

Using a shared web content management system to reduce cost, improve security, help developers, and improve the quality of University websites.

# Founding Members

Shawn DeArmond, Web Architect UC Davis

John Kealy, Web Services Manager UCSF

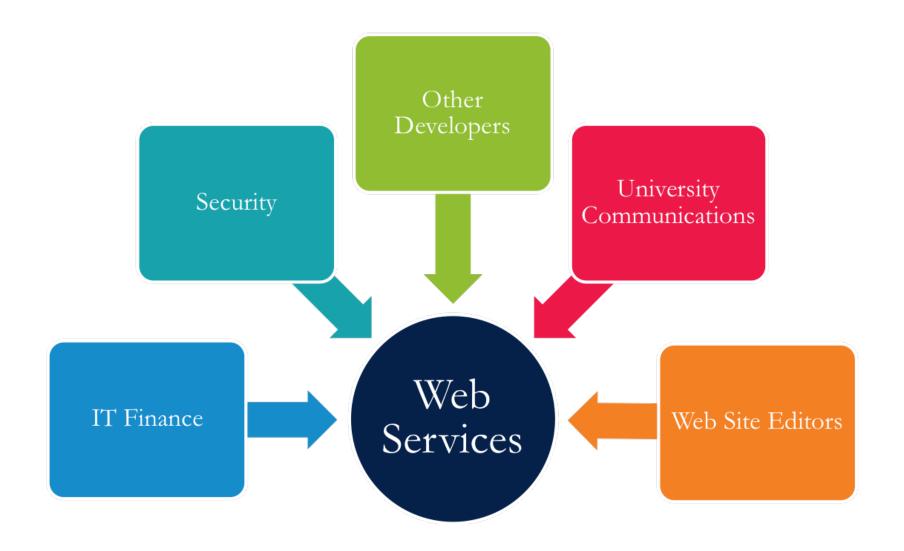
Quyen Vaillant, Web Services Manager UCLA

UNIVERSITY OF CALIFORNIA

# **Project Goals**

- Reduce Costs
- Security
- Development Best Practices
- Facilitate Branding
- Meet Web Publishing Needs

# **Demands on Web Services**



# IT Finance

How much are we spending to run all of these websites?

# Goals

- Reduce costs to University
- Predicable costs
- Product meets customer needs

- Leverage scale to reduce cost
- Long term contracts
- Partnering with other groups



# IT Security

How do I manage the risk of thousands of websites?

### Goals

- Keep private data secure
- Prevent website compromises
- Ensuring availability

- Keeping applications and servers secured and patched
- Simplifying and standardizing website management
- Web Application Firewall



# Developers

I want to quickly deliver web sites and applications.

### Goals

- Deliver websites quickly
- Spend time on new work
- Learn new technologies quickly

- Continuous integration (CI)
- Pattern and code library
- Community of developers



# **University Communications**

How do I create a coherent message with thousands of websites?

# Goals

- Tell the University's story
- Improve quality of information
- Create a sense of community

- Brand guidelines
- Content syndication
- Community organizing



### Website Editor

I want to have a good looking and easy to edit website.

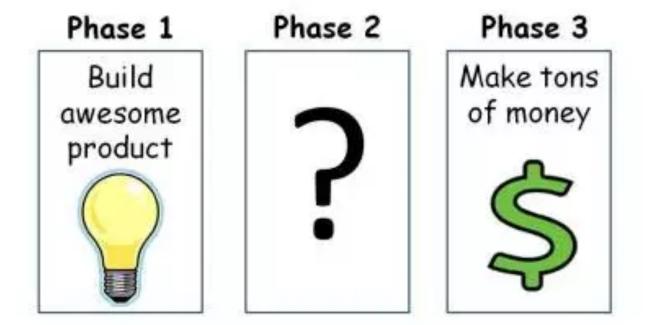
### Goals

- Up to date website
- Easy to add content, without having to code
- Clearly speak to my audience

- Syndication of content
- Advanced WYSIWYG editor
- Flexible Design and features



# **Business Model**



### How to make the business case

# First Steps

- Inventory the websites
- Determine cost to create a site
- Determine yearly website development costs
- Determine Demand
- Determine time for average web site creation project
- Determine hosting cost
- Determine patching cost

# What we found at UCSF

- We had over 1,000 websites
- \$20K \$150K/per site build
- UCSF spent ~\$620k/per year on Drupal sites
- Demand for 27 sites confirmed
- Project time was 2 months to a year.
- Average hosting cost \$1,200
- Average patching cost \$2,000

# Costs of a Small Website

Activity	Cost	Annual/ One time
Design and site Configuration	\$10,000 +	One time
Secure Hosting	\$1,200	Annual
Security and maintenance	\$2,000	Annual
Total year 1 cost	13,200 +	

# **Investment Case**

Item	Item Cost	Number	Total	Cost
Drupal Consultant Cost	\$ 50,000.00	1	\$	50,000.00
Project Manager Cost	\$ 10,000.00	1	\$	10,000.00
UCSF Drupal Architect	\$ 15,000.00	1	\$	15,000.00
Toal Project Cost			\$	75,000.00
Site Builds	\$ 10,000.00	27	\$	270,000.00
Total Savings			\$	195,000.00

### **UNIVERSITY OF CALIFORNIA**

### **UCSF Starter Kit Goals**

# Project Goals on February 2, 2012

- Build 27 Sites with Distribution
- 25% cost decrease for building Drupal sites
- 20% cost decrease in site maintenance
- Reduce initial, base site creation to 3-4 hours

# Projected Savings of \$270,000 in build costs year 1

### First Three Years of Starter Kit

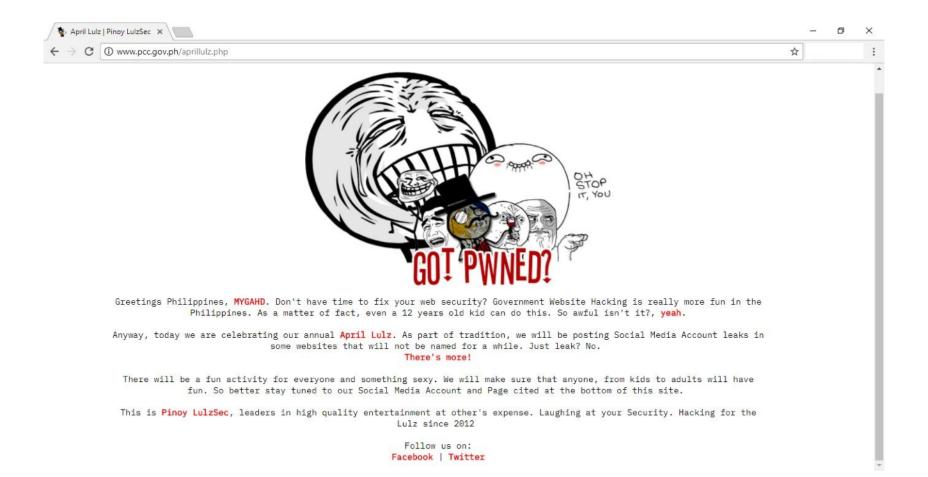
# Projected Savings of \$270,000 in 2013

	2013	2014	2015	Total
Starter Sites	215	135	228	578
Savings	\$2,150,000	\$1,350,000	\$2,280,000	\$5,780,000

# We saved \$2.1M

### UNIVERSITY OF CALIFORNIA

# **Security Case**



# How to Convince your CISO

### Problems:

1. Lack of comprehensive and current website inventory, unknown site owners

- 2. Lack of visibility and accountability for website data
- 3. Need for standardize management processes

## Solutions:

- Centralized inventory of websites, CMS versions and contacts—allowing for easy reporting
- 2. Clear understanding of data practices
- 3. Timely and convenient OS and CMS updates

# Case For Developers



# Benefits for Developers

- Community of practice
  - Common Development Practices
  - Pool of talent with shared skills
  - Community support
- Shared Codebase of improvements
- Test Coverage
- Documentation

# Advantages community of practice model

- Decrease the learning curve of new developers
- Respond more rapidly to customer needs and inquiries
- Spawn new ideas for products and services
- Reduce rework and preventing "reinvention of the wheel"



# 100% Test Coverage

- Automated Software Testing Saves Time and Money
- Testing Improves Accuracy
- Automation Does What Manual Testing Cannot
- Automated QA Testing Helps Developers and Testers
- QA and Dev Team Morale Improves



### Probo.Cl Bot APP 3:42 PM

PR Add tip about Chrome Driver path has finished building.

Review the build on Probo

Log in to the fully-built site (username: admin, password: probo)

PR Add tip about Chrome Driver path has finished building.

Review the build on Probo

Log in to the fully-built site (username: admin, password: probo)

Monday, July 23rd



### Probo.Cl Bot APP 3:23 PM

PR <u>upgrade crop module dependency</u>. has finished building.

Review the build on Probo

Log in to the fully-built site (username: admin, password: probo)

PR upgrade crop module dependency. has finished building.

Review the build on Probo

Log in to the fully-built site (username: admin, password: probo)

PR upgrade crop module dependency. has finished building.

Review the build on Probo

Log in to the fully-built site (username: admin, password: probo)

PR upgrade crop module dependency, has finished building.

Review the build on Probo

Log in to the fully-built site (username: admin, password: probo)



### **Documentation**

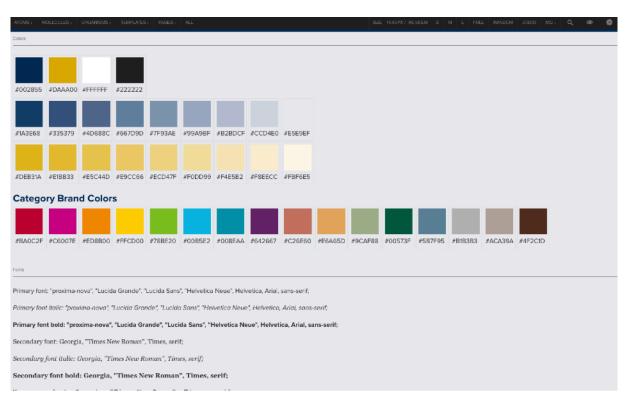
https://github.com/ucdavis/sitefarm\_seed/tree/8.x-1.x/docs

- Local Development Setup
- Creating a Sub Profile of SiteFarm Seed
- Adding New Configuration in a Sub Profile
- SiteFarm Seed Custom Modules
- SiteFarm Seed Feature Modules
- Third-party Libraries
- Test
- Best Practices

# Case For University Communications



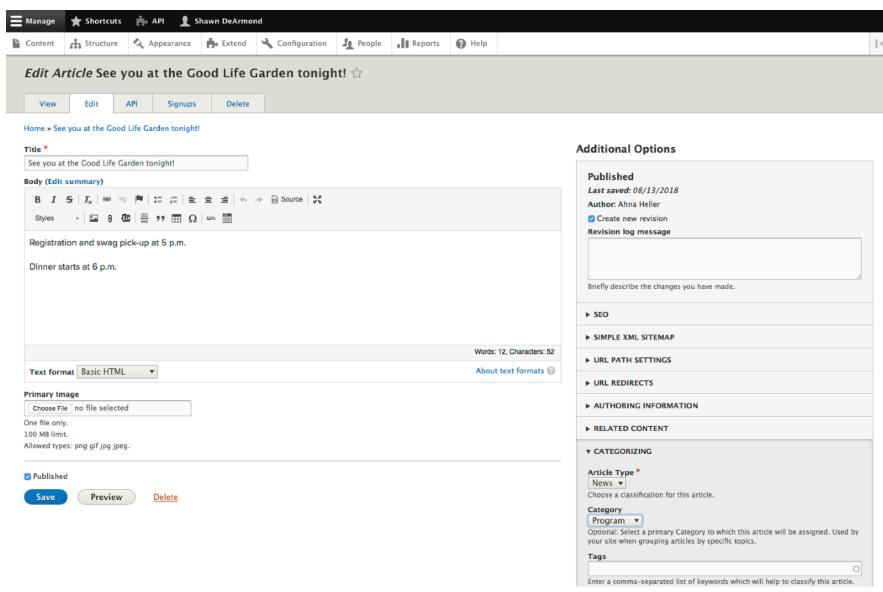
# **Branding Consistency**



Make it easy to stay within branding.

Make it hard (but not impossible) to go off the reservation.

### Case For Website Editors



### Features in SiteFarm Seed

- Basic Pages (Home Page, Landing pages, About pages, etc)
- Articles (News, Blog, Announcements)
- People (Staff, Faculty, Researchers, Collaborators, Subjects, etc.)
- Events (Dates, Meetings, Seminars, etc.)
- FAQs



### Features in SiteFarm Seed

### Continued...

- Photo Galleries
- Featured Content

- Social Media Sharing
- Marketing Highlight Blocks
- Hero Banner Block

- M Photo Slideshow

- **Webform**
- RSS Feeds
- ☑ Lockable configuration
- **SEO** Tools
- Mark And More...

### ...and features built on sister sites

- Cascade Migration Tool
- WordPress, CSV Import
- Single Sign-on (CAS)
- JSON API
- Vue.js Blocks
- Multilingual
- LDAP directory integration
- UC Profiles

- Content Audit
- Content Moderation
- Syndicated Content
- UCCSC Site!

# Questions?

Shawn DeArmond sgdearmond@ucdavis.edu

John Kealy john.kealy@ucdavis.edu

Quyen Vaillant quyen@it.ucla.edu

UNIVERSITY Of Zaliegobija

