Online Events & Membership Framework

Online Events and Membership forms for Campus Fundraising

Proposal for
2012 University of California Larry L. Sautter Award
for Innovation in Information Technology
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Events and Membership Framework

**Project Information**

The following information is being submitted for consideration for the 2012 University of California Larry L. Sautter Award for Innovation in Information Technology.

**Project Title**

**Online Events & Membership Framework for Campus Fundraising** – A lightweight framework for creating online events and membership forms, accepting online payments, and managing attendees.

**Submitters’ Name, Title, and Contact Information**

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- **Crystal Harris**, Manager UNAS, ACT, UCSD, crys@ucsd.edu
- **8+ campus areas** involved in defining requirements and business process, Advancement Services, Development Services, Birch Aquarium, Alumni and Constituent Engagement, Campus Development Offices, Athletics, and Student Support.
Summary of Significance of Project

Universities as large, diverse, and innovative as the UCs rely on fundraising efforts to support such programs as graduate fellowships, undergraduate scholarships, athletics, colleges, medical, engineering, arts, and many others.

During the span of a year, UCSD typically holds about 300 fundraising events to benefit specific funds and programs.

Gone are the days of relying solely on postcard mailings, reminders and paper RSVP forms. Research shows that a quick and easy online reservation and payment system results in many more participants (and donors) in a shorter period of time. With this in mind, our online Events and Membership framework was collaboratively designed to quickly produce online event and membership forms that meet our clients’ needs.

The significance of this innovative and collaborative approach to producing online event and membership forms is that hundreds of annual IT development man-hours have been eliminated and consolidated into one central streamlined process. The lightweight event and membership framework allows for a quick, and stable process for creating and launching online forms used for event and membership fundraising. In addition, the improved usability and accessibility increases user satisfaction and potential for repeat donations. From a technical standpoint, the system is based on standards; it is sharable and interoperable across all UCs. Considering both the event and membership usage, we project a cost savings of $7,533 for every event or membership site. Considering the potential of bringing all 300 event and membership sites into the new framework, the cost savings would soar to $1.7M annually.
**Project Description**

The University’s Online Giving system serves as the central campus payment-processing engine for collecting donations. Donations can be made directly via the Online Giving system to predefined funds, or they could be made indirectly via a fundraising event. University fundraising events are varied and diverse, but the ultimate goal is to attract the most number of donors/participants.

Usage statistics show that people tend to RSVP and purchase tickets to events at a higher rate when an online option is offered. The Events and Membership Framework offers easy-to-use and consistent forms for online purchase and payment of event tickets and memberships.

The forms and framework are designed once, taking into account various usage as well as usability tactics -- in other words, they are architected and designed in a way that would result in getting the user/donor to fill out the form most quickly.

**Improved User Experience**

**Reduced Form Elements**

The original process consisted of 6 steps and various repeated forms and would be required to enter. The new process reduces it down to 2 quick information to complete the transaction: 1) select number of tickets and 2) information. See Appendix
Pleasing Campus Branding
The newly-design forms have undergone User Experience design and Usability testing to produce the most efficient and user-pleasing forms. These forms are then used as a template for all subsequent Event and Membership forms. See Appendix B for example screenshot of an event form.

Payment Processing
Authorize.net integration
The back-end Gift and Payment processing remained unchanged, which minimized the development and integration. The project leverages the preexisting merchant account that the UCSD Foundation holds with Authorize.net. Utilizing the APIs offered by merchant services, the project avoids the need for the system and the university network to be PCI compliant, by not storing and transmitting credit card information through the campus infrastructure.

Integrating with existing Gift Processing procedures for e-commerce gifts reduces the overhead of processing physical gifts, such as checks, credit cards and cash, which substantially mitigates risks to the university. By reducing the number of people handling physical payments, the cost of compliance is also significantly reduced.

Secure Administrative Dashboard
The Event and Membership Framework includes an Administrator Dashboard for event and participant management. Each event has its own secure and provisioned administration dashboard which empowers event and membership administrators who can now obtain data directly from the system; it also eliminates the need for technical team database queries, data cleanup, and other changes to be done by the technical staff. The reduction in operational support costs on the technical and business side is discussed below.

Cost Savings
At UC San Diego, we estimate a potential cost savings of almost $1.7M per annum by leveraging the centralized online Events and Membership Framework. We calculate this by identifying the time/effort savings between the original process and this new process.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Original Method</th>
<th>New Method</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event registration site</td>
<td>60 Hrs</td>
<td>50 Hrs</td>
<td>10 Hrs</td>
</tr>
<tr>
<td>Admin Dashboard</td>
<td>20 Hrs</td>
<td>0</td>
<td>20 Hrs</td>
</tr>
<tr>
<td>Manually event reporting</td>
<td>30 Hrs</td>
<td>0</td>
<td>30 Hrs</td>
</tr>
</tbody>
</table>
## Events and Membership Framework

<table>
<thead>
<tr>
<th>Task</th>
<th>Requirement</th>
<th>Actual</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>User support</td>
<td>30 Hrs</td>
<td>0</td>
<td>30 Hrs</td>
</tr>
<tr>
<td>Data cleanup</td>
<td>20 Hrs</td>
<td>0</td>
<td>20 Hrs</td>
</tr>
<tr>
<td>Managing multiple data sources</td>
<td>20 Hrs</td>
<td>0</td>
<td>20 Hrs</td>
</tr>
<tr>
<td>Application debugging and security checking</td>
<td>20 Hrs</td>
<td>0</td>
<td>20 Hrs</td>
</tr>
<tr>
<td>Client satisfaction &amp; added functionality</td>
<td>Mediocre</td>
<td>Exceptional</td>
<td>Priceless!</td>
</tr>
<tr>
<td>Donor satisfaction &amp; return rate</td>
<td>Mediocre</td>
<td>Exceptional</td>
<td>483% increase</td>
</tr>
<tr>
<td>Savings per Event</td>
<td></td>
<td></td>
<td>150 Hrs</td>
</tr>
</tbody>
</table>

On average, we have launched 15 event sites during a given year. For every 15 event sites that are launched, there is a cost savings of 2,250 hours, $86,000, or a little over 1 technical FTE.

It’s not just about cost savings! Based on the last two years of data, the online event sales amount using the new systems has increased by 483% going from approximately $35,600 in event and membership donations to $207,550 for the 15 event sites reviewed.

Prior to the implementation of the Events and Membership Framework, technical teams were tasked with developing custom applications for individual events. Each application hosted static content and captured event registrations. Each of these applications were replicas of each other with tweaked content, and over time, became extremely costly to support. As events repeat each year and new events are added to the calendar, the cost of maintaining the existing portfolio of event applications, while having to deploy new code for new events amounted to approximately 1 FTE. In addition to technical resources, the lack of standardization in the technology also increased the cost to support by...
Gift Processing. We believe that the operational cost shared between the technical and business team, for just the 15 hosted university events launched, equates to just over 1 FTE, or $86,000 / annually. See Appendix C for visual representation of the reduction in development and launch of each event site.

**Membership Framework**

The Membership Framework is an extension of the Events Framework. The project was initially proposed by Triton Athletics as a project to implement a vended solution for the purposes of maintaining online membership. It was quickly determined that the Events Framework could be enhanced with functionality to support the needs of our business units without licensing a vended solution. To ensure maximum return on investment, the Birch Aquarium, the Alumni Office, and various development officers were invited for gathering requirements. Since Jan 2012, over 250 memberships were processed through the Membership Framework for Triton Athletics alone. Several projects, including the Town and Gown, are slated for implementation in 2012. We believe that the operational cost shared between the technical and business team, plus the cost of licensing a vended solution, could equate to several FTEs depending on the cost of the vended solution.

**Technologies Utilized in Project**

The following standard technology stack was used to implement the system:

- **jQuery**: abstractions for low-level interaction, advanced effects, themeable widgets, interactive web applications
- **JSP**: rapidly develop and easily maintain dynamic web pages, platform independent
- **CSS, HTML, JavaScript**: lightweight, standard, and client-side technologies
- **Spring MVC**: enterprise java app framework, clean division between controllers, models, and views, open standard
- **SiteMesh decorator framework**: clean and effective way of separating web content from look and feel
- **MySQL**: database system

**The Timeframe of Implementation**

Together the Online Events and the Online Membership Framework was completed in **7 months** as outlined below:

**Online Events & Payment Framework:**

- **09/2010**: Kickoff, define project, scope, requirements
- **10/2010**: UI and system design
- **11/2010**: front end and admin dashboard development
- **12/2010**: payment processing development
Events and Membership Framework

- **01/2011**: QA, UAT
- **02/2011**: Deployment

**Online Membership Framework:**
- **09/2011**: Kickoff, define project, scope, requirements
- **10/2011**: UI and system design & development
- **11/2011**: QA, UAT, Deployment

**Supporting Documents**
See the following links for supporting details of the various areas addressed within this document:

<table>
<thead>
<tr>
<th>Document</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting Figures &amp; Information</td>
<td>Appendix in this document</td>
</tr>
<tr>
<td>Request Event Registration Form</td>
<td><a href="http://uxt.ucsd.edu/about/services.html">http://uxt.ucsd.edu/about/services.html</a></td>
</tr>
<tr>
<td>Membership Form (Athletics)</td>
<td><a href="https://act.ucsd.edu/triton-athletics-fund/?DB_OEM_ID=5800">https://act.ucsd.edu/triton-athletics-fund/?DB_OEM_ID=5800</a></td>
</tr>
</tbody>
</table>

**Success Factors**
The following measurable success factors were defined, and the results successfully achieved.

<table>
<thead>
<tr>
<th>Success Factor</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased number of online event sites</td>
<td>87.5% increase</td>
</tr>
<tr>
<td>Increased funds raised</td>
<td>483% increase</td>
</tr>
<tr>
<td>Increased up-time/stability/security</td>
<td>100% increase</td>
</tr>
<tr>
<td>Increased customer satisfaction</td>
<td>Positive feedback</td>
</tr>
</tbody>
</table>
**Objective Customer Satisfaction Data**

Below is a sampling of the many positive client responses received following the rollout and usage of the events and membership forms. The names have been omitted and replaced by titles.

"We really appreciated and benefited from the new registration system for the Red Ribbon Dance Project. We found it most helpful to be able to access registration status and information in real time and when needed - for us that was sometimes in late in the evening and on weekends. We were able to anticipate our attendance ahead of time, and also target non-responders to our registration broadcast messages. We were very satisfied and happy with the services and application."

-- Administrative Director, AIDS Research Institute

"The Triton Athletics Fund membership offers the option of "opting out of benefits" and "donor recognition". Having the Opt out option is so beneficial, because it educates and sends a clear message to the donor that they have that option and it serves as a good way to keep track of these requests. Also, we will know if the donor does not want to be recognized. It's immediate, so we have a lot of information about the donor at once, and it's easy to organize and manipulate the data. We can send thank you notes in a timely manner."

-- Directory of Development, Athletics

"For the 5K, the new event registration system greatly improved race day registration questions, as there were few to no glitches that caused confusion for the participants with the online system. All of my questions during registration were answered by your team quickly and efficiently. I greatly appreciate the value of the system as a time saving gain for me."

-- Stewardship & Events Coordinator, Student Affairs Development
Appendix A

Improved User Experience based on reduction of steps in event registration process.

Figure 1. Original Multi-step Forms

Figure 2. Streamlined Form
Appendix B

Online Event Form

Campus-branded user interface on a single-page web form. Only essential information is requested from user/donor which attributes to greater completed registrations.

![Online Event Form](image)

Figure 3. Online Event Form
Events and Membership Framework

Administration Dashboard

The event or membership administration dashboard provides a clean and easy self-service tool for managing registrants/members, running queries, updating data. This powerful tool comes with every event or membership site and puts the power into the hands of the event manager, not the technical person.

Registration List

<table>
<thead>
<tr>
<th>Id</th>
<th>First Name</th>
<th>Last Name</th>
<th>Status</th>
<th>Ticket #</th>
<th>Ticket Total</th>
<th>Team Name</th>
<th>Donation</th>
<th>TOTAL Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>Cristiano</td>
<td>Horta</td>
<td>COMPLETED</td>
<td>1</td>
<td>25.00</td>
<td>Team Crew</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>27</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>1</td>
<td>15.00</td>
<td>No Team Selected</td>
<td>10.00</td>
<td>25.00</td>
</tr>
<tr>
<td>26</td>
<td>Sakman</td>
<td>Chui</td>
<td>PENDING</td>
<td>1</td>
<td>25.00</td>
<td>No Team Selected</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>25</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>1</td>
<td>25.00</td>
<td>Other Team - Team Ellen</td>
<td>50.00</td>
<td>75.00</td>
</tr>
<tr>
<td>24</td>
<td>Joe</td>
<td>Tester</td>
<td>PENDING</td>
<td>2</td>
<td>50.00</td>
<td>No Team Selected</td>
<td>25.00</td>
<td>75.00</td>
</tr>
<tr>
<td>23</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>2</td>
<td>50.00</td>
<td>No Team Selected</td>
<td>0.00</td>
<td>50.00</td>
</tr>
<tr>
<td>22</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>1</td>
<td>15.00</td>
<td>Yathali Lodge</td>
<td>35.00</td>
<td>50.00</td>
</tr>
<tr>
<td>21</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>1</td>
<td>25.00</td>
<td>Team Crew</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>20</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>2</td>
<td>50.00</td>
<td>Team Fitzgerald</td>
<td>50.00</td>
<td>100.00</td>
</tr>
<tr>
<td>19</td>
<td>Sakman</td>
<td>Chui</td>
<td>COMPLETED</td>
<td>3</td>
<td>45.00</td>
<td>No Team Selected</td>
<td>0.00</td>
<td>45.00</td>
</tr>
</tbody>
</table>

Showing 1 to 10 of 28 entries
Appendix C

The request, development, integrating and implementation process for each event site has been reduced drastically, saving 150 hours for each event site.