

planetmagpie

unleashing the power of IT

CASE STUDY

Keeping Strawberries Safe

PlanetMagpie Builds Event
Management Application to Track
Strawberry Grower Safety Training



The California Strawberry Commission is responsible for regulating the State's strawberry growers. The Commission addresses food safety, production and nutrition research, trade relations, public relations, and public policy.



The California Strawberry Commission is responsible for providing food safety training programs to California's strawberry producers. As the number of producers grew, the trainee volume and frequency of training events grew as well. They needed an application that would allow Commission administrators to create and manage events, strawberry producers to register their trainees, and trainees to receive certificates of attendance. They also needed reporting capabilities and, ideally, a CMS that they could extend in the future for a new California Strawberry Commission website.

So they solicited bids for a management platform from California IT agencies. PlanetMagpie IT Consulting won the bid, and set out to create the desired application.

THE CHALLENGE

The biggest challenge was meeting all of the client's requirements with the application. In order to make the management process a breeze (not a hassle), many details needed to be covered; such as:

- › **Creating different types of events.**
- › **Registration of participants and participant coordinators for events.**
- › **Coordinators need to manage groups of participant information, and allow/deny participants access to the application.**
- › **Event information must coordinate between all participants (no overlap on times/locations).**
- › **Tracking individual participants' training progress and certificates awarded.**
- › **Use of role-based permissions, so Participants cannot edit Events, or see the Coordinator, or use management tools.**
- › **Managing and printing certificates of attendance by event.**
- › **Creating custom reports for administrative purposes.**

The tracking platform had to make the Participant Coordinator's life easier, by automating most of the management. It also needed to provide the administrators a simple interface for all Participant and Participant Coordinator features, so even Participants not using the Internet can still be easily tracked.



THE SOLUTION

We decided to create a web-based application using Sitefinity CMS. Sitefinity had the modules and structure to support such a platform, even under heavy use.

The starting guidelines for development were:

1. **To control management of training events**
2. **To provide a central location for Participant Coordinator information and the Participants associated with them**
3. **To review and record Participants' training progress**
4. **To create Participant certificates of attendance**

In order to build the application, we would need to customize existing modules and integrate custom third-party modules.

The Development Process

This project started with a 100+ hour requirements gathering effort. PlanetMagpie had multiple meetings with the Strawberry Commission staff to develop workflow processes, draft form templates, develop user stories and database schema, develop technical and security requirements, etc.

In order to build the platform database and structure, we had to extend the Sitefinity Events module to work with a tiered hierarchal custom CRM module (Participants and Participant Coordinators CRM, from Sitefinity Dynamic Module Builder). We also integrated other Sitefinity Dynamic Module Builder elements and custom Sitefinity Classifications to create an object relational database within the application.

With a database in place, we employed document, image and video library integrations for event-related content. Then custom Tags and Categories for synchronizing these content items with Events, Event Types, Public versus Private, and the language of the documents.

The application's interface was designed to accept future extensions for localized pages and content. It will support an unlimited number of event types (that may or may not need registration through the platform) and reporting on connections to the application.

We created online documentation so the Commission's administrators could manage Participant Coordinators and Participants through every type of change. For example, a change in distribution, or Participants merging.

We even added an online style guide with CSS classes for page elements, so the client could create their own pages in the future.

THE RESULTS

The application is now live at:
<http://education.calstrawberry.com>

It centralizes the training processes and event tracking...making the whole effort much easier for Participant Coordinators to manage.

From this management console, Participants can:

1. Sign up for events
2. Report on their event status
3. Access training materials as provided.

Coordinators, who see an expanded set of options, can create Events, register Participants, track Participants' activity, and issue certificates of completion. All of this is recorded on the backend, so the Commission has up-to-date records of all grower training.

The Process works like this:

1. **Say you're a Coordinator for a grower. You need to train management and personnel, who'll teach Food Safety at a farm, according to State Commission standards.**
2. **You create a Coordinator account and log in. You then schedule event attendance for your Participants.**
3. **Participant account creation is automated when a Coordinator adds Participants under their account. Emails notify Participants and Administration of new accounts.**
4. **The Coordinator registers Participants for a training event.**
5. **At the event, attendance is verified by scanning ID cards. All scanned information is imported as event attendance records by the site's Administrator.**
6. **The Administrator then scores the attendees who complete and pass the test.**
7. **Participants who completed the event can print their certificate of attendance.**
8. **Those who complete a series of events & have met the criteria receive a Food Safety Certificate of Completion.**

This new training platform gives the California Strawberry Commission an efficient system for recording and managing grower safety training. With it they can keep up with the demand for strawberry grower safety training.

Event Title	Location	Start Date	End Date	Actions
Teaching Food Safety	Elks Lodge, Oxnard, California	08/26/2009 8:00 AM	08/26/2009 12:00 PM	Actions
Teaching Food Safety	Elks Lodge, Oxnard, California	09/23/2009 8:00 AM	09/23/2009 11:00 AM	Actions
Teaching Food Safety	Holiday Inn, Santa Ana, California	11/18/2009 8:00 AM	11/18/2009 11:00 AM	Actions
Introduction to Food Safety	Elks Lodge, Oxnard, California	12/08/2009 8:00 AM	12/08/2009 11:00 AM	Actions
Teaching Food Safety	Elks Lodge, Oxnard, California	12/08/2009 1:00 PM	12/08/2009 3:00 PM	Actions
Teaching Food Safety	Elks Lodge, Oxnard, California	02/22/2010 8:00 AM	02/22/2010 11:00 AM	Actions
Food Safety for the Harvest of Processing Strawberries	Elks Lodge, Oxnard, California	06/03/2010 1:00 PM	06/03/2010 4:00 PM	Actions
Introduction to Food Safety	Holiday Inn, Santa Ana, California	11/17/2010 8:00 AM	11/17/2010 12:00 PM	Actions
Teaching Food Safety	Holiday Inn, Santa Ana, California	11/18/2010 8:00 AM	11/18/2010 11:00 AM	Actions
Introduction to Food Safety	Elks Lodge, Oxnard, California	12/01/2010 8:00 AM	12/01/2010 12:00 PM	Actions
Teaching Food Safety	Elks Lodge, Oxnard, California	12/02/2010 8:00 AM	12/02/2010 11:00 AM	Actions
Food Safety for the Harvest of Processing Strawberries	Holiday Inn, Santa Ana, California	04/15/2011 5:00 PM	04/15/2011 7:00 PM	Actions
Food Safety for the Harvest of Processing Strawberries	Elks Lodge, Oxnard, California	05/05/2011 8:00 AM	05/05/2011 11:00 AM	Actions
Introduction to Food Safety	Holiday Inn, Santa Ana, California	11/16/2011 8:00 AM	11/16/2011 12:00 PM	Actions
Teaching Food Safety	Holiday Inn, Santa Ana, California	11/16/2011 1:00 PM	11/16/2011 4:00 PM	Actions
Teaching Food Safety on Your Farm	Holiday Inn, Santa Ana, California	11/17/2011 8:00 AM	11/17/2011 11:00 AM	Actions
Introduction to Food Safety	Elks Lodge, Oxnard, California	12/06/2011 8:00 AM	12/06/2011 11:00 AM	Actions



Upcoming Events Program Details Resources Contact Us Training Participant Participant Coord

Edit Event

CSC Administration / Event Management / List Events / Edit Event

Event Details

Title *

Teaching Food Safety

Summary *

This workshop prepares participants to train harvest workers on recommended food safety practices using the Calif Harvest Workers flip chart. We recommend that participants attend this workshop only after they have attended the

Description

This workshop prepares participants to train harvest workers on recommended food safety practices using the Calif Strawberry Commission's Food Safety Practices for Harvest Workers flip chart. We recommend that participants attend this workshop only after they have attended the Introduction to Food Safety workshop.

© 2013 PlanetMagpie

PLANETMAGPIE

Owner & President: Robert Douglas

Fremont Tech Center | 2762 Bayview Drive | Fremont | CA | 94538

T 1 877 magpie1 [624 7431] P 408 341 8770 F 510 498 5929

info@planetmagpie.com

INDUSTRY:

Agriculture

CHALLENGE:

Implementing all the desired options for managing events, participant coordinators and their participants' involvement in events. Create a seamless integration between the Sitefinity Events module, custom CMS classifications and a custom CRM module unique to the Strawberry Commission's needs.

WHY SITEFINITY:

We chose Sitefinity CMS so we could use its Events module, Classifications and the Dynamic Module Builder. Sitefinity saved the client on development time, and it provided a back-end framework we could build into their existing website.

TECHNOLOGY HIGHLIGHTS:

- › Sitefinity CMS 5.1
- › Windows Server 2012
- › Database: SQL Server 2012
- › Number of Developers: 2
- › Development Time: 3 months

DEPLOYMENT HIGHLIGHTS:

- › Tying custom modules together.
- › Architecting relational database schema.
- › Customizing DNS routings.
- › Hosting for maximum site performance.

RESULTS:

Sitefinity provided a development framework that allowed for easy extension and management of custom features. Sitefinity gave the project all the advantages of CMS-secured pages with role-based access, time-saving data modules, and many other features to help simplify the development efforts (e.g., custom classifications). Future extensions will be easy to integrate (such as localized content) due to Sitefinity's out-of-box module capabilities.