles and testimonials. The tasks were performed multiple times in order to build good capacity. During the consulting process Mr. Mattox wrote with the help of the consultant his own guide, which explains step-by-step how to perform a particular updating task. He made screen shots for critical steps in the process in order to have a visualization of the situation. The consultant provided also diagrams which explain entirely the structure of the website and every single step of the updating process.

Recommendation

Mr. Mattox is the Program Assistant of the Fathers program and also responsible for the Fathers website. His responsibility consists of updating the website with content on a regular basis, without changing the structure or adding new pages. For example, his tasks could include adding a new testimonial movie and new information. In addition, he would have make more substantial changes every couple of months, such as putting an entire new page and link it to the website in a specific position. He is also responsible of managing the information flow on the discussion board.

In order to fulfill the responsibilities mentioned above, it is not necessary to be a great Web developer. The only thing needed is to be aware of all the steps during the updating process and know how to use

Macromedia Dreamweaver MX to change statically the content of the web pages. For the discussion board, one should know its structure and how to use it properly to post and delete messages.

There is no particular book I want to recommend but the vital references are the two documents already in place describing the Fathers website and its particularities. The first one has been written by the creators of the website and the second one has been elaborated during the consulting process as a quick and complete reference about different updating tasks (e.g. create and insert images from digital movies, create testimonials, add text) and important user techniques in how to successfully manage the discussion board. It also explains the necessary steps to set up Macromedia Dreamweaver MX and make backup versions of the website. I strongly recommend using this document when updating the site. However, this document should be used if and only if the updating consists of tasks already explained in it. For any substantial changes on the web site, which will normally be performed every couple of months, external assistance would definitely be needed. Additional assistance can be found inside HHA because there is already a competent person who manages the HHA main web site.

One should never try to make complicated updates not described in the reference document. This might have a disastrous result on the website such as bad links, images which do not appear properly or destroy the nice interface of the website. I recommend before making substantial changes on the web site to choose very carefully the available assistance. Mr. Mattox should get in touch with the Technology Coordinator Mr. Jackson in such a case and create a full backup the website before starting.

Resources

User guide of the Fathers Website	This user guide has been developed by the School of Design and explains the basic structure of the website and basic steps for different updating tasks
User guide realized during the consulting process	This guide is the vital reference for performing updates. It contains complete information on how to perform specific updating task. It includes also visual examples and screen shots of critical steps during the updating process
Macromedia Dreamweaver MX Help	The help menu of Macromedia Dreamweaver MX is really helpful when a problem occurs while using the software. It may be really an invaluable source of information about the software

Outcome 2: Unified Database solution for all the various HHA programs

HHA previously maintained a plethora of information on users of its services by paper. None of the information from all the different HHA programs was connected to each other, and there were major problems when trying to track usage by the community. In addition, when preparing for application for grants, HHA had to go through a long arduous process and getting together all the paper work to apply properly for the grant. A database solution hence was suggested to help unify all the data from the programs and tie together user data across programs.

Results/Outcomes

- The consultant worked the community partners and with Mr. Williams to establish what type of database solution would be necessary for the data HHA collect. The database chosen for the task was MySQL, as it is freely available and secure and powerful enough for the needs of HHA.

Other databases evaluated included Microsoft Access and Microsoft SQL Server. Neither seemed appropriate for the tasks at hand.

- The specific information each HHA program collects was identified by the program heads. Based on the information collected, tables were designed in the database by Mr. Williams and the consultant, in addition to a layout for data entry.
- A database for the information collected was created, with a common interface for all the departments
- Employees at the HHA began entering in data about the users into the database

Outcome Evidence

Using MySQL for the back-end database and Visual Studio .Net for the front-end development, a database was created by Mr. Williams and the consultant, allowing HHA program-heads to key in information about the users of the programs. Once this data is fully keyed in, HHA managers, such as Tony Bell, will be able to use the data from the database to perform key functions such as applying for grants, tracking usage of its programs, and maintaining information about the users of its programs.

Evidence of Expanded Capacity

With the functional database, the processes of case management, grant application, and tracking of usage will be greatly simplified and expedited. The database records information on the users of HHA's services, such as social security number, contact information, and family history. This information can be easily and instantly updated if necessary, improving on the previous process which required a multitude of forms and labor. In addition, HHA can use this information to apply for grants as it has live tracking of how well the programs are doing. As another benefit, HHA will be able to easily recommend programs to its users electronically based on previous usage, as well as being able to share information to other parties, if necessary.

Evidence of Sustainability

The database was engineered to be a sustainable product that would not require regular updating, aside from the simple process of keying in or manipulating data. However, when processes such as adding new programs to the database, adding new features or functionality, or changing the interface are required, database expertise would be required. Currently that expertise exists in Mr. Williams; however, he is a temporary worker, and hence after he leaves the HHA, another employee may be needed to make large-scale changes to the database in the long run. A plan for regular maintenance would help the survivability of the database, and would ensure that it does not become a dead-end product after Mr. Williams leaves the organization.

Recommendation

As described previously, the database would require expertise to ensure it is properly maintained and updated. Hence, the consultant recommends that the HHA hire a permanent employee who can make changes to the database, which will probably be necessary if the HHA adds or modifies programs or needs to add more functionality to the database. Recommended would be a candidate with strong database experience, especially with MySQL and Visual Studio .Net. The consultant recommends that HHA could save money by hiring a Carnegie Mellon student who has taken the Database course offered in the Computer Science department, which would offer enough knowledge to maintain the HHA database, instead of hiring a professional database consultant. The HHA could find such an employee using the TartanTRAK hiring system for CMU students, or by contacting the Computer Science department.

Also, the consultant strongly recommends that an active approach be taken to backup the data in the database so that it remains secure, in case the computer on which it resides experiences technical difficulties. More information on this is available on the recommendation section of this report, which

outlines many resources that could help in this task. Having such a large database could prove to very helpful to the HHA, but if it is not maintained correctly or not backed up often, major issues would be introduced in the everyday operation of the HHA.

Outcome 3: Auditing and Implementation for Wireless Internet Project for Community Agencies

Previously, many smaller community organizations in the Hill District either had their own Internet access, sometimes expensive for higher-speed connectivity, or remained without it. However, as organizations became more and more dependent on the Internet, especially for serving the community, the Hill House Association saw an opportunity to bridge together these organizations with a high-speed connection to the Internet. Not only would this allow these organizations to get on to the Internet, but also since the connection would be centrally shared, it would allow these organizations to share data and information about and from their organization to other organizations in the area. Hence, it was established that this was a key project, and tasks had to be done to allow these organizations to connect onto the solution. The Consultants task was to identify what would be needed to allow the service to be created, create an audit to see if the community organizations are ready for such a service, and finally recommend solutions to the community organizations on how they would implement the service.

Results/Outcomes

- The consultant, working with the ideas supplied from the community partner, created a sample audit, based on previous knowledge and experience. The audit then would be used to go into a community organization and would be modified (hence improved) as necessary
- The consultant and the community partner visited Grace Memorial Church to perform the audit, and completed the audit for that organization. Also, based on the information collected from Grace, the consultant recommended a plan for Grace to enable them to receive this service
- The consultant, based on the Grace audit, then modified and improved the audit so that it could be used at other organizations in the future when they would be interested in acquiring the high-speed centralized Internet service
- The consultant contacted Carnegie Mellon Computer Services and also researched pricing and specifications on the Internet about various solutions community organizations could use to enable themselves to join on to the services, such as internal wireless networks, lab environments, etc.

Outcome Evidence

The audit and other specifications established through the research and previous knowledge and experience of the consultant was made a final document and presented to the Hill House Association and the community partner so that they may in the future, at their own discretion, make use of the documents when auditing community organizations. With this document, a step-by-step approach to performing the audit, even those with limited technological knowledge could perform the audit and hence a decision could be made whether the organization is ready for the Internet access. The audit is also included in Appendix A.

Evidence of Expanded Capacity

Through creating an audit and performing it at the Grace Memorial Church, the consultant left the HHA with a reasonable idea of the steps that need to be taken for an organization to jump onto the Internet access program. This left HHA with the universal audit that hereon can be used at other organizations when evaluating their need for this service. In addition, since the audit is in layman's terms, it can be performed by a multitude of HHA employees. Also, the solutions suggested for Grace can be used as recommendations for other organizations.

Evidence of Sustainability

The community partner, Mr. Jackson, worked together with the consultant in creating the audit and has a great grasp of what is required to perform and if necessarily, modify, the audit in the future. In addition, since the audit is fairly simple and not technology buzzword-heavy (the language was chosen to be in layman terminology), in the future it could be performed by almost anybody, and therefore be fairly sustainable in the long run. Also, while the technological recommendations may obviously change in the future as technology improves, the recommendations were made to be fairly general and not product or technology specific, and hence could easily be altered in the future.

Recommendation

The consultant recommends that in the short-term, the HHA begins implementing the solutions for organizations where the audit has been passed. Using this information, the HHA will gain a better understanding of the processes needed for the audit to be performed in the future and also will understand the complexity of the solution. In addition, through providing Internet access to the community organizations, not only will the HHA provide a community service, but also they will gain from having a centralized network connection the various community organizations in the Hill District. This will of course allow potentially sharing of data and information between the various agencies, as well as a potentially a central repository of information on usage and availability of the various community programs in the Hill District. For example, a person using a service in Grace Church such as job training may find it useful that additional seminars or programs are offered also at Hill House Association, and won't have to apply again to attend such a service. Instead, through the centralized system, he could automatically be recommended and if he wants, enrolled, in that service. Such synergy between the community organizations could definitely help the community out greatly.

Hence, in the long-term a centralized data repository should be created for the Hill District, so as other community organizations join into the central connection, they will be able to not only access data from other organizations but also share their own data. This would also help in the process of applying for grants and donations, as the user base for services would increase dramatically. Ultimately, with a central high-speed Internet connection, the Hill District community will greatly benefit and be able to gain a step up into the new technological world.

Outcome 4: Set up Physically a Digital Lab

Hill House Association had started a new program which intended to teach children literacy through technology. The consultants helped to build physically the computer lab where children will be able to make digital movies and discover technology. Having a state-of-the-art digital lab would definitely create a good image for potential donors.

Results/Outcomes

- The consultants and Mr. Jackson visited all available rooms at Blakey center and identified the place for the future lab
- The consultants and Mr. Jackson used the switch in the Robotics lab to provide the new digital lab with Internet connectivity. As a result, the Digital lab got a direct Internet connection
- The consultants and Mr. Jackson installed the machines in the chosen room, hooked them up and performed all the necessary updates on the software already available

Outcome Evidence

This task was distinguished in that through physically creating a lab environment, the concrete evidence of the outcome can be easily seen in the Blakey center. The room chosen for the lab was completely wired and well lit for the needs of the program. The two eMac computers were installed and are ready to be

used for the next stage of the project which is to train the staff and get prepared for the starting date of the program.

Evidence of Expanded Capacity

As a result of having helped with the establishment of the lab, HHA got a fully operational digital lab and made a further step towards successfully deploying the new program. Having an additional computer lab expanded also the technical capacity of the organization.

Evidence of Sustainability

The establishment of the computer lab was performed by Mr. Jackson with the help of the consultants. Mr. Jackson has the necessary capacity to maintain the digital lab. He has already a very good knowledge on how to manage computer labs.

Additional Note:

The consultants recommend that the community partner makes regular updates on the software installed on the eMac computers in order to be always up-to-date. These updates can be done free-of-charge using the built-in Software Update control panel on the eMacs, available in the System Preferences under the Apple menu. Many security holes are fixed every month and it might be useful to download and install the patches.

Recommendation

Development of a Technology Plan and a Disaster-Recovery Plan for Hill House Association

The consultants recommend that a technology plan be created for the Hill House Association, as well as a disaster-recovery plan in order to protect valuable data that is crucial to the organization.

Source

While speaking with executive members in the staff at the Hill House Association, it became apparent to the consultants that although various staff members in the organization have an idea of the general direction that they believe HHA should take with regards to technology, no concrete technology plan currently exists. The Director of Operations recognizes that technology is an important tool and that it can help them further reach their goals which directly relate to their mission and as such the development of a technology plan is crucial. Also, during our consulting process, we realized that the technology plan should also include a disaster-recovery plan in order to assure the organization could operate on a normal basis in case a technology disaster occurs.

Rationale

It is important for HHA to have a technology plan, so that everyone in the organization has a firm understanding of what technology will be implemented when, how, and at what cost. These are things that people can have general ideas about, but in order for technology to be appropriately budgeted for, it is important that it have its own section in the budget with line items detailing the various uses and amounts of money that will be allocated towards reaching certain goals. By creating a technology plan, HHA can ensure that everyone in the organization is on the same page with regards to budgeting and allocation of money for the technology. Without a technology plan, an organization the size of HHA could have problems allocating financial resources for undertakings such as replacing technology equipment when it breaks down or needs replacement.

In addition to having a technology plan, it is also very crucial to have a technology disaster-recovery plan that ensures sustainability for the organization. The recovery plan should include two important aspects:

1) To ensure that the organization can continue in normal operation when critical equipment happens to fail, and 2) How to analyze the damage and restore the functionality in order to return to normal operation. In addition, it might be wise for an organization the size of HHA to have a significant technological insurance policy in case equipment needs to be replaced in the event of a disaster. Having a long-term technology plan and a disaster-recovery plan could provide a critical safety net for the HHA as it expands its technological resources into the future.

Resources

The following are resources in the web that could prove useful in developing a plan for technology management. By reading the following documents and/or attending workshops and seminars, the HHA management team could gain experience in developing its own technology and disaster-recovery plan.

Website:

<http://www.nonprofits.org>

Description:

This website contains answers to many commonly asked questions about managing nonprofit organizations and managing technology in nonprofits. There are technology planning frequently asked questions and the cost-effectiveness of different types of strategies are discussed. In addition, strategies to help prevent over and under estimating costs when creating a technology plan area also discussed.

<http://www.nctp.com>

This website focuses its information primarily on schools and as such could prove extremely useful in developing a technology plan.

<http://www.disaster-recovery-plan.com>

This website gives the opportunity to purchase a technology planning guide called the BCP Generator. This guide includes important steps for the creation of a technology plan, as well as a comprehensive technology disaster recovery guide.

<http://www.drj.com/drpol/drj.html>

The website offers a free copy of a comprehensive disaster recovery plan.

<http://www.tomtobin.com>

This website offers free and low-cost seminars and workshops for technology planning.

<http://www.techsoup.com>

This website is dedicated to technology planning for nonprofit organizations. It can be an invaluable resource when creating a technology plan. One particularly nice touch is the message boards that allow nonprofit organizations to share information with one another.

http://www.tekcentral.com/teknetwork/Disaster_Recovery/Sample_Plans

This website contains many sample technology and disaster-recovery plans, which could be a good guide for the HHA when creating a plan for their own organization.

*Portions of the previous recommendation were borrowed from Andrew Dubois' consulting report for the Rodef Shalom Congregation Library.

Appendix A. Internet Access for Community Organization Sample Audit

Issue	Y	N	If N, what needs to be done
Wiring			
Roof access for dish			
Power port on roof for dish			
Wiring readiness from dish to rest of the building			
Misc. Concerns			
Network			
Central room for modem and server			
Wiring from server room to computer rooms (Walls ready to be drilled for wiring, enough wire to accommodate distance, etc.)			
Server software and hardware to accommodate connection (router, switches, modem, NIC, internet connection sharing...)			
Optional - Wireless sharing of connection internally			
Misc. Concerns			
Client Computers			
Network Interface Cards			
Software ready			
Hardware will support connection			
Misc. Concerns			
Maintenance			
On-sight technical resources			
Technology manager to maintain network, server, and computers			
Scalability of network			
Misc. Concerns			
Costs and Resources			
Cost for Internet access (\$x/month)			
Hardware costs			
Software costs			
Costs for technical support and troubleshooting			
Misc. Concerns			
What the network will be used for...			