I. Background Information

ProjectEducate, a young organization headquartered in Pittsburgh, PA, aims to support the education and infrastructure in the country of Zambia. The mission statement of ProjectEducate is stated on their website, and is as follows:

*A non-profit, non-governmental organization designed to help improve educational standards and infrastructure in the southern African state of Zambia with the goal of building developmental capacity.*

My community partner Mbao Ngula, the executive director of the organization, is in charge of the program and budgeting planning, as well as the implementation of work processes in the organization. Due to limitations in manpower, she is also in charge of technology planning and technical implementations.

II. Consulting Tasks

The consulting partnership focused its efforts on the following areas:

1. **Improvement in management of donor information**

   One problem was that the organization kept the contact and donation information of donors in several separated spreadsheets. This bookkeeping process was done manually, even if the donation was collected online through ProjectEducate’s website, which was time-consuming and highly susceptible to human error. A possible solution here was to introduce an integrated database for all the data and have information go automatically into the database when donors donated via the website or when supporters made an online subscription to the mailing list.

2. **Better management of website**

   Another problem that hindered the organization’s fulfillment of its mission statement was the state of their website. The information was scattered, and many pieces of information overlapped with one another. Most importantly, since website management was out of scope of Mbao’s technical skills, the website lacked maintenance and update. Therefore, there was an opportunity here to improve the management of the website.

III. Outcomes Analysis and Recommendations

**Outcomes:**

1. **Improvement in management of donor information**

   A new website using the web content management system Drupal was created. The new website has increased the capacity of the organization, providing more functions and has made the
maintenance and update of information much easier. Mbao is now able to handle the site herself, and has no need to depend on external technical assistance to maintain it.

2. **Better management of website**
A web-based database system is now in place in the organization to better manage donation and subscriber information. The work process is streamlined by having the CRM automatically import the contact information when a donation is made or when a supporter subscribes to the mailing lists. In addition, the two executive directors of the organization, who are located in different places (Pittsburgh and Zambia) can both view and process the contact information without worrying about issues of data consistency.

**Recommendations:**

1. **Contingency planning and software upgrades**
The contingency planning and software upgrades include creating back-ups of the website, database and all other critical data on a regular basis, and keeping track of the job descriptions for volunteers/part-time employees in case there is a need for certain technical skills during future upgrading work using Drupal and CiviCRM.

2. **Generate more site traffic**
It is recommended that research be conducted about the different ways more traffic can be generated for the website, such as by having a better ranking among the most popular search engines and adding a flash-generated introduction on the site to make it look more attractive. Also, a good way to attack the problem would be to first survey the common traits and demographics of donors. Such information would be useful in tailoring the site to suit the tastes and preferences of this target audience and in doing so could potentially attract more future donors.

3. **Request posting functions on the website**
This recommendation involves having a request-posting function on the website, so that local people, schools, other organizations, or even government agencies in Zambia can post their needs on the website.

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**Community Partner**
Mbao Ngula
*Project.educate1@gmail.com*
*ProjectEducate*
*http://www.projectEducate.org*

**About the Consultant**
Ting Tong

Ting Tong is a first year student in MISIM.

**About the Consultant**
Ting Tong
*ttong@cmu.edu*

Ting Tong is a first year student in MISIM.

Fall 2006
I. About the Organization

Organization ([www.project-educate.org](http://www.project-educate.org))

Mission: A non-profit, non-governmental organization designed to help improve educational standards and infrastructure in the southern African state of Zambia with the goal of building developmental capacity.

Vision: A future with improved educational facilities and standards that will enable people to become active members of their communities.

Objective

* To provide books to schools
* To introduce computer technology into schools
* To rehabilitate school infrastructure
* To help improve teacher skills
* Encourage and support students to become active and productive members of their communities
* Help increase the number of women and girls in formal education

History: The organization is a newly-established non-profit with a short six month history. My Community Partner, Mbao Ngula, a Zambian who now lives in Pittsburgh, is the initiator as well as the founder of the organization. The reason why she started ProjectEducate was that although many supporting organizations already exist in Zambia, they do not focus on imparting skills and knowledge to the local people in Zambia. And most of the time, it is the case that these
organizations are founded by outsiders who do not truly understand the local culture, therefore harboring misconceptions and setting over-idealistic goals.

In spite of its short history, ProjectEducate has already made progress: the organization has collected and sent out about 100 donated computers as well as much needed textbooks to the secondary and high schools in Zambia; It has sent one volunteer, Jamie, from Pittsburgh to Mongu, Zambia, to help better communicate with schools and government and provide aid; Also, a community center has been established to serve as a liaison between the organization in Pittsburgh and the local people in Mongu, and to provide basic training and support. Currently the organization has approximately 100 donors, who come from different geographic locations. Some donations are collected when the organization holds fundraising activities, while others are collected by various means such as online donations and mail.

**Facilities**

The executive director uses an ibook and compatible software to perform her daily tasks, which involve making presentations, writing proposals, planning budgets, putting up web postings and sending emails. Most of the time, the work is done at home, which has a wireless internet connection. The organization also has an office in downtown Pittsburgh, which is used for the occasional meeting with volunteers or board members.

**Programs**

Programs are need inspired and community-based. The organization works with people in their communities to identify their needs, encourage them to seek and devise solutions, and assist them in implementing remedial strategies to resolve issues. So far, the organization has established a community support and resource center in Mongu, Zambia, which acts as a liaison between the organization here in Pittsburgh and the people and schools in Mongu, Zambia. It provides basic computer and internet training, small business training, Micro-financing, and free HIV/AIDS counseling support for the local people.

**Program goal:** According to the website of ProjectEducate, the program goal is: to empower people to do something for themselves. The organization works toward complimenting government efforts by helping people address their needs in the communities in which they live.

**Programs** ([www.project-educate.org](http://www.project-educate.org))

* Operation Grid-Child: Designed to help increase the number of women and girls in formal education with the goal of helping to close the gender gap.

* Operation Empower: Helps improve teacher skills through the world-renowned Certificate of Teaching Mastery offered by Teachers without Borders.

* Operation Read: Focuses of providing books to schools through a partnership with Books for Africa.

* Operation Reach-out: Encourages students to take an active role in their communities by mentoring one another and helping to keep them safe and clean.

* Operation Rehabilitate: Strives to improve school infrastructure through rehabilitation.
* Operation Technology: Introduces the use of Information Communications Technology into schools with the goal of helping to bridge the digital divide.

**Staff**

There are 5 boards of directors, two executive directors (one in Pittsburgh and one in Zambia), and two part-time volunteers from the University of Pittsburgh. The board and the executive directors make plans pertaining to the programs and budget. The directors also take charge in the internal and external communications of the organization. Basically, local schools or other entities seeking help will go to the community center in Mongu and apply for donations from ProjectEducate. The director in Zambia will then direct these requests to the board and director here in Pittsburgh. After thorough consideration of the needs of the applicant and the capabilities of the organization to provide for such needs, the director in Pittsburgh will collect funds and seek help from partner organizations. When the computers or textbooks requested are sent to Zambia, the other director will implement the installation, providing necessary training and responding to their problems.

**Technical Environment**

The directors use computers to do their daily work, such as sending each other email, making presentations and writing proposals using Microsoft Word and PowerPoint.

**Technical Management**

Hardly any technical management exists in the organization. There is no staff in charge of the technological aspects of the group. Instead, such responsibilities have fallen into the hands of the directors who, for example, perform technology planning, and input all contact information into the spreadsheets, although they do not possess all of the necessary knowledge and skills, and have to learn as they go. The website used to be maintained by a volunteer, who has moved to another city and cannot do the task anymore.

**Technology Planning**

The executive director is in charge of technology planning. The organization has a budget of $100,000 for technology. The technology budget planning is based on the needs the organization has either in the organization or the community's needs as they are presented to the organization by the community or determined by the organization for the community.

The ultimate goal is to optimize the use of technology in maintaining and managing information, i.e. mailing lists, donor lists, and to utilize technology to communicate with donors, supporters and the community they serve.

**Internal and External Communication**

Emails are regularly exchanged between the communication center and the staff here in Pittsburgh; the organization also gives out information about fund raising events to supporters and potential donors. The website of the organization serves an important function in the dissemination of information and donors can even make their donations through online services such as Paypal. The website (www.project-educate.org) was designed by a previous volunteer using Html and JavaScript and is hosted on DIYwebhosting (http://www.diywebhosting.ca). However, the executive director, who is also responsible for the technological issues of the whole organization, did not possess the skill and knowledge to maintain and update the site, and to regularly post current events. Another issue with the website was that the information was scattered, making it difficult for
potential donors and supporters to find information they need. For example, the site was served with two navigation bars with some of the functions overlapping. Many pages contained merely several lines of information and there were no details about the life of the volunteer in Zambia. Another important aspect of information management was donors and supporters’ contact information and the information pertaining to every donation. This was managed by several scattered spreadsheets.

**Information Management**

As stated above, information management involved putting the information into several scattered spreadsheets. The reason this happened was that every time the organization held a fundraising event, they asked the people who attended it to sign up and give some of their basic information. The information obtained for this specific event was then keyed into a spreadsheet, so the information went on different spreadsheets and needed to be consolidated.

**Business Systems**

Accounting transactions are recorded using the QuickBook accounting software. Donors’ information is recorded first in a donors’ spreadsheet.

**II. Scope of Work**

**Task 1. Improve management of donor information**

The organization formerly recorded all the information of their donors and supporters in several different spreadsheets. So the information was scattered and was hard to manage well. However, about 82% of its funds come from individual contribution, which makes the contact information of this group of people especially valuable. Therefore, a database was needed to better manage their information and communicate with them.

**Expected Outcomes**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Expected Outcome</th>
<th>How Measure</th>
<th>Current Measure</th>
<th>Evidence of changing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research on the cost and benefits of different databases and choose the most cost-effective one.</td>
<td>Find the most cost-effective way to record and manage donors’ information.</td>
<td>Budget plan and requirements are satisfied</td>
<td>None</td>
<td>Comparison among different database management methods</td>
</tr>
<tr>
<td>Analyze the data requirement and design a database based on the research.</td>
<td>All requirements properly defined</td>
<td>Requirements are analyzed and defined CP satisfaction</td>
<td>No requirement is analyzed or defined</td>
<td>Requirement document CP satisfaction</td>
</tr>
<tr>
<td>Database Design</td>
<td>A database design using good design principles, involving</td>
<td>Design exists CP satisfaction</td>
<td>No design exist</td>
<td>Design document CP satisfaction</td>
</tr>
<tr>
<td>Database Implementation</td>
<td>A working database</td>
<td>Database existence Database completeness</td>
<td>Database completeness</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------</td>
<td>------------------------------------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Migrate the data from the current spreadsheets into the Access database</td>
<td>Information is migrated accurately and completely</td>
<td>Information accuracy Information completeness</td>
<td>Information is scattered and incomplete</td>
<td></td>
</tr>
<tr>
<td>Teach Mbao to manage and input information into the database</td>
<td>Skill and knowledge of the director about database operation</td>
<td>CP adds, modifies, deletes items/tables</td>
<td>Mbao does not possess any database management skills or knowledge</td>
<td></td>
</tr>
<tr>
<td>Improve communication between donors and ProjectEducate</td>
<td>Improved fundraising, easier information management, more accurate data</td>
<td>Fundraising revenue</td>
<td>Revenue level Time to input contact information</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Impacts**

**Programs**

The database can help to better record and track the donors’ information. The goal is that it will ultimately help to bring in more donations from donors and supporters and therefore help to fund more projects in Zambia.

**Staff**

The database will also impact the work processes of the staff in the organization. They no longer need to manually input the online donors’ contact information. In addition, they can now put the information directly to the database instead of using a separate spreadsheet.

**Technical Management**

The technology used here may create awareness of the importance of technology management in the organization.

**Information Management**
Management of donor information is a crucial part of the information management functions in the organization. The database can therefore increase the level of information management.

**Internal and External Communication**

A better external communication would be guaranteed since it will be easier and much more convenient to send newsletters to all supporters and donors.

**Task 2. Better management over the website**

The dearth of up-to-date information in the organization’s website was also a problem. There was a desire to post current information, such as that related to fund-raising activities, work progress of volunteers and so on, on a regular basis. However, the executive director, who was also responsible for the management of technology in the entire organization, did not possess the skill to maintain and update the events. Another problem with the website was that the information was scattered, so it was very hard for potential donors and supporters to obtain the information they needed. For example, the site had two navigation bars with some overlapping functions; many pages contained only several lines of description or information and were therefore not user-friendly. In addition, there was no detailed information about the volunteer’s life in Zambia. The previous website was designed with HTML and JSP, which is beyond the scope of technical skills possessed by my CP. A key solution here was to use a web content management system to create a new site that would be easy to update and maintain. At the same time, it was important to get constant involvement from my CP in all stages of website design and implementation, so that she would become capable of doing this herself after the student consultant leaves.

**Expected Outcomes**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Expected Outcome</th>
<th>How Measure</th>
<th>Current Measure</th>
<th>Evidence of changing</th>
</tr>
</thead>
</table>
| Analyze and organize information | All information properly categorized                                             | Information is categorized and organized | Information is scattered all over the website                                   | Requirement document
<p>|                                  |                                                                                  | CP satisfaction                     | CP satisfaction                                                                 | CP satisfaction      |
| Website design                   | A website design using good design principles, involving the CP in all stages of design | Design exists                       | Bad design                                                                      | Design document      |
|                                  |                                                                                  | CP satisfaction                     |                                                                                | CP satisfaction      |
| Implement design                 | A better working website                                                        | Site completeness                   | None                                                                            | All links work       |
|                                  |                                                                                  | Site robustness                     |                                                                                | All programs described and are easy to find “Attractive look” |
| Develop capacity to maintain the | CP can maintain and sustain the site                                             | CP add, modify, delete pages        | CP does not have the skill to edit                                            | CP add, modify, delete pages |</p>
<table>
<thead>
<tr>
<th>site</th>
<th>the pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create publicity using the website</td>
<td>Donors can find the site easier The site has a higher ranking in popular search engines</td>
</tr>
<tr>
<td>Improved communication between donors and ProjectEducate</td>
<td>Improved fundraising, better information provided More potential donors</td>
</tr>
</tbody>
</table>

**Additional Impact**

**Staff**

By involving my CP in all stages of the design and implementation of the website, she will have the ability to independently maintain and update the information in the site.

**Internal and External Communication**

After the implementation of the solutions, better external communication is guaranteed since it will be easier to find the site and obtain information about the organization. Also, setting up a blog is a very good way to communicate experience from the volunteers in Zambia, since blogging is a practice that is so familiar to the average donor and supporter. These can be easily achieved using web content management systems.

**Technical Management**

An attempt to integrate the website with the database will be implemented so that when people sign up with the mailing list or donate online, their information will be automatically input into the database system. This integration will help the organization to view their applied technologies as a unified whole and with this perspective employ better technical management.

**III. Outcomes and Recommendations**

**Task 1: Build a better website that provides more readily accessible information about the organization to potential donors and supporters.**
Implementing the suggested solutions resulted in a more informative and better organized working website. The website was implemented using Drupal, an open-source Web Content Management System. The reason for choosing Drupal as opposed to other possible methods of implementation is that it is much easier to maintain and update, with little complex web design syntax and a quick learning curve. As a young organization with limited staff, ProjectEducate needs to be able to maintain the site internally. Web content management systems would seem to be the best fit for my Community Partner, who has the responsibility of maintaining the site, but was constrained with her limited technical skills. In addition, the website is integrated with CiviCRM, an open-source Constituent Relationship Management System. With the existing CiviContribute and CiviMember modules, it is now very easy for my CP to set up donation pages and mailing lists – a crucial function in online fund-raising. Also, monthly/yearly donation figures are now readily available, and thank-you letter are generated and sent automatically after each donation transaction is completed.

The information on the website is now better categorized into the two navigation bars that separate the information by its nature. News can be updated in a fairly time-efficient way, and operates in a way is similar to posting blog entries. Mbao has tried to make two news postings on the site, and is satisfied with this new user-friendly way of posting news. As a result, there is a high possibility that this function will be sustained with regular news updates from Mongu, Zambia, to those who are interested and want to know more about the organization. In the past, the information provided in the former website was very limited and only included basic information about the organization and Zambia. Also, the two navigation bars led to some overlapped information.
A flash clip showcasing photos taken in Zambia is displayed on the homepage, giving people a dynamic and visual presentation of the mission statement of the organization. Also, another flash animation provides a lively, animated and interesting way to convey the organization's mission statement and focus to the site’s visitors, which is a big contrast from the former plain text presentation.

Furthermore, a mailing list is available for potential supporters to sign up for the latest fund-raising activities, and other activities held by the organization. A calendar function on the site enables Mbao to update and inform site visitors of upcoming events. Although the calendar function has not been currently updated, Mbao has learned how to use it to post events. Since ProjectEducate is a fairly young organization that is seeing fast-paced development, constantly updating the website to include progress and the latest news is very important. However, it was in the past beyond the scope of Mbao’s skills to perform this task. She had many photos taken in Zambia, as well as a lot of the latest news, but didn’t know how to embed them onto the website. Now she has acquired basic working knowledge of HTML, and is able to make simple web pages. She has successfully created two pages – titled “Contact Us” and “Our Journey in Pictures”, and is confident that she will be able to do self-sufficient basic maintenance of the site.

**Sustainability:**
The new website, built on Drupal, is easier to maintain and update. Mbao only needs to master some basic skills of HTML to do the daily maintenance job. She can now create simple web pages, and manage donors’ information simply by following the instructions in the CiviCRM module. Posting news is as simple as publishing a blog entry. Therefore, there is a high likelihood that Mbao can maintain and update the website after the consultant leaves.

**Potential Risks:**
There is a risk in the future that the amount of available space on the server will not be enough. As more content like photo albums and videos are put onto the site, the amount of available space on the server will run out. To mitigate this risk, Mbao needs to purchase more disk space to improve the scalability of her organization’s information systems. Another future risk that Mbao may face is the need for higher-level technical assistance when a new version of the software is released and needs to be upgraded. A mitigation plan for this risk is to have the job descriptions of part-time employees or volunteers, so that when an upgrade job is needed in the future, these employees and volunteers can be hired for their expertise.

**Task 2: Install the Customer Relation Management system and migrate all the contact information into it. Also configure a donation management page and a mailing list sign-up page.**

**Details:**
CiviCRM, a constituent relationship management system, has been installed and integrated with the website. There are several reasons for choosing this system over other possible implementations. Firstly, CiviCRM is specifically designed for non-profit and non-governmental organizations,
available without a license fee and is supported by a community of nonprofit-focused consultants. Also, since it is targeted at non-profits and NGOs, it stores common nonprofit contact data into categories like individuals, organizations, and households that support donor management. Moreover, CiviCRM integrates with Drupal, and is thus more secure and stable.

So far, one list of donor and supporter contact information (about 550 rows) has been migrated from spreadsheets into this CRM system. Due to issues of attribute consistency, the other two spreadsheets need to be revised before migration, which would take several weeks to accomplish and thus could not be completed at the end of the consulting task. However, the consultant has shown the migration process to the community partner in a step-by-step fashion, as well as let her experiment on it independently, so that she would be able to autonomously handle this task in future.

An online donation page has been set up, which enables donors to choose to donate money via Paypal security payment, without worrying about confidentiality problems. All donation information goes directly to the CRM database. A Thank-you letter will be sent automatically to people who have made online donations. Prior to the use of this CiviCRM, Mbao had to put the donor’s information into Quickbook manually and send thank-you letters one at a time, which was time and labor consuming.

In addition, a sign-up page was built, which helps to collect supporter information and store it in the CRM database. Therefore, it is easy for Mbao to group them and send emails on a regular basis to inform group members about the latest fund-raising and other organizational activities. No sign-up function was available on the former site. This made follow-up work with people who were interested about ProjectEducate very difficult in the past.
**Increased Capacity:**
The web-based database system is now available in the organization to better manage donor and subscriber information. The work process has been streamlined by having the CRM automatically import contact information into the database when a donation is made or a supporter subscribes to the mailing lists. In addition, the two key figures of the organization (the executive director and the community center officer), who are located in different places (Pittsburgh and Zambia respectively) can both view and work on the contact information without worrying about consistency of the data.

**Sustainability:**
The CiviCRM system is fairly easy to use since it has specific instructions within each function module. Mbao has successfully learned how to migrate contact information from the former disparate spreadsheets to the CRM database. Although the organization currently needs only one mailing list, I showed her how to create sign-up pages in case of a future need to put up multiple sign-up forms for different projects.

**Potential Risks:**
The CiviCRM may face the same risks as with the Drupal site because if new versions of the software are released, there is a chance that the site may as a result not work properly. Mbao may
hire temporary part-time staff or find a volunteer to upgrade the software for her to mitigate this future risk. An upgrade job takes about 3-4 hours in average, which will not be a very big problem for the organization.

Recommendations

Vision:
The vision of technology for ProjectEducate in the future is to continue improving its website as a major source for fund-raising and a tool for communication with its external supporters and donors. This involves having a back-up plan, incorporating more functions into the website, making the website more attractive to visitors, and generating more incoming traffic for the website. Currently, ProjectEducate has no back-ups for its website. This may cause serious problem if the original data is destroyed by accidents or hard-disk crashes. By backing-up on a regular basis, ProjectEducate will always have a working site available. Also, technology can be deployed in many other ways to create more functions on the site to aid the online fund-raising activities and the projects currently run by the organization. More functions on the site will increase the volume of online donations and foster better communication between donors, supporters, local people in Zambia and the organization itself. Finally, research on how to generate more site traffic, for example, to have a better ranking among the most popular search engines, will also help to achieve the goals of ProjectEducate.

Recommendation 1: contingency planning and software upgrades

Overview:
The contingency planning and software upgrades include having back-ups of the website, the database and all other critical data on a regular basis, and preparing a job description of volunteers/part-time employees in case of future need of their expertise in the upgrading work for Drupal and CiviCRM.

Details:
Currently, ProjectEducate has no work process for regular back-up of its website. This may cause serious problems if the original data is destroyed by accident or hard-disk crashes. Since now we have incorporated the CiviCRM into the website, it is also important to keep a back-up for the online donations information and mailing-list subscribers’ information. ProjectEducate’s website is now hosted on DIYhosting, a Canadian web hosting company. It uses CPanel as the control panel. Having a back-up of the site and the MySQL database is fairly easy, using the back-up function provided by CPanel and download the files to the Mbaa’s personal computer. This will ensure having two copies of the site at two distinct places, so any hardware problem, catastrophes will not cause serious problem. Due to the relatively stable contents of the website, bank-up of the site can be done only when changes are made onto it. The MYSQL database files should, however, be updated monthly or even weekly, depends on the frequencies of mailing list subscription and online donation transactions. In addition, all other critical data of the organization, for example, the request forms from Zambia, the photos and videos taken in Zambia and other organizational documents should be backed up. This can be done by having a back-up copy of those files using USB drive or CD-RW or other back-up software.
Drupal releases new versions of the software on a timely basis, due to issues of security vulnerabilities and bugs. Therefore, my CP may need temporary help from volunteers/part-time employees to help her upgrade the software and install it onto the server. This task doesn’t require much technical skills. However, a proposed job description may be helpful when she needs to seek for help in the future.

**Reasoning behind the Goal:**
A backup is important for that it creates a reserve copy of the website files, which can be used to restore the site, should some file gets deleted, a server crashes or any other predicament occurs. A backup would keep the organization from losing any valuable information and guarantee the organization to work on track to provide information to potential supporters and collect online donations.

For the upgrade of the software, new versions are released for the purpose of security and others. Since ProjectEducate collects online donations via the website, it is important to make it secure and safe. Therefore, to hire temporary volunteers or part-time staff to do the periodic upgrade job makes sure that there will be fewer possibilities that the site will be hacked.

**Approach:**
1. Plan for the backups: write backup schedule into the working process of the organization and delegate the responsibility to certain staffs.
2. Several alternative ways to make the backups:
   (A). having a copy of all the files in the website using USB drive or CR-RW
   (B). Using back-up software:
      Free trial version of Dantz’ Retrospect Backup. (Information on the product can found on [www.dantz.com](http://www.dantz.com))
      Handy Backup – Backup software specifically designed for website backups. (Information of the product can be found on [www.handybackup.net](http://www.handybackup.net))
3. A proposed job description for recruitment of temporary volunteers/part-time employees:
   - Programming experience in PHP, knowledge of css/html
   - Experience with Drupal and CiviCRM preferred
   - Good communication skills

**Outcomes:**
- Increased robustness of the website
- Increased website security

**Internal Resources:**
The following resources are internal resources available to implement the contingency plan for ProjectEducate:
- Executive director – plan for the backup and write it into the work process of the organization.
• Part-time volunteers and temporary staff – implements the backup responsibility on a timely basis
• Hardware for backing up files
• Proposed job description for recruitment of temporary employees

**External Resources:**
The following resources are external resources that can be helpful to the contingency plan:
• Backup software – for example, Handy Backup and Dantz’ Retrospect Backup
• Volunteers/part-time employees

**Budget:**
• Cost for backup software
• Cost for hiring temporary staff to upgrade the website

**Recommendation 2: Generate more site traffic**

**Overview:**
This recommendation involves doing a thorough research about different ways to generate more traffic to a website, including having a better ranking among the most popular search engines and having a flash-generated introduction on the site to make it look more attractive. Also, identify the common traits and demographics of the donors of the organization and then targeting this audience would be useful to attract more future donors.

**Details:**
ProjectEducate uses its website as a means to collect online donations as well as to communicate with the potential supporters and donors. However, currently, the organization hasn’t really considered about different approaches to generate more traffic into the site. To research on ways to generate site traffic and implement them will have more visitors onto the site and thus increase the amount of donation collected via the website. In addition, the organization doesn’t really have a target audience. A thorough study about the demographics of the donors would provide future guidance for the fund-raising activities of ProjectEducate.

**Reasons behind the goal:**
Many proposed projects in ProjectEducate are constrained with the limited funds available in the organization. To better achieve the mission statement, it is important to generate more site traffic to collect more online donations since money collected in this way accounts for a major part of the total donations (about 82%, as I stated earlier). Thus, to investigate on how to generate more site traffic will create value to the organization.

**Approach:**
1. To have a ProjectEducate link on all of our partner organizations’ websites: ProjectEducate currently has six partner organizations that we work corporately with, as well as many others that we seek help and advice from. Many of these organizations are big non-profits with a stable number of supporters and donors. Therefore, to exchange banners with them will
generate more traffic into our site for the reason that people who are interested in our partner organizations will also tend to be interested in ProjectEducate.

2. To have a higher ranking among popular search engines. And there are several alternative ways to do this:
   (A) Purchase paid search placements: Nearly all search engines sell their top rankings or have side bars for advertisements. Take Google as an example, the top links and right side on the search result pages are paid placements. Companies and organizations pay ‘per click’ for those placements. This method of advertising is inexpensive and return on investment is very measurable: a test for the performance of keywords in attracting people to the site is available at Google http://www.google.com/ads/.
   (B) Search engine optimization: One way to optimize the ranking for ProjectEducate website on search engines is to carefully choose keywords using a keyword tool such as Wordtracker (www.wordtracker.com) or Overture (www.overture.com) and then include these in the Meta tags, title, and body of the site. The primary keywords we choose should make up about 12-15% of the overall content and should be included in your page title, somewhere in bold near the top of the page as well as mentioned a couple of times throughout the article.

3. Have a flash-generated intro onto the website: A flash generated intro will make the site looks more appealing. The flash-animated design will give a lively introduction of the organization about its history, mission, vision and recent projects. The purpose of this introduction is to attract visitor’s attention and make them explore the site for more details of our projects and fund-raising activities. A professional website design company is needed to achieve this task. ProjectEducate will need to provide them with a detailed documentation of our information, and they will design and implement the website introduction in a timeline of 6-9 months. ProjectEducate will continuously give feedback and supervision during this time period in case of under misinterpretations.

4. Study the demographic traits of existing donors and supporters. This can be achieved by sending survey regarding the background and other information from the donors/supporters through group emails or regular mails, or to put up a survey form on ProjectEducate’s website. Once the target audience has been identified, the organization can launch promotional campaigns and other site traffic generating activities aiming at this group of people. For example, to put an internet advertisement in one of the websites where the target audience will be most likely to browse in. Money spent in this way will be more efficient in generating site traffic, and therefore, attract more donations eventually.

Outcomes
- Increased visibility on popular search engines (can be listed on the top 2 pages when search by keywords)
- Increased overall site traffic
- Increased amount of donation

Internal Resources:
- The ProjectEducate website
- Partner organizations and other organizations related to ProjectEducate
• ProjectEducate documentation: to provide detailed information about the flash-animated design
• Design of the online or paper survey for the demographic/traits of donors and supporters

**External Resources:**
• Ten Tips To Generate Traffic to Your Website ([http://www.tengoldenrules.com/QuickTip10Website%20Traffic.htm](http://www.tengoldenrules.com/QuickTip10Website%20Traffic.htm))
• A test for the performance of keywords in attracting people to the site is available at Google ([http://www.google.com/ads/](http://www.google.com/ads/))
• Keyword tool like wordtracker ([www.wordtracker.com](http://www.wordtracker.com)) and Overture ([www.overture.com](http://www.overture.com))
• Search engine optimization companies
• Website design companies

**Budget:**
• Cost of ‘per click’ of placements on popular search engines
• Cost of hiring a search engine optimization company
• Cost of a flash-animated introduction to the website
• Cost of Online or paper survey about the demographic/traits of donors and supporters

**Recommendation 3: Request posting functions on the website**

**Overview:**
This recommendation suggests having a request-posting function on the website, so that local people, schools, other organizations, or even government agencies in Zambia can post their needs on the website.

**Details:**
So far, ProjectEducate has established a community center in Mongu, Zambia to act as a liaison between their head office in Pittsburgh and the local people in Zambia. When people/organization has need for textbooks or computers, or has other problems, they will come into the community center and apply for help. It would be time-saving and resource-saving if we could have a request-posting function on our website. One benefit is that since local people already have access to computers through the facilities and training program provided in the community center, they could post their own requests onto the website to save time for volunteers in Zambia. This is especially important for a small organization like ProjectEducate with limited manpower. Another benefit of having this request-posting function on our website is that donors and visitors of the site can view the needs of the local people. The best solution is more likely to arise with a higher public awareness of the problems.

**Reasons behind the goal:**
ProjectEducate is a young organization with limited resources and funding. Therefore, it is impossible for it to help all people and organizations seeking help from them. In most cases, ProjectEducate needs to evaluate the urgency of the problem and potential efficiency of use of
resources, and then decide on whether or not to respond to this request. The organization tries to support all people in need, but faces its own constraints as an organization. If local people are able to post their requests online and make them visible to all potential supporters, their needs might be met outside of the organization, with the help of other non-profits, companies or even individuals.

**Approach:**
1. Investigate request-posting functions: a request-posting function is similar to a forum. Therefore, conducting research on how to incorporate forum functions onto the site will be helpful. Also, we can research on existing modules provided on the Drupal site (www.drupal.org) to see if any of them are suitable for acting as a request-posting function.
2. Requirements analysis: gather requirements to achieve the functions. A questionnaire among local people who have sought support from the organization, as well as people who intend to seek help, will be useful to collect insights about the requirements of this function.
3. Design of the function: design the request-posting function. Consider possible implementation method, estimated budget and timeline. Future outcomes should be included at this stage.
4. Implementation: implement the request-posting function. Get feedback from potential users of this function and make possible improvements.

**Outcomes:**
- Increased number of needs being met for local people in Zambia
- Increase site traffic
- Increased involvement of donors and supporters

**Internal resources:**
- ProjectEducate website
- Microsoft Project – provides diagrams such as Gant charts to analyze a feasible project timeline
- Executive director – who will carry out the management and supervision of the whole project
- Questionnaire among local people who will be the potential users of the function

**External resources:**
- Existing modules on Drupal site (www.drupal.org)
- Temporary or contracted web designer to design and implement the project
- Local people in Zambia – who will give insights about the functionality of the project
- Donors and supporters of ProjectEducate

**Budget:**
- The cost of implementing the questionnaire
- The cost of development of the function if no existing modules/software can be used

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**About the Consultant**

Ting Tong is a first year student in Master’s of Information System Management (MISM) at Carnegie Mellon University.
Appendix A.

- ProjectEducate website
  http://www.project-educate.org
- Ten Tips To Generate Traffic to Your Website
  (http://www.tengoldenrules.com/QuickTip10Website%20Traffic.htm)
- A test for the performance of keywords in attracting people to the site is available at Google
  http://www.google.com/ads/
- Keyword tool: wordtracker (www.wordtracker.com)
- Keyword tool: Overture (www.overture.com)
- Free trial version of Dantz’ Retrospect Backup. (Information on the product can found on
  www.dantz.com)
- Handy Backup – Backup software specifically designed for website backups. (Information of
  the product can be found on www.handybackup.net)
- CiviCRM Documentation
  http://wiki.civicrm.org/confluence/display/CRM/CiviCRM+Documentation
Appendix B.

A screenshot of the former homepage

A screenshot of the new homepage (www.project-educate.org)
A screenshot of CiviCRM administer panel