

**Information Systems Management
Course 95-822**

Spring 2007

Final Consulting Report

Family Tyes

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Family Tyes
Executive Summary
Student Consultant, Gautam Vasudev
Community Partner, Paul Hinde

I. Background Information

Family Tyes is a non profit organization that is committed to increasing environmental awareness and improving family relations through fly fishing.

Their mission statement is as follows,

We at Family Tyes are committed to youth development and environmental conservation through fly-fishing. We believe that fly-fishing provides a life long positive alternative to drugs, alcohol and other challenges facing today's youth. We strive to teach young people the important role they play in fisheries management, environmental stewardship and conservation. We believe that utilizing a shared interest in fly-fishing promotes family values, volunteerism, educational processes, business skills development, and community involvement

II. Consulting Tasks

To Improve Communications, Information Management and Scheduling using a Content Management System

This task was broken in to four subtasks namely online document sharing, online event registration, dynamic site updates and easy to use news letters.

Online Document Sharing

As Family Tyes (FT) staff use personal computers to store and modify documents, they are scattered across various computers. When needed, they had to be explicitly asked for. This diverted focus from mission oriented activities. Quick access to documents translates to faster processing. A Content Management System (CMS) allows for document sharing and ownership. This is an effective tool in converting unorganized storage shall to organized storage with online subject based repositories and explicit ownership. This feature shall have a very positive impact on information management and solution is feasible for the given time frame. A CMS solution is devised keeping in mind users little technical familiarity. It is easy to use, and highly sustainable. Uploads of documents are simple and intuitive, though there is a danger of the users modifying or deleting documents if the security is not well configured and if backing up is not regular.

Online Event Registration

To date registration was done by mail. The process had some associated variability and sometimes unexpected registrations occurred and the group numbers could not be determined in time. Mode of transportation, which is based on that number, was hard to decide. Once again focus was diverted

from mission oriented activities. If the mode of transportation was not adequate, the fishing trip got off to a bad start. The Event Registration functionality of a CMS allows for users to register for an event on the calendar module. A forum could also be created for registration. With quasi-online registration, it is hoped that the number of registrations may be increased. Also, the feature shall have a positive impact on the number and ease of registration

Dynamic Site Updates

Previously site updating communication was difficult since it was based solely on email till it reached the technical consultant who actually did the update. Updates to the website for external communications were expensive and time consuming. Focus was diverted from mission oriented activities as more time spent in just facilitating communication. A Content Management System allows dynamic site updates, making it easier to communicate with target audience, there by eliminating the costs and wait time previously associated with the updates. Users can change the web pages by just double clicking the text and editing it like a text document.

Newsletters

All contact addresses are stored on staff Outlook applications. This made creation of newsletter lists difficult to manage as the lists had to be merged and modified to address the correct set of FT members. With the CMS system, newsletters are sent based on user roles by just checking the correct roles. Roles can be created on the fly and organized in a custom manner to best serve the needs of FT. Examples of these roles are Board, Staff and Students.

III. Outcomes Analysis and Recommendations

Outcomes

- Document sharing and ownership would be very useful. The present unorganized storage shall hopefully turn to organized storage with explicit document ownership. Virtual folders would allow the documents to be organized consistently and accessible by all staff. The increase in the number of documents uploaded and folders created is a good indicator of the use of this functionality.
- Event registration allows for users to register for an event on the calendar module. A forum could also be created for registration. With quasi-online registration (since a registration/waiver form must be additionally e-mailed in as well), it is hoped that the number of registrations may be increased. The feature shall have a positive impact on the number and ease of registration. Increased registration for future trips would be a good indicator of this improvement.
- Dynamic site updates would make it easier to communicate with target audience. Functionality such as contacts list would allow for a centralized email address book. The ease of use of a CMS should encourage increased site activity in terms of updates, both by staff and users. This would be measured by new registrations, new pages and new modules added. The increase in site hits is a good indicator of this.
- Newsletters are sent through the role based memberships. Currently all addresses are stored on staff Outlook applications. With the CMS system, news letters are sent based on the role of the user, such as Staff, Board or student. Addresses shall be backed up on the CMS as well. This would be reflected by a growing CMS user registration.

Recommendations

Incorporate Future Projects with Content Management System

Family Tyes shall be working in collaboration with the Information Systems department at Carnegie Mellon to develop a measurement system to measure certain parameters that describe the effectiveness of Family Tyes in executing its mission statement. This system could be incorporated directly into the Content Management System, there by leveraging its ease of use and rapid deployment capabilities. The move would combine enhance the visibility of the project as well.

Use YouTube to Host Videos on Family Tyes Business Site

YouTube allows videos to be embedded on external websites. Family Tyes can upload videos of their trips and trainings on to YouTube or other streaming video websites such as Veoh, DailyMotion, Guba, MetaCafe etc. There are 2 advantages to this. Firstly, this allows Family Tyes to provide on demand video streaming of their videos from their website. Developing this independently would be an expensive task. Second, videos are usually large files and by hosting the content on YouTube, Family Tyes saves space on its hosting web server.

Engage Student in Maintaining and Updating Website

While using the CMS is very easy, Family Tyes staff may not have the time to upload documents and organize modules. A student could be hired to work part time to maintain and upgrade the CMS system. The student would not need any prior qualification, though a background in computers would be welcome. Any knowledge of .Net and C# would make him an ideal candidate. The work load would be around 2 hours a week. The pay should range from \$10 to \$15 an hours.

Use Instant Messaging for Faster Communication

Instant messaging provides a cost free method of instant communication. Given Family Tyes' distributed nature, an instant messaging system such as Yahoo Messenger or MSN Messenger would be well suited for this. There would significant cost reduction and savings on phone calls. A messaging service also allows for voice conferencing as well as document and photo sharing. Organization of contacts is easily done through tags.

Instant Messengers can be downloaded and installed directly from the internet. To add new contacts, only an email address on that platform is needed. Some popular messengers are Yahoo! Messenger, MSN Messenger, and Google's Gtalk. If a part of Family Tyes is already on some messaging service, the same could be chosen.

Use Google Maps API to map locations of Operations, Trips and Schools Programs

Google Maps allows websites to use their API to map locations based on addresses. The APIs, once set up, accept the address of a location as input. The address can be provided in simple text, just like in a mail and the system is smart enough to interpret the correct meaning.

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Family Tyes
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Community Partner, Paul Hinds

I. About the Organization

Organization

Family Tyes is a non profit organization that is committed to increasing environmental awareness and improving family relations through fly fishing.

Their mission statement is as follows,

We at Family Tyes are committed to youth development and environmental conservation through fly-fishing. We believe that fly-fishing provides a life long positive alternative to drugs, alcohol and other challenges facing today's youth. We strive to teach young people the important role they play in fisheries management, environmental stewardship and conservation. We believe that utilizing a shared interest in fly-fishing promotes family values, volunteerism, educational processes, business skills development, and community involvement

Family Tyes was founded was founded originally as the "Baldwin Fishing Club" in 1979 by Paul Hinds and Chuck McKinney. By 1989 the number of schools enrolled in their program had grown to 5 with a spurt of growth in membership. They attained their 501 C-3 Non-Profit status in 1993.

[<http://familytyes.com/history.htm>, 02/24/07]

Facilities

At present Family Tyes has no centralized office location. Most of the staff work from home and own equipment individually. The organization does have a functioning website and another that was used temporarily for a sweepstakes competition. They also have access to printing facilities.

Programs

Family Tyes is organized by five programs. These are as follows

- Club Program – A membership based program involving fishing trips and other organized activities. Assistance is provided in securing equipment and liability and medical coverage are provided. Class room sessions starting in winter allow students to meet with Family Tyes mentors and learn lasting skills.

- Mentor Programs - For volunteers supporting club efforts. Mentors participate on trips and in other programs such as class room sessions on behalf of Family Tyes. They provide invaluable support to Family Tyes in achieving its mission.
- Physical Education Program - A curriculum and equipment package designed to teach fly-fishing in Physical Education programs at schools. The program meets national standards and also provides teaching materials for the program to teachers and schools.
- Student Business Program – Students involve themselves in business activities such as making presentations, brochures and newsletters at conferences, seminars and business enterprises. The program also encourages students to grow as mentors, teaching others what they learnt a few years before.
- Outreach Program - Club members introduce thousands of students and families to fly fishing and fly tying by working in conjunction with Fishing Shows, Scouts, Safari Club, Ruff Grouse Society and others.

[<http://familytyes.com/>, 02/24/07]

Staff

- Paul Hides – Vision Team Director, Co-Director. The primary point of contact, Paul is an integral part of Family Tyes and has contributed greatly to their new technology initiatives. He is at the heart of Family Tyes and one of its original founders.
- Charles Mckinney – Co-Director. Chuck deals with the website, classroom teaching presentations, communications between clubs, schools, members, mentors, business contacts, and others.
- David Thorn – School Director, Co-Director. Dave is involved in trip planning and involving and updating schools with the latest developments at Family Tyes.
- Richard Jones - Regional Director. Richard is involved with the Club program and teaching at various sites in the class room sessions.
- Don Gavett - Trip Coordinator. Don is responsible for trip planning and registration which involves filling waiver forms and mode transportation.

Technical Environment

The PCs are personally owned by staff members. They are all Windows machines running Windows ME, 2000, or XP. Not all staff have an updated version of MS Office which is used extensively by the organization. Different versions of PowerPoint have led to difficulties in revising and editing larger presentations. Outlook is used as the primary email client and contact management application. There is some familiarity with MS Access and Excel, but not enough confidence to engage actively in their use.

Family Tyes does have a functioning website, www.familytyes.com, which has been used extensively thus far. There have been complaints as the difficulty in navigation and updating. It has proven to be an effective means of external communications. Every employee has internet access. Their connection speeds may vary however.

Technical Management

Family Tyes did not have any structured technology management focus until recently. Given that they do not have any organization level information system the extent of technology management is limited. They receive technical support from Carl Kunzmann who is responsible for backing up data and providing technical support. Carl is paid hourly and is not a member of Family Tyes.

Updating of the web site is mostly by contact an external agent who is responsible for its maintenance. The external agent, Stan Barker is paid hourly. Family Tyes decides it updates on a weekly basis.

The staff members have limited familiarity with technology. There is some awareness of the availability and functionality of applications such as Excel and Access. However, these have not been used thus far.

Technology Planning

Family Tyes has recently focused on developing a strong technology strategy that shall allow them to leverage their experience and expertise in building a sustainable revenue model and acquiring further funding. Paul Hindes is responsible for this planning for the most part.

In the short term Family Tyes seeks an information system to improve the organizational communication. For this, a virtual office system would be a good substitute for the lack of an actual physical presence allowing for the basic functionalities such as document sharing and scheduling.

In the medium-long term they hope to create an ERP like measurement system for Family Tyes. This would be used to measure effectiveness in executing their mission statement and also augment their yearly report to funding organizations. This quantitative reporting is in keeping with the new Youth Standards reporting standard, developed by Bob Bowen for the Mellon Foundation. Family Tyes hope to be the first non-profit to implement this.

Finally, Family Tyes also wishes to create an outdoor data gathering system to monitor member activity and stream side data in restricted fishing areas. The system would be the first of its kind. The data would be distributed to land owners to verify the correct and proper use of their streams and land, to industry for subscription fees and to academics and regulators as needed for modified subscription fees.

Family Tyes hopes to continue its partnership with Carnegie Mellon University in achieving these goals. They have recently received a grant from the Mellon foundation and feel that they have adequate funding to provide for them. The mutually beneficial model for students and Family Tyes also contributes to their technology planning.

Internal and External Communication

Internal:

All internal communication is via email and distributed mailing lists, phone conversations and meetings. Brochures, pamphlets and presentations are handed over personally or mailed. The staff is spread over a large geographic area as there is no office.

External:

External communications is mainly via a website which has proven to be difficult to update. There have complaints about the ease of navigation. Also, some of the links do not work. As mentioned earlier, updates are made by an external agency paid on an hourly basis.

Articles submitted by members for the website such as trip logs and reviews for the website are treated in a similar manner, by sending it to the external agency (Stan Barker) who posts it to the site.

Information Management

As mentioned before, Family Tyes does not use any organization level information system. Most membership data is maintained in the form of a contacts list. This would be stored in Outlook on a staff computer. There are several such lists.

Event scheduling is done by mailing target audiences and posting the event to the website. Respondents reply via email. Waiver Forms required for the trip are available on the website, but they are unformatted as they have been copied and pasted and not uploaded as the original documents.

Other documents are maintained by staff on their individual computers. If a document is needed, an email or a phone call usually suffices though finding documents is sometimes.

For the Club and School program when making presentations, the original copy is sent for revision to other staff. They are revised and sent back for printing. Inconsistent versions of PowerPoint have made it difficult to format the presentations consistently. This has led to incomplete presentations on occasions.

For trip registration, mails are sent out and additionally the event notification is posted on the website, though this is less effective. Registration is usually in the form of a confirmation e-mail.

II. Scope of Work

Improve Communications, Information Management and Scheduling using a Content Management System

At present, communication is difficult since it is based solely on email and phone conversations. Updates to the website for external communications are expensive and time consuming. Event scheduling, document sharing, archiving, ownership, newsletters as well as impromptu site modifications are needed to effectively communicate with Family Tyes' target audience. Focus is diverted from mission oriented activities when time is spent in just facilitating communication.

Expected Outcomes

A Content Management System is a good technical solution to the problems faced by Family Tyes, as well as a facilitator of beneficial opportunities. Its ease of use, expansive functionality set and robust implementation are ideal for users unfamiliar with technology. There are regular updates and open source versions are low cost to install and maintain. Additionally, in built security and user

authentication would allow for easy access control. For Family Tyes, the following functionality would be especially useful.

- Dynamic site updates would make it easier to communicate with target audience. Functionality such as contacts list would allow for a centralized email address book. The ease of use of a CMS should encourage increased site activity in terms of updates, both by staff and users. This would be measured by new registrations, new pages and new modules added. The increase in site hits would also be a good indicator of this.
- Contact List could be used to synchronize the mailing lists of the various staff members. Currently all addresses are stored on staff Outlook applications. With the CMS system, it is hoped that all new addresses shall be backed up on the CMS as well. This would be reflected by a growing CMS contact list.
- Event registration allows for users to register for an event on the calendar module. A forum could also be created for registration. With quasi-online registration (since a registration/waiver form must be additionally e-mailed in as well), it is hoped that the number of registrations may be increased. The feature shall have a positive impact on the number and ease of registration. Increased registration for future trips would be a good indicator of this improvement.
- Document sharing and ownership would be very useful. The present unorganized storage shall hopefully turn to organized storage with explicit document ownership. Virtual folders would allow the documents to be organized consistently and accessible by all staff. An increase in the number of documents uploaded and folders created would be a good indicator of the use of this functionality.

Additional Impacts

Use of Additional CMS Functionality:

A Content Management System has a wide range of functionality. Initially, the feature set used by Family Tyes will be restricted to those that can be used directly in their day to day processes. However, further exploration shall allow them to leverage the additional functionality of the CMS for their benefit. A good example of this is the Forum module available with CMS's. This allows users to discuss topics, creating new discussion threads that can be replied to. Such a feature would be invaluable to Family Tyes in discussing trip timings, reviews and feedback.

Focus on Organizational Information & Technology Management:

Apart from the solutions provided by the CMS itself, there will also be a new focus on data management for Family Tyes. Document storage, consistent contact lists, clear processes for updates and registration shall bring additional discipline to the work flow of the organization. This is a low cost, high benefit activity that shall allow smoother running and contribute indirectly, yet significantly, to the mission of Family Tyes.

Base for Future Technological Growth:

The final CMS implemented will most likely be DotNetNuke (DNN), a Windows based CMS running on ASP .NET and created in the C# language. This CMS is easy to customize and has a large user community. It would be possible to add modules to DNN for the Measurement System that Family Tyes wishes to implement. The hosting plan includes additional databases that can be used for this purpose.

Integration with Current Website:

Additionally, since the present web site can still be used and there is no need to migrate any of the content from the present website to new. The present website shall be accessible by a prominent link on the front page of the new site. This would leverage the effort put into the current website and augment it with the functionality of the new site.

Feasibility

The solution is feasible for the given time frame. Paul Hindes, the associated Community Partner has seen the functionality of various CMS packages through demonstration is enthusiastic about the project. A CMS solution is devised keeping in mind users little technical familiarity. Family Tyes staff should have little difficulty in using it. With training, they should be very comfortable with the technology.

Risks:

- **Support:** Usually, the web host provides support for the CMS offered by them, but this is not always reliable. It would be very useful for Family Tyes to have external technical support for the CMS. This is not always easy to find if it is open source. Popular packages have better support and this would be an important factor in deciding the final CMS.
- **Regular Backups:** There is a danger that users deleting entire modules and pages if the security is not well configured and if backing up is not regular. User may delete entire registered list or contact lists. Also, shared documents could be deleted. The effects of these can be minimized by regular backups. These are provided by the web hosting company. It would be useful to familiarize Family Tyes with the backing up process so that it can be done explicitly as well. Well defined user roles would also help prevent unwanted deletion or modification.
- **Irregular Updates:** Without regular updates, the site may fall into a state where it is no longer possible to update with the latest updates. This can be avoided by assigning this responsibility and accountability to a staff member for this task.

A Content Management System is easy to use, and highly sustainable. Self updating is a common feature in most CMS packages, allowing easy updates. This ensures that Family Tyes would have little difficulty in updating the CMS. The backend database used by the CMS is the responsibility of the web host and would be updated by them.

Family Tyes and the student consultant shall also identify an expert in the chosen CMS technology for future support. This would ensure that in case there are technical difficulties with the site or modifications/customizations need to be made, there is an established support solution that can be used. As mentioned earlier, a staff member shall be identified to ensure regular updates and he/she shall have the contact details for the external technical support and be responsible for getting in touch with them as and when needed.

III. Outcomes and Recommendations

Outcomes

On-line document storage and sharing:

Outcome

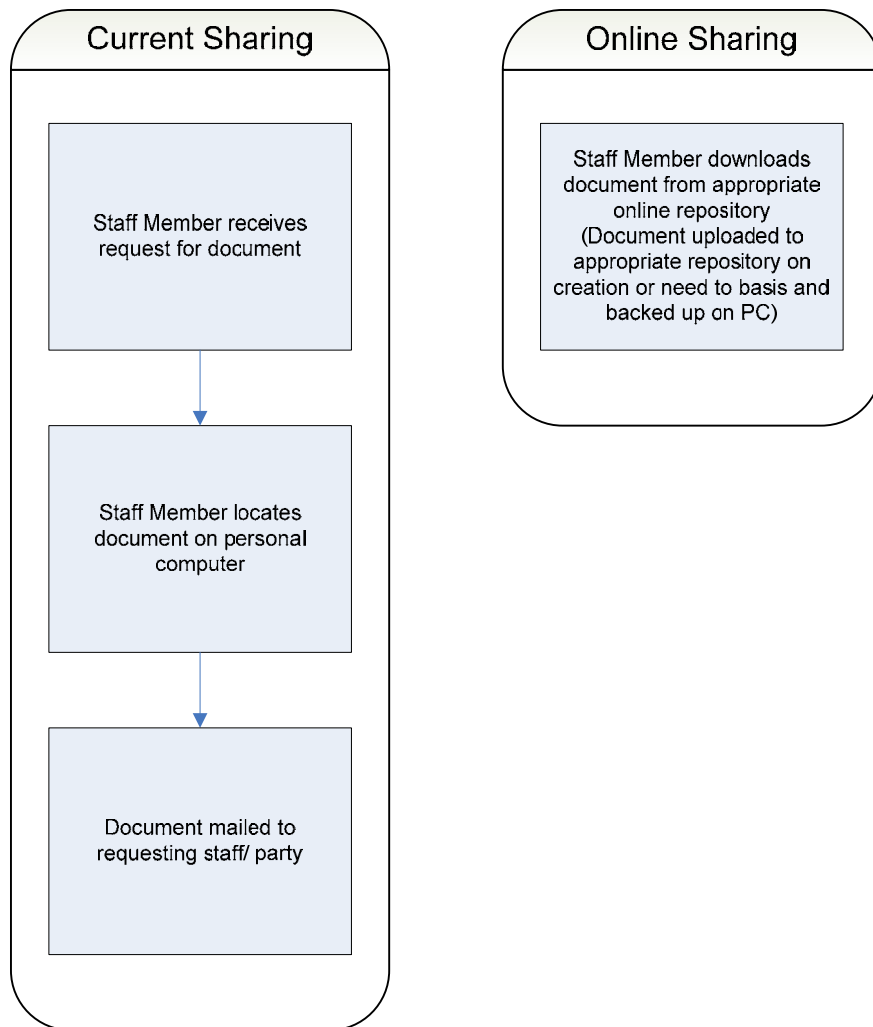
The objective of this task was to provide a virtual presence for Family Tyes (FT) in place of a physical centralized repository. Since this capability has been implemented, over 20 documents have been uploaded on to the website. These documents are frequently used, and are required for the training and other programs at FT. The download count of the documents is 3.7 on average.

State before Consulting

Prior to the online sharing of documents, the process of acquiring such documents was informal and email based, or using physical media. This had a turn around time anywhere from 10 minutes to over a day. At present, depending on the size of the document, document sharing takes less than 5.

Capacity Evidence

By providing an online repository, document sharing, a vital need of FT, is facilitated in an economical and sustainable manner. Trainees on the go, staff and board members use the documents to market and manage FT. By making them more easily accessible, FT can reach a broader set of their target audience and improve their management processes.



Process Improvement in Document Sharing

Sustainability

The outcome is sustainable, with low risk. The staff member and site users have understood how to upload and download documents, as well as configuring user roles. These are the basic steps needed to sustain the solution. The risk lies in the failure of the CMS system which houses the repository as a whole. This is mitigated by having on call technical assistance by their previous technical consultant, Stan Barker.

Outcomes not Achieved

The FT staff has some very large documents (visually rich presentations over 50 MB). These cannot be uploaded using the basic online interface as the connection times out. The documents must be transferred to the site server via FTP and then added to the repositories as usual, only locally. Only a few staff members are comfortable with this process and they must train the rest of the staff in time.

New Vision for Technology

With the success of the online repository, it has been possible to raise interest in the host of other modules provided by the CMS system. The FT staff is comfortable with that module and has gained confidence in the system. They look to use the other modules such as event scheduling and forums to improve their business processes. This is in keeping with the technology vision of FT, to leverage technology to aid the organization in achieving its mission statement.

Event Scheduling

Outcome

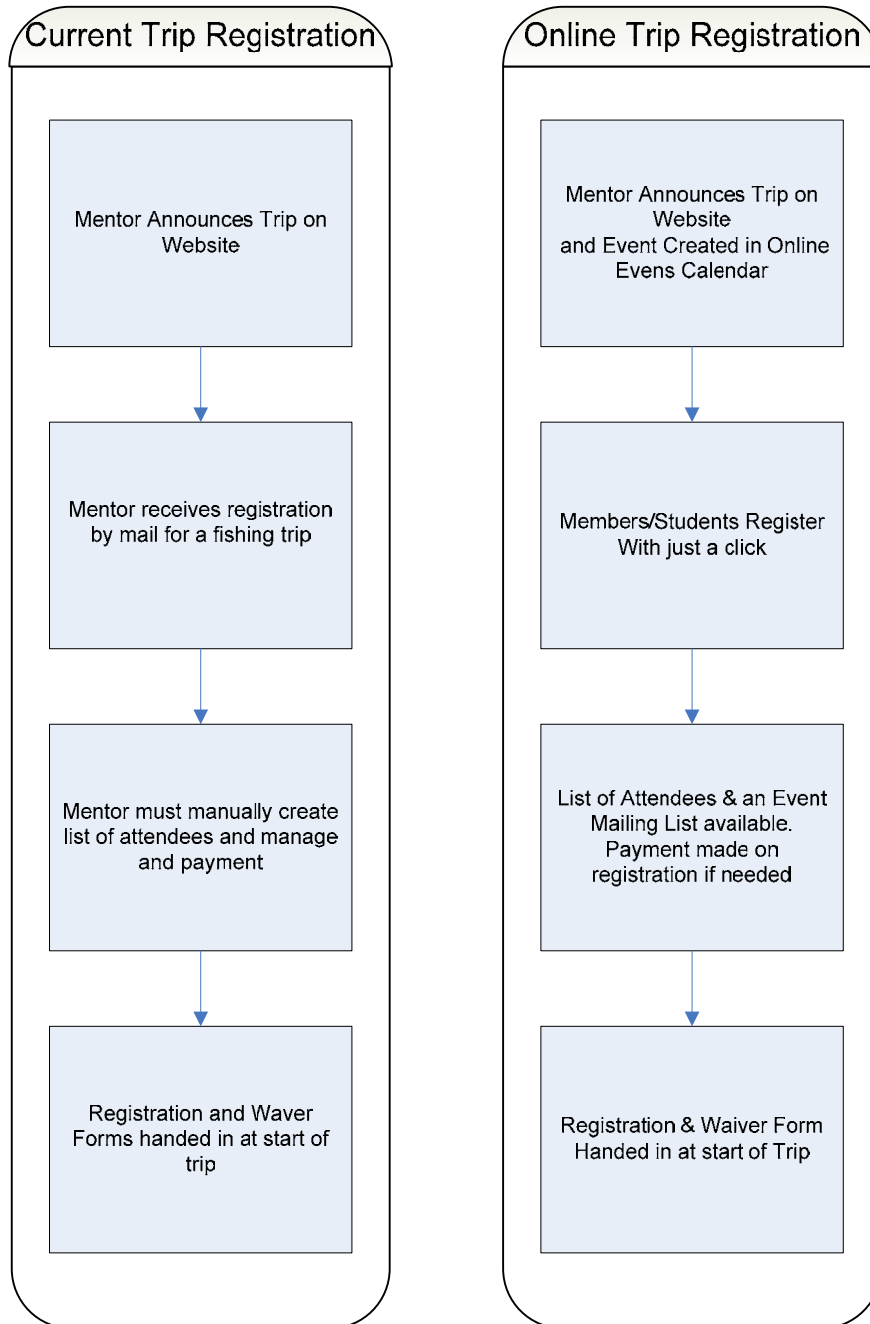
The objective of this task was to provide a scheduling capability and shared calendars for the various events conducted by FT.

State before Consulting

Prior to this, the main scheduling and coordinating effort was email based. All registrations were sent by mail. A mailing list for the event was created and all further communication was through this list. List creation was manual, and additional registration meant adding to the mailing list.

Capacity Evidence

The events module allows creation of events on a shared calendar. Events can be marked as registration events. Users can register via a click. All registration is automatic, with a mailing list being created for each event. Mails can be sent along with attachments with just a few clicks. A picture can also be associated with each event, helping distinguish it.



Online Trip Registration

Sustainability

The outcome is sustainable, with low risk. The events module is quite robust and training sessions have introduced FT staff to the working of the module. Risk is additionally mitigated by having on call technical assistance by their previous technical consultant, Stan Barker.

Outcomes not Achieved

A PayPal account has not yet been integrated with the site. With a PayPal account, the site can accept payments for registration, allowing FT to collect payments on registration.

New Vision for Technology

FT envisions online registration for all of their events via the CMS system, with online payments. This would simplify the events registration process considerably. Checking for event qualification can also be done this way which is sometime a factor when events involve some degree of expertise in fishing.

Dynamic Site Updates

Outcome

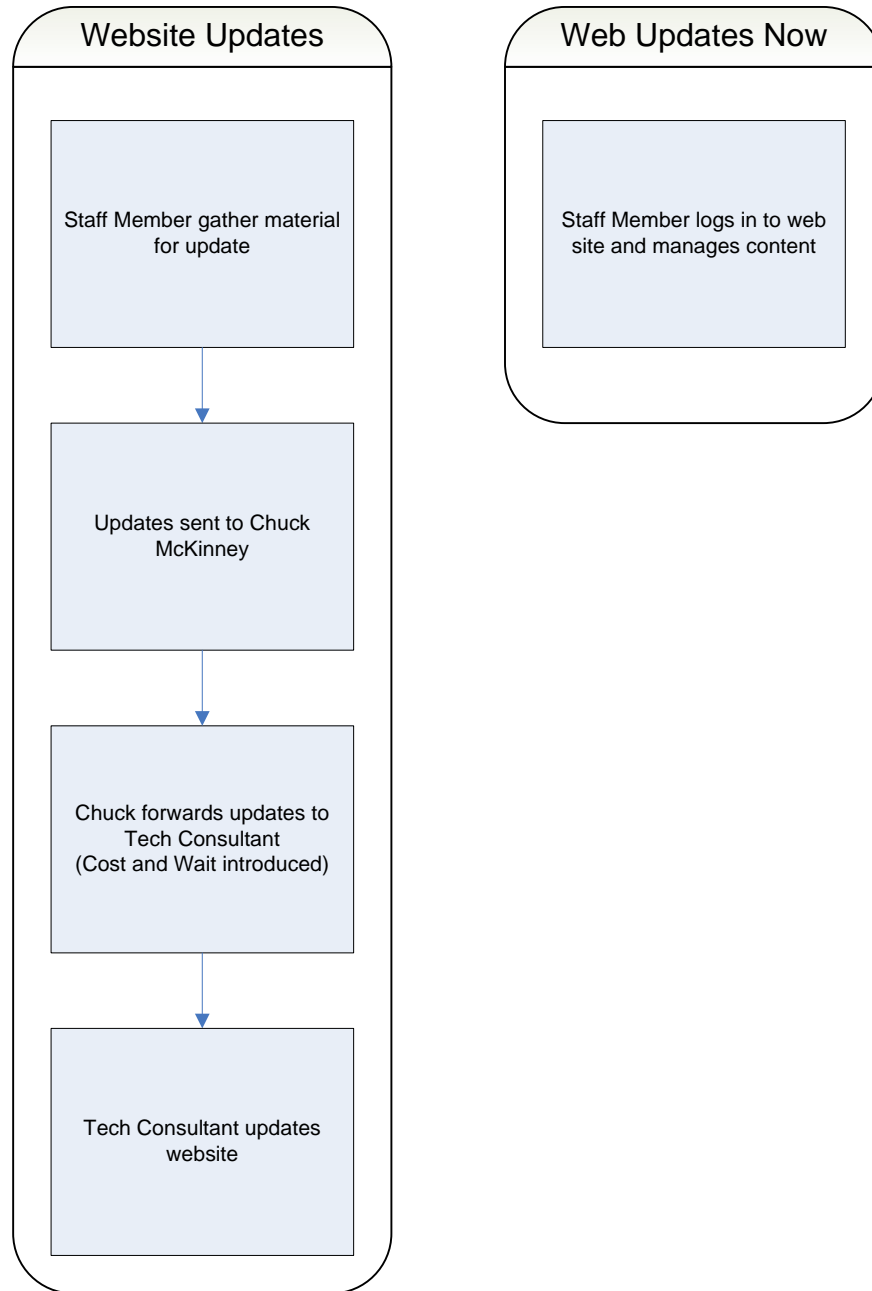
Dynamic updates are possible with the CMS, a capacity addition which reduces cost as the updates are made by the site users themselves at no extra costs.

State before Consulting

Prior to the CMS site updating was an involved process. All site updates were directed to Chuck Mckinney, who in turn forwarded them to Stan Barker, the technical consultant, who updated the site. Stan was paid at an hourly rate.

Capacity Evidence

Site updates in DotNetNuke can be made dynamically by double clicking the textual area and editing it on the web interface. During the CMS training session, FT staff engaged in site updates and updated the information on the pages as well as the modules. There were over 15 modules added.



Dynamic Web Updates

Sustainability

The outcome is sustainable, with low risk. Editing can be undone via re-editing in real time to correct any mistakes that may have occurred. However, deletion is permanent and once deleted modules and text cannot be retrieved. Risk is additionally mitigated by having on call technical assistance by their previous technical consultant, Stan Barker.

Outcomes not Achieved

While website updates were explained and understood clearly in the FT CMS training, website upgrades has not been discussed in detail yet. While this is can be handled by Stan Barker, it would be useful if FT staff knew how to do it as well.

New Vision for Technology

Dynamic updates allow users greater freedom in expressing themselves. Spontaneous inspirations can be reflected on the website in minutes and by many users simultaneously, at no additional cost. FT members would be welcome to express their views on the website and through blog modules that would be readily accessible to them after registration.

Newsletters

Outcome

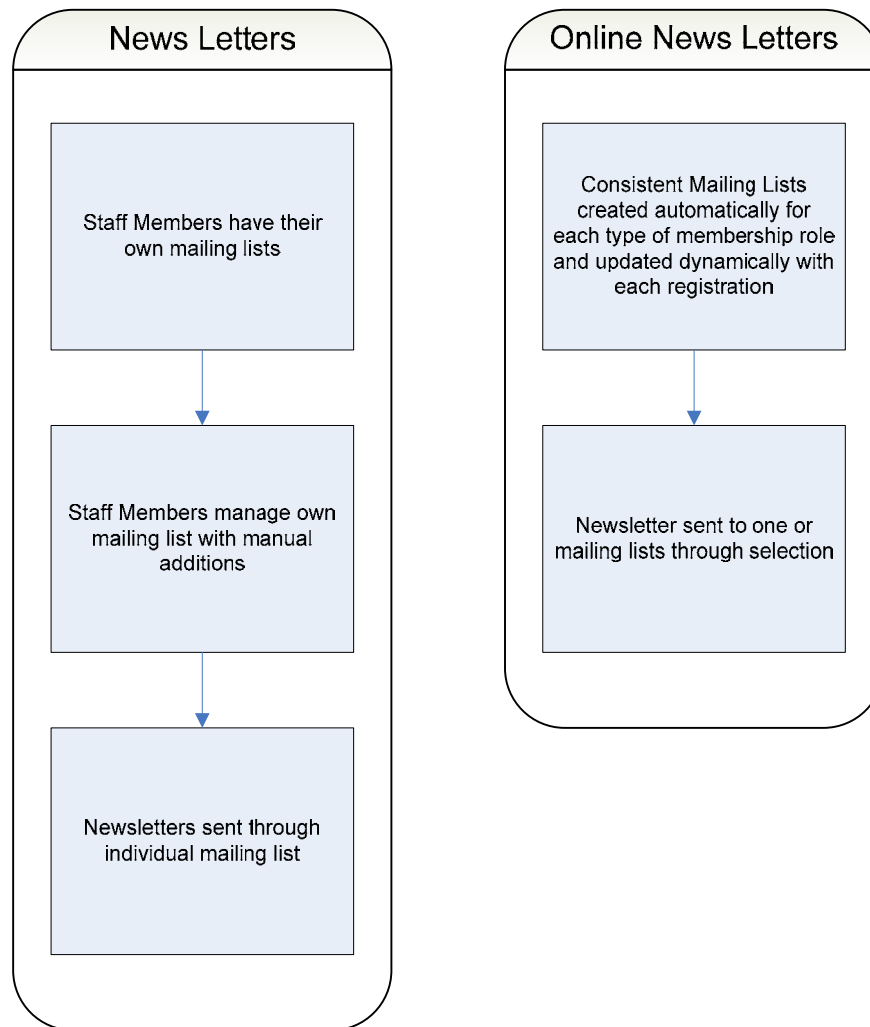
DotNetNuke allows for creation and sending of newsletters based on user roles, such as Board members, Staff, Schools etc. This eases the process of sending and updating lists of based on membership roles and roles within FT.

State before Consulting

FT staff members maintain their own lists for newsletter. These lists are added to manually when a new member or contact is established. These lists overlap across FT staff and must be sorted to or grouped based on the role and type of the contact. Newsletters are created and sent out after careful selection of the recipients through combing omitting and partial selection of the various mailing lists.

Capacity Evidence

A number of user roles have been created on the FT CMS, such as Board, Staff, Student and School. Every registered user has one or more roles. Newsletters can now be sent to each role member by just checking one or more role types. Every user assigned that role is included by the CMS as a recipient.



Newsletters, before and after...

Sustainability

The outcome is sustainable, with low risk. The user roles must be kept updated as this determines the eligibility to receive the Newsletter for that role, as well as number of other viewing permissions. The more the registered users for the site, the easier and more successful the FT newsletter will be. Risk is additionally mitigated by having on call technical assistance by their previous technical consultant, Stan Barker.

Outcomes not Achieved

At this point, there are very few FT members that are registered on the web site. A lot of the success of the various CMS capabilities is dependant on the number of registered users. The newsletter is one of the examples of this. The greatest benefit of the CMS system will be when the number of users has grown substantially.

New Vision for Technology

FT envisions that updates, news feeds and other notifications be available through role based notifications. Newsletters and membership details such as number and history should be viewable and easily measurable. This will in turn help FT measure their success.

Recommendations

Establish Virtual Presence through Continuous Online Capacity Growth

Goal

Incorporate Future Projects with Content Management System

Family Tyes shall be working to develop a measurement system to measure certain parameters that describe the effectiveness of Family Tyes in executing its mission statement. This system could be incorporated directly into the Content Management System, thereby leveraging its ease of development and rapid deployment capabilities. The move would combine enhance the visibility of the project as well, and using the same web site would be familiar to several FT members. Also, FT would gain valuable experience in deploying an online project that will be beneficial down the line.

Strategies

FT shall be working in collaboration with the Information Systems department at Carnegie Mellon University. The development of the measurement system could be independent and implemented only for local consumption within FT or made accessible online. It is the recommendation of the consultant that the system be available to the public with the exception of information that is sensitive with respect to FT. Finally, the system should be incorporated with the DotNetNuke CMS system, so that a separate interface need not be built and the prototypes could be deployed rapidly, reducing the overall project timeline.

Outcomes

With the incorporation of future projects into the CMS system, FT can establish a one stop shop for all business interactions, from performance measurement to document access. This shall support the FT mission through various forms of process improvement and measurement.

Resources

Internal: The technological skill to incorporate different systems into the Content Management System is currently not available with Family Tyes.

External: The integration would be done via their university collaboration initiative. Given the ease of development in most CMS's this should be a sustainable and relatively small project.

The technical requirements for such incorporation are available on the internet. It requires the .Net platform. There are books available such as DotNetNuke professional Edition 4.0. Students could use this as a reference book for custom module development.

Budget: The project should be at no cost to FT since the student consulting would be free of charge. The storage capacity, website as well as the CMS system are already available with Family Tyes.

Provide On-Demand Video Capability on the Family Tyes Website

Goal

Use YouTube to Host Videos on Family Tyes Business Site

FT has a number of videos of fishing trips, class sessions and various other events that would be interesting viewing to a number of viewers. It would be beneficial if these videos could be viewed directly of the FT website. Demonstrations of lessons and trip reviews could be hosted to increase the site viewership and distance education.

Strategies

YouTube allows videos to be embedded on external websites. Family Tyes can upload videos of their trips and trainings on to YouTube or other streaming video websites such as Veoh, DailyMotion, Guba, MetaCafe etc. Each video should be preceded by a custom message from FamilyTyes and the address of the FamilyTyes website.

There are 3 advantages to this. Firstly, this allows Family Tyes to provide on demand video streaming of their videos from their website. Developing this independently would be an expensive task. Second, videos are usually large files and by hosting the content on YouTube, Family Tyes saves space on its hosting web server.

Finally, because the video is hosted on YouTube, it is likely that there will be higher viewership through Youtube than the FT website. Out of the number of viewers of the video, about 10% will go to the FT website out of curiosity. This provides indirect advertising that would increase the visibility of Family Tyes.

Outcomes

Increase site hits, increased visibility of Family Tyes. Indirect advertising benefits. Members would be able to view instructional and trip videos easily.

Resources

Internal: To upload videos on YouTube, an account must be created. The account would be common for all of Family Tyes. Registration can be done at www.YouTube.com. Once an account has been created, videos can be uploaded by going to “My Account” and clicking the “Upload New Video” button. Beyond this, most of the default requirements are self explanatory.

Once the video is uploaded, a link is provided for embedding the video on to an external website. This link should be copied and pasted in to a “Text/HTML” module in the Family Tyes DotNetNuke CMS.

External: There are a number websites that instruct on how to upload videos to Youtube. <http://www.google.com/support/youtube/> is one such site that explains the required steps clearly.

Budget: There is no budget associated with this project. Uploading videos on to YouTube and embedding them in to other sites is free of cost.

Keep Technologically Up to Date with Student Interaction

Goal

Engage Students Interaction with FT through Internships in Maintaining and Updating Website

While using the CMS is very easy, Family Tyes staff may not have the time to upload documents and organize modules. There may be situations where FT staff may not have the time to upload videos onto the web site via Youtube or move a document repository online. In such a case a student interning or working part time for FT would be the ideal support. Also, keeping up to date with the latest CMS module releases as well as other technologies may be best accomplished by a student working with FT and keeping them abreast of the latest news. As FT is committed to the student learning process and involves them in the entirety of FT operations, this would be a valuable experience for the student as well. The win-win situation would be highly beneficial to both parties.

Strategies

A student could be hired to work part time to maintain and upgrade the CMS system. The student could be at school or college and not need any prior qualification, though a background in computers would be welcome. Any knowledge of .Net and C# would make him an ideal candidate. The work load would be around 2 hours a week. **Outcomes**

The workload on FT staff would be reduced. Knowledge sharing, retention and training for new FT staff could be the responsibility of the student intern. Knowledge of relevant technologies will be up to date. Finally, the student shall benefit through the learning process and this shall reflect on his resume.

Resources

Internal: If any of the FT staff know of students looking for a part time job or an internship, they would be qualified for the position.

External: Students can be hired easily on campus. Flyers would be the best way to recruit a student. The job would continue beyond the year if the student performed well. The prospect is beneficial for students as the pay is commensurate to the effort put in and they can work from home. At the same time, the expense is something that can be accommodated into the Family Tyes budget.

Budget: The pay should range from \$10 to \$15 an hours, which is the norm for such a role.

Improve Communications Infrastructure

Goal I

Improve Communications at reduced costs through free Instant Messaging Software

Instant messaging provides a cost free method of instant communication. Given Family Tyes' distributed nature, an instant messaging system such as Yahoo Messenger or MSN Messenger would be well suited for this. There would significant cost reduction and savings on phone calls. A messaging service also allows for voice conferencing as well as document and photo sharing. Organization of contacts is easily done through tags.

There are several scenarios where an instant messaging service would be particularly useful to FT. On occasions when meeting must be cancelled due to bad weather or attendees not being able to

make it, using the free conferencing capabilities of messaging service would be very useful. In addition, file transfer could be done within the same window, thereby allowing both voice and data communication. This capability can even extend to video conferencing with up to 4 people.

Another situation where instant messaging is very appropriate in the case of instant communication, when perhaps a student would need to be in touch with an FT member just before a fishing trip.

Strategies

Instant Messengers can be downloaded and installed directly from the internet. To add new contacts, only an email address on that platform is needed. Some popular messengers are Yahoo! Messenger, MSN Messenger, and Google's Gtalk. If a part of Family Tyes is already on some messaging service, the same could be chosen.

If staff or students are disposed or not available, they can reconnect later or just set their mode to offline or not available.

Outcomes

There should be a significant increase in the frequency of communication when FT staff and members establish an instant messaging network. Confirmations for various events, photo sharing and short message exchange are expected results.

Resources

Internal: If any FT staff member is currently using an instant messaging service they will be in a position to lead the initiative through out FT. Installation is the same for every computer since all of FT runs windows.

External: As an example, if Yahoo! Messenger is selected, the tool could be downloaded from <http://messenger.yahoo.com/> by clicking on the "Get Started" button. The system automatically downloads and installs. Click through the screens appropriately, most of the default options are fine. The tool starts and you're ready to go. Contacts are added by clicking the Add Contact button and entering the email address of the contact in the text box.

Budget: There is not budget associated with such an undertaking, since all messaging services are free, and operate over a standard internet connection

Goal II

Use Google Maps for Geographic Communication of Family Tyes Activities

Family Tyes has a number of activities at various locations. These could be represented in Google Maps.

Strategies

Google Maps allows websites to use their API to map locations based on addresses. The APIs, once set up, accept the address of a location as input. The address can be provided in simple text, just like in a mail and the system is smart enough to interpret the correct meaning.

Outcomes

This would allow users to just click on the location to get the address, making address communication trip times and live traffic data available.

Resources

Internal: There is a DotNetNuke Google Maps module that is in beta testing. This could be implemented on final release. The module can be downloaded from the DotNetNuke Community Forums, where a link has been provided. Uploading the module is via the modules definition under the host tab on the CMS. “Install New Module” must be click and the module uploaded from the “Browse” button. It can then be used as any other standard module.

External: The APIs would need to be implemented by some one familiar with the technology. Once this is done, a module could be developed on the DotNetNuke that accepts these addresses and stores them in the back end database and maps them when the page is loaded. This would not be the best option however as a DotNetNuke module would be far more robust and easier to use.

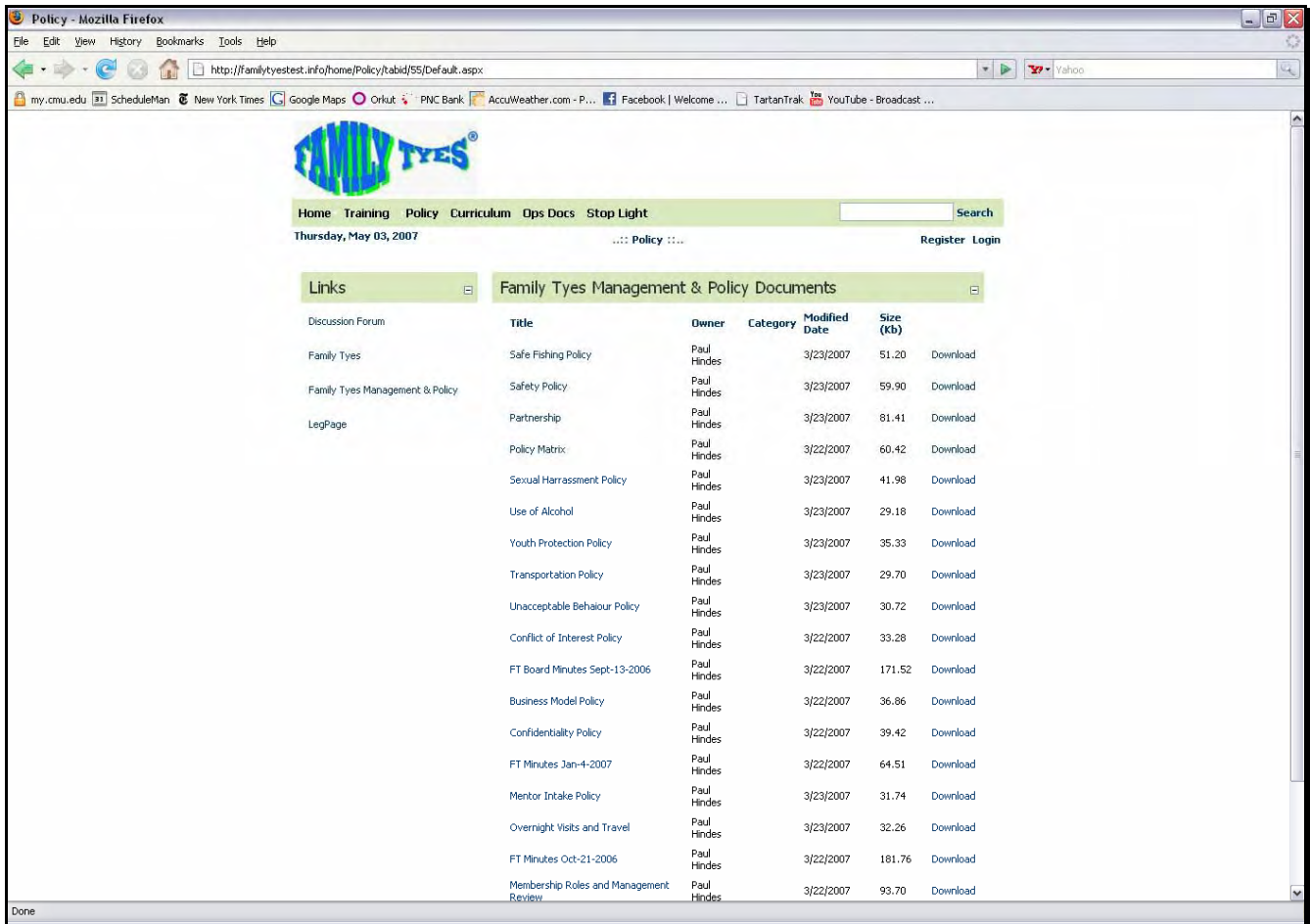
Budget: There is no budget associated with this project, unless an external consultant is engaged to build a custom module for the Google API. The DNN module available from the DotNetNuke modules repository is free of cost.

About the Consultant

Gautam Vasudev is in his first year in the MISM at Carnegie Mellon University. He shall be interning at Salesforce.com in the summer. Prior to coming to CMU, he completed his undergraduate degree in Computer Science and Engineering under the Vishweshwaraiah Technological University at Bangalore. In his senior year, he interned at Wipro Technologies at Bangalore for three months. He has lived in three cities in India and attended over ten educational institutions in his twenty two years. He is an avid traveler.

Appendix A.

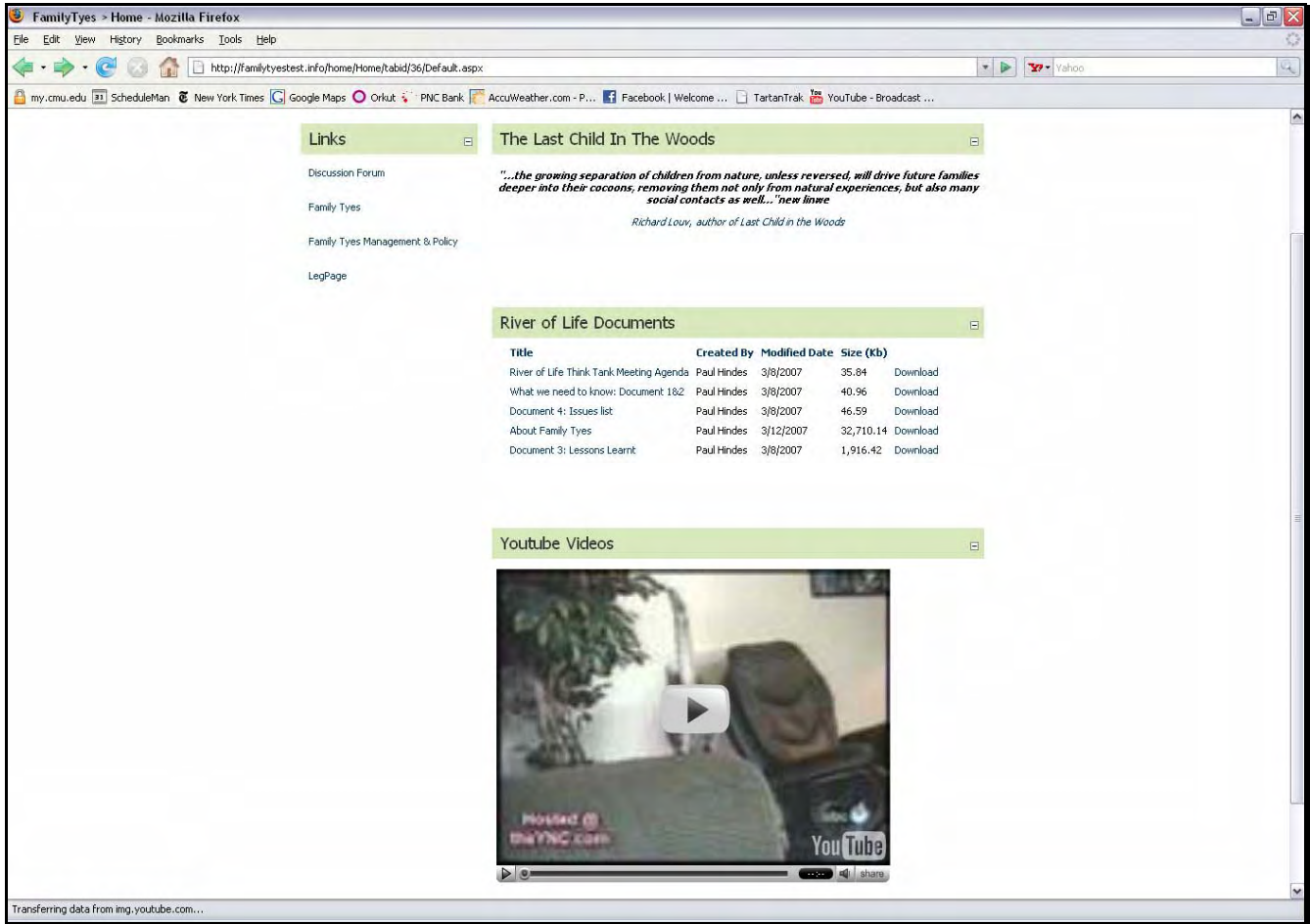
The Family Tyes Website.



The screenshot shows a Mozilla Firefox browser window displaying the Family Tyes website. The page features a navigation menu with links for Home, Training, Policy, Curriculum, Ops Docs, and Stop Light. Below the menu, there is a search bar and a date indicator for Thursday, May 03, 2007. The main content area is titled "Family Tyes Management & Policy Documents" and contains a table of documents. The table has columns for Title, Owner, Category, Modified Date, and Size (kb). Each document entry includes a "Download" link.

Title	Owner	Category	Modified Date	Size (kb)	
Safe Fishing Policy	Paul Hinde		3/23/2007	51.20	Download
Safety Policy	Paul Hinde		3/23/2007	59.90	Download
Partnership	Paul Hinde		3/23/2007	81.41	Download
Policy Matrix	Paul Hinde		3/22/2007	60.42	Download
Sexual Harrassment Policy	Paul Hinde		3/23/2007	41.98	Download
Use of Alcohol	Paul Hinde		3/23/2007	29.18	Download
Youth Protection Policy	Paul Hinde		3/23/2007	35.33	Download
Transportation Policy	Paul Hinde		3/23/2007	29.70	Download
Unacceptable Behaviour Policy	Paul Hinde		3/23/2007	30.72	Download
Conflict of Interest Policy	Paul Hinde		3/22/2007	33.28	Download
FT Board Minutes Sept-13-2006	Paul Hinde		3/22/2007	171.52	Download
Business Model Policy	Paul Hinde		3/22/2007	36.86	Download
Confidentiality Policy	Paul Hinde		3/22/2007	39.42	Download
FT Minutes Jan-4-2007	Paul Hinde		3/22/2007	64.51	Download
Mentor Intake Policy	Paul Hinde		3/23/2007	31.74	Download
Overnight Visits and Travel	Paul Hinde		3/23/2007	32.26	Download
FT Minutes Oct-21-2006	Paul Hinde		3/22/2007	181.76	Download
Membership Roles and Management Review	Paul Hinde		3/22/2007	93.70	Download

The Policy Documents Repository on the Family Tyes website



On Demand Video via Youtube on the Family Tyes website

Past Community Partners

4 Kids Early Learning Centers
Addison Behavioral Care, Inc.
Alafia Cultural Services
Alcoa Collaborative
Allegheny County Housing Authority
Allegheny General Hospital Pastoral Staff
American Association of University Women
Animal Friends, Inc.
Animal Rescue League
ASSET, Inc.
ASTEP-Grace Memorial Presbyterian Church
Auberle
Bedford Hope Center
Bedford Initiatives
Bethany House Ministry
Bethlehem Haven
Bishop Boyle Center
Bloomfield-Garfield Corporation
Borough of Crafton
Boys & Girls Club of Duquesne-West Mifflin
Boys & Girls of Wilkensburg
Braddock Carnegie Library & Community Center
Braddock Redux
Brashear Association, Inc.
Breachmenders
BTC Center
Calliope: The Folk Music Society
Career and Workforce Development Center East
Carnegie Library of Homestead
Carnegie Library of Pittsburgh
Carnegie Science Center
Center Avenue YMCA
Center for Creative Play
Center for Hearing and Deaf Services, Inc.
Center of Life
Central Academy
Central New Development Corporation
Child Watch of Pittsburgh
Children Youth Ministry
Children's Museum
Christian Life Skills
Citizens to Abolish Domestic Apartheid
Community Day School
Community House
Community Human Services Corporation
Community Technical Assistance Center
Competitive Employment Opportunities
Conflict Resolution Center International
Consumer Action Response Team
CONTACT Pittsburgh
Creative Nonfiction Foundation
Dance Alloy
East End Cooperative Ministries
East End Neighborhood Employment Center
East End Neighborhood Forum
East Liberty Development
East Liberty Presbyterian Church
East Side Community Collaborative
Eastminster Child Care Center
Eastside Neighborhood Employment Center
Education Center
Every Child, Inc.
Fair Housing Partnership
Faison Development & Opportunities Center
FAME
Family Services of Western PA
Family Tyes
First Charities/First United Methodist Church
Friendship Development Association
Garfield Jubilee Association, Inc.
Gateway to the Arts
Girl Scouts - Trillium Council
Glen Hazel Family Reading Center
Greater Pittsburgh Community Food Bank
Greater Pittsburgh Literacy Council
Greenfield Senior Center
Guide Runners
Gwen's Girls
Hazelwood Senior Center
Hazelwood YMCA
Heritage Health Foundation
Hill House Association
Hill/Oakland Workforce Collaborative
Himalayan Institute of Pittsburgh
Hope Academy of Music and the Arts
Hosanna House
Housing Alliance of Pennsylvania
HUB Downtown Street Outreach Center
Hunger Services Network
Interfaith Volunteer Caregivers
Jane Holmes Residence
Jewish Family & Children's Service
Jewish Residential Services
Joy-Full-Gospel Fellowship After School Program
Just Harvest
KidsVoice
Kingsley Association
Lawrenceville Development Corporation
League of Young Voters
Light of Life Family Assistance Program
Madison Elementary School
Manchester Academic Charter School
McKees Rocks Terrace
McKeesport Collaborative
McKelvy Elementary School
Mental Health Association of Allegheny County
Message Carriers
Methodist Union of Social Agencies
Miller Elementary School, Principal's Office
Mon Valley Initiative
Mon Valley Providers Council
Mon Valley Resources Unlimited
Mon Valley Unemployment Committee
Mon Yough Community Services
Mount Ararat Community Activities Center
NAACP National Voter Fund
National Alliance of the Mentally Ill
National Association of Minority Contractors /
Black Contractors Association
Negro Educational Emergency Drive
New Beginnings Learning Center
New Penley Place

Past Community Partners (continued)

Northside Coalition for Fair Housing
Northside Institutional Children Youth Ministry
Northside Leadership Conference
OASIS Senior Center
Opera Theater of Pittsburgh
Operation Better Block
Orr Compassionate Care Center
Outreach Teen & Family Services
Parental Stress Center
Pennsylvania Biodiversity Partnership
Pennsylvania Low Income Housing Coalition
Peoples Oakland
Phase 4 Learning Centers, Inc.
Pittsburgh Action Against Rape
Pittsburgh Citizens' Police Review Board
Pittsburgh Foundation
Pittsburgh Health Corps
Pittsburgh Interfaith Impact Network
Pittsburgh Mediation Center
Pittsburgh Social Venture Partners
Pittsburgh Toy Lending Library
Pittsburgh Vision Services
Pittsburgh Voyager
Pittsburgh Youth Symphony Orchestra
POISE Foundation
Program for Health Care to Underserved
Populations
Project Educate
Providence Family Support Center
Radio Information Service
Reading Is Fundamental Pittsburgh
Regional Coalition of Community Builders
River Valley School
Rodef Shalom
Rodman Street Missionary Baptist Church
Ronald McDonald House Charities of Pittsburgh
Rosedale Block Cluster
Sacred Heart Elementary School
Rx Council of Western PA
Salvation Army Family Crisis Center
Sarah Heinz House
Schenley Heights Community Development
Center
Second East Hills Social Services Center
Sharry Everett Scholarship Fund
Sixth Mount Zion Baptist Church
Southwest Pennsylvania Area Health
St. James School
St. Stephen Elementary School
Sustainable Pittsburgh
Thomas Merton Center
Three Rivers Center for Independent Living
Three Rivers Youth
TLC-USA
Turtle Creek Valley Council of Governments
Tzu Chi Wen Chinese School
Union Project
United Cerebral Palsy
Univ. of Pittsburgh - Division of Applied Research
and Evaluation
Urban League of Pittsburgh
Urban Youth Action
Ursuline Services
Vintage Senior Center
Weed & Seed Program, Mayor's Office
Wesley Center
West Pittsburgh Partnership
Wireless Neighborhoods
Women's Enterprise Center
Working Order
YMCA McKeesport
YMCA Senior AIDE Center
Youth Fair Chance
YouthBuild
YWCA Bridge Housing
YWCA of McKeesport

Community Partner Information FAQ

(continued from back cover)

7. What does it cost to be a Community Partner?

The cost for participating in this experience is your time and your commitment to follow through as agreed. As leaders of community organizations, we know your time is of premium value. Those who have made this investment of time have reaped returns many times over.

8. What does the Community Partner have to offer Carnegie Mellon students?

- Students learn to structure unstructured problems. Community organizations are complex environments with complex problems. Your organization provides excellent environments in which to practice the art of structuring problems.
- Students come from different cultural backgrounds and most have never been in a nonprofit organization. They are practicing how to communicate across cultural differences and across technical knowledge differences. They need to be able to make mistakes and learn from them. Community partners provide a supportive relationship in which students can take risks and learn about how to communicate, how to relate, and how to maintain professionalism.
- Students get the opportunity to practice process consulting. They are learning that expertise is only as valuable as the ability to help others solve authentic problems. You provide a context in which students can practice these skills.
- We've found that Community Partners are very appreciative for the students' assistance. There is nothing more rewarding than to experience your efforts as valuable and rewarding for others. You provide that experience for students.
- Finally, you offer a glimpse into career opportunities in the nonprofit arena. Students learn to appreciate those who work in the nonprofit sector, and they grow to appreciate the role and function of community organizations. We hope this appreciation not only informs the choices they make in life, but also encourages them to care and give back to the community throughout their professional careers.

9. How do I become a Community Partner

Contact an instructor, Joe Mertz or Scott McElfresh. Send your contact information: name, title, name of organization, address, phone, fax, location of organization and your interest in being a Community Partner. You will have a telephone conversation and possibly an on-site visit. All organizations are considered, though preference is given to organizations providing services to a low-income community or a community at risk for falling into the "digital divide."

**Send email to
instructors@tcinc.org
(email preferred)**

**Or call
Joe Mertz: 412.268.2540
Scott McElfresh: 412.268.4859**

10. Caveats

- We do our best to ensure that students who sign-up for the class are committed to completing the class, however, occasionally, a student ends up withdrawing from the class during the semester. Typically, this happens when a student has underestimated the time they need for this class. We do our best to advise students so this does not happen. When it does happen, there is nothing we can do except to invite the Community Partner to participate in the following semester.
- The semester is short and the student has to do a lot of work in a short amount of time. For this reason, it is critical that you keep your scheduled appointments, do the work you agree to do, and maintain communication with the student. The student will need your feedback on reports quickly, often the next day. When we get to the final consulting reports, we will need fast turnaround time from Community Partners because we also need to get the reports published in time for the Community Technology Forum.
- If there is any chance that you think you will not be able to follow through with the requirements of this partnership, please wait until such time as when you are able to do it. Since the Community Partner is the focus for the student's learning, it is essential that the partnership be sustained for the semester.

Community Partner Information FAQ

1. What is the goal of the partnership in this course?

The goal of this class is to expand the capacity of the Community Partner to use, plan for, and manage technology, administratively and programmatically. The student is learning process consulting, project management, communication, relationship management, problem identification, and analysis.

2. As a Community Partner, what can I expect to happen?

Once you match with a student consultant, you will set a meeting schedule that you and the student will keep for the remainder of the semester. The student comes to your location for 3 hours a week. During this time you and the student work together. This is not an internship in which the student merely works on site. Rather, it is a consulting partnership in which you must work together to achieve your technology goals. The student facilitates a process that moves from assessment, to analysis of problems and opportunities, to defining a scope of work, to developing a work plan, to analyzing outcomes and finally presenting that analysis. As the Community Partner, you are the consulting client. You provide information and discuss that information with the student. But you are more than a client; you are also a learner. In process consulting the client "owns the problem" as well as its solution. The consultant facilitates the client in achieving that solution. The consultant doesn't "do for" the client. Rather, the consultant works with the client.

3. What types of activities are typically included in a scope of work?

Each scope of work is unique and depends solely upon the specific needs and opportunities of the individual Community Partner. Partnerships have focused on a wide range of activities, including: personal information management (how to use Windows, organize files, backup files, use various software packages, use time managers, use Palm Pilots and other personal information management tools, e-mail, etc.), developing a plan for how to train staff and how to incorporate knowledge and skill into job description, designing a local area network, implementing Internet connectivity, designing and developing a web site, determining effective data storage methods, analyzing the needs for an information database, designing and implementing a database, solving technical problems, designing a public community technology access center, determining the specifications for computers, developing disaster recovery plans, and more.

4. Who can be a Community Partner?

This course target individuals playing an administrative or programmatic leadership role within a community organization. Typically Community Partners are Executive Directors, Directors, Assistant/Associate Directors, Coordinators, and Managers. But, we make the selection based on the organization and the role that the individual plays within that organization, regardless of title.

5. Why do you focus on organizational leaders?

For an organization to use information technology effectively, its leaders must have a vision for how it can support the organization's mission, they must be comfortable enough to integrate technology into their personal work practices, and they must know enough to budget, staff, and subcontract appropriately. By partnering one-on-one with a student consultant, the leader has a unique opportunity to build that vision, comfort, and knowledge, no matter where they are starting from.

6. What are the requirements for being a Community Partner?

- Hold a leadership role within your organization.
- Have a computer in your office or one you could or do use in your job.
- Reliably meet with the student consultant 3 hours per week, every week, for about the 13 weeks.
- Come to an on-campus gathering 2 times during the semester. Once at the beginning and once at the end.
- Share information about your organization with the student consultant.
- Read project reports prepared by the student and give the student immediate feedback.
- Complete a brief response form after reading each report and return to the instructor.
- Keep a log of consulting sessions and send to instructors twice during the semester.
- Read the final consulting report. Give feedback to the student immediately.
- Make a brief presentation at the end of the semester (with the student) at the Community Technology Forum. (This is the 2nd on-campus gathering you are required to attend.)

(continued inside back cover)