Ecclesiastical Services

Web, mobile, social, identity, and community Initiative Approach Document

2011 Initiative Summary

Initiative: Web Services \$1,420,800

Sum mary

Provide centralized and horizontal Web Services to all ICS Portfolios. Increase their scope and capability, their reach both within and without the organization, and their use and adoption across applications. Provide the development, management and ongoing support of these Web Services.

Objectives

- Provide a Center of Excellence for the development and hosting of horizontal web services. This objective will lead to a reduction in overall application development costs, as well as a reduction in risk-profile and operational costs.
- Evangelize the services framework, including sound principles of code modularity, versioning, software contract immutability, multi-channel accessibility, high availability and enterprise scalability. Work with individual portfolios to understand the services framework and adopt it within their solution offerings.
- Develop new horizontal Web Services where there is a business need. Facilitate
 decoupling and development of aggregate services and applications. Continue to support
 current customer and client development and expand user base. This also includes
 building out hosting server environments.
- Deliver LDS Identity Service (LDS Account / LDS Profile), which will provide centralized authentication, authorization and account profile capability for use by all authorized services and applications.
- Expand LDS Profile beyond initial capability, in support of 2011 authentication, authorization and social network efforts.
- Maintain services framework documentation for use by all portfolios, in support of their application solution development.

ICS Key Deliverables

• Web Services -- continued existing horizontal Web Service support
Continue to provide the development, management and ongoing support of these Web
Services for current customers and business partners: MLU (CMIS) Web Service, LDS
Account Web Service, LDS Profile Web Service, Missionary Web Service, Payment Web
Service, Journal/Annotation Web Service, Information Quality (Address Standardization)
Web Service, Facility Web Service, Web Service Admin, and Riskonnect Web

Service. Additionally, provide requested support to CDOL Web Service, GIS Web Service, and Scriptures Mobile Search Web Service.

- LDS Profile Service -- completion of project from 2010.
 - Deploy LDS Profile Web Service into swim lanes and complete testing in conjunction with LDS Account application and other IAM efforts. Provide support and capability as LDS Account web application is modified, to enable centralized and service-enabled account and contact capability. This may include adding messaging capability to allow people to send messages to groups, organizations, and individuals without knowing their contact information.
- Expand and create new Web Service capability in support of various portfolio initiatives. Examples of current negotiated and agreed-upon initiatives include: Enhancements to Annotation Web Service for Mobile and lds.org; Facility Web Service development, MLU Web Service enhancements, and .NET Web Service admin capability for Cortez maps project; MLU Web Service enhancements for Member Leader and Temple Scheduling projects; Riskonnect Web Service development for Finance and Legal Riskonnect project; CDOL Web Service and CDOL web application re-architecture for CDOL 2.5 project; several potential pending requests for Missionary Web Service enhancements; Payment Web Service work for PEF and other payment-related projects; and MTC usage of the Address Standardization Web Service.
- Analytic and Semantic Services
 - Ingest LDS Profile, weblogs, social network data, and other selected repositories in order to provide a self-service analytics service, which would be available to IAM and other departments, including LDS.org and Mormon.org leadership. Enable search and reputation/sentiment analysis. Complete work to provide a true self-service user experience, meaning on-the-fly reporting and integration with SharePoint. Provide APIs for QA, Ops, Dev and our customers.
- Enable Community through Test Data
 Enable community testing by providing cross-discipline data sets that obscure sensitive date. Define and build a pattern for scalable and maintainable test data.
- Technical Documentation

Provide usage and training material to Web Service consumers and potential partners. Provide documentation, recast it and maintain it for a varied end-user audience. Provide marketing documentation and updates to the rest of the organization to assist in evangelizing Web Service adoption and development.

Initiative: LDS Identity (LDS Account, LDS Profile) \$1,065,600

Summary

Overall the project will reduce the risk of violating standards and internal Church security policies, enhance ability to comply with customer SLAs, and deliver new functionality by providing a new version of LDS Account and releasing LDS Profile. This initiative will enhance the value to users and customers by updating the LDS Account web application, web services, and core repositories to incorporate the highest priority backlog features requested by customers. Example requests include: Facebook integration, higher service availability, mobile device functionality, grace sign-ins before email is validated, move to Stack 3.0, and a new user interface. This also includes expansion of the information store and a new user interface for LDS Profile.

Objectives

- Reduce the risk of LDS Account outages and incidents by decoupling the web interface of the LDS Account application.
- Reduce the cost of supporting password changes (which represents upwards of 80% of customer support requests) by providing better password change management as well as reducing the number of changes required.

- Reduce the risk of LDS Account outages by automating various steps in the deployment process.
- Reduce the risk and capture the value associated with the organization's move to Stack 3.0.
- Expand social networking and business intelligence of the LDS Profile repository.
- Provide a new user interface and experience for both LDS Profile and LDS Account.

ICS Key Deliverables

LDS Identity Web Services

These services will enhance the current capabilities of LDS Account as well as enable other platforms, such as Mobile, access to account creation and maintenance. LDS Profile will expand on the current information maintained for an account holder by adding social network, email verification, subscription management, and messaging enhancements. The current LDS Account registration service used by Family Search will be enhanced.

LDS Account site rewrite

Bring look and feel to date and provide a smooth, easy-to-use process for account creation and maintenance. The UI rewrite will be done along with the move to Stack 3.0, which will replace current JSF and SEAM technologies with Spring MV Cand JSP. This will help with cross-team technology familiarity, as well as code base longevity and Stack team support moving forward. This rewrite will also eliminate the number one problem plaguing the reliability of current LDS Account services —large memory object issues.

- Release of LDS Profile 1.0 (see Web Services initiative.)
 New identity storage and access service supporting integration of social media and profile information.
- Ongoing maintenance and operation of LDS Identity
 Respond to current Jira backlog for customer-requested enhancements, bug fixes, and
 performance targets. Current customers have created a long list of enhancement requests
 that will be addressed through this initiative.

Initiative: Mobile Solutions \$1,065,600

Summary

Flood the world electronically with the prophetic word on mobile devices.

Gospel Library (GL) 2011: Deliver world-class (in terms of stability and usability) Gospel Library applications for the iOS, Android, BlackBerry, Windows Phone 7, and webOS platforms so Saints worldwide can freely download and consume all available content (and UI) in their own languages (English, Spanish, Portuguese, German, Italian, French, Russian, Korean, Japanese, and Chinese). Also release a basic offering for Symbian, and a texting-based scripture service POC in the U.S. and Canada for non-smart phone users.

Objectives

Deliver selective content download, annotations (highlights, cross references, notes) which sync with LDS.org, the Standard Works, General Conference from at least 2009 forward, and Church Magazines from at least 2011 forward in the Internet 10 languages, and other available Curriculum content as available to the specified platforms by the end of 2011. Establish and manage process for the delivery of new content within 24 hours of receipt from Content & Media.

ICS Key Deliverables

- Double user base in 2011. Continue to support and sustain > 300k existing users, as well as 300k anticipated new users as follows (i.e. target user base by end of 2011 of > 600k)
- Deliver ability to allow users to add, annotate, and share personal content (e.g.
 Patriarchal Blessings, talks, lessons) to GL. This implies the need for a format conversion
 tool made freely available to Saints worldwide. This may include the ability to add
 licensed third party content to the GL app (e.g. Doctrinal New Testament Commentary).
- Deliver a Personal Study Area to facilitate the composition of lessons and talks on mobile devices.
- Deliver an iPad-optomized GL app
- Deliver, support, and maintain Windows Phone 7 app
- Deliver a GL solution for touch-screen BlackBerry devices, and enhance and support existing BlackBerry offering (i.e. for non-touch devices).
- Deliver a basic GL app for Nokia Symbian smart phones
- Deliver a texting-based scripture service for non smart phones (proof-of-concept)

Summary: Mormon Channel (MC)

2011: Exceed AV's expectations by producing rapidly and expertly their designated roadmap/features on iOS, Android, and Windows Phone 7 platforms.

Objectives

- Ongoing delivery of Mormon Channel Radio, Mormon Channel Music and International programming, scripture, General Conference, and Church magazine audio content, as well as video content for General Conference, Mormon Messages, and various other AVmanaged content for iOS, Android, and WP7. Audio only maintenance for BlackBerry and Palm/webOS will continue throughout the year.
- With >260k downloads through November 2010, we are targeting >500k downloads by the end of 2011. This will be done in part by working with AV to identify and deliver new types of content.

ICS Key Deliverables

- Robust streamed content delivery and ongoing customer support and product maintenance. Continue to support and sustain > 260 k existing users with platformoptimized content delivery. This includes support for an estimated 700+ content offerings (many video) to be added in 2011.
- Deliver UI in at least Spanish and probably Portuguese in 2011.
- Deliver play-listing for non-radio audio content, as well as retroactively selectable daily play list for MC Radio content.
- Deliver live television broadcasts
- Deliver, support, and maintain Windows Phone 7 app
- Deliver a Mormon Channel solution for touch-screen BlackBerry devices, and enhance and support existing BlackBerry offering (i.e. for non touch devices) to support video, as well as sustain/troubleshot BlackBerry installation and use issues.

Summary: LDSTools

Facilitate local member communication and interaction.

Objectives

 Provide directory, calling, calendar, leadership reporting, and communication tools available on iOS, Android, BlackBerry, WP7, and Palm/webOS platforms.

ICS Key Deliverables

- Deliver calendar (both new and legacy) support for iOS, Android, BlackBerry, and WP7
- Deliver leadership reports for all platforms (goals approx. 50 MLS Classic reports)
- Deliver communication tools (group texting and emails) for all platforms (only iOS available today)
- Deliver leadership reports based on LDS Identity credentials
- Deliver ability to make changes to personal info in MLS based on credentialed authorization
- Introduce a BlackBerry version
- Introduce a WP7 version

Summary: Youth App

Encourage consumption of youth-targeted content (e.g. New Era) by delivering elements from Youth website via mobile applications.

Objectives

 Provide a visually appealing app experience to induce youth to consume underutilized youth-oriented content

ICS Key Deliverables

- Upon successful POC, rewrite iOS app as native
- Deliver integration with Testimony wall, Polls, and other sections of Youth website.
- Deliver free music download/playback (as possible perplatform)
- Deliver Android version
- Deliver integration with LDS Account to facilitate safe/authorized sharing
- Deliver a WP7 version

Initiative: Social Media Solutions \$410,200

Summary

Maximize the relationship the Church has with its members. Maximize the relationship members have with each other. Maximize the relationship members have with non-members. Maximize the relationship members have with Christ.

Objectives

Provide packaged services, enabling any department in the Church to quickly and easily integrate and enable Social Media in their products and workflow.

- Make it easier to set up, manage, and maintain a presence on Social Networks for any department desiring to accomplish such.
- Improve, encourage, and manage the processes members, non-members, and less-actives use to communicate with each other online. Help improve communication between Church Headquarters and members in this process.
- Build and utilize tools and technology to take the message of the Church to every Nation,
 Kindred, and tongue in as intimate and personal a way possible.

ICS Key Deliverables

Creation, Management, and Maintenance of Social Network Properties
 The Church currently has 31 Facebook Pages, 33 Twitter Accounts, and 14 YouTube channels. A lot of effort goes into the creation, management, analytics, and maintenance

of such properties. ICS will provide services to make management of such pages easier, including services to encourage improved posting to Social Network accounts, analytics, custom designs and applications, and more.

As part of this effort, several tools will be needed to manage this process:

- Radian 6 Radian 6 tracks conversations of individuals across hundreds of
 websites and social networks and provides reporting for various keywords and
 search terms. It also provides a workflow, allowing us to assign specific
 conversations or blog posts to other individuals at the Church. ICS will provide
 this as a solution for any department needing analytics.
- Virtue Currently used by Missionary department for facebook.com/mormon, Virtue provides automated tools for detecting controversial conversations on Church-owned Social Networks and alerts us when these conversations are happening.
- WebTrends WebTrends provides analytics for Facebook Pages and allows us to track the success of each post to the Pages we administer.
- o **Fan/Follower Tracking** There are various tools that enable us to tell how many people are following the updates of the Church on a regular basis.
- Promotional/Campaign Tools There are various tools that enable us to create promotions, encouraging people to follow and like our pages, enabling better advertising opportunities for Missionary department.

Social Media Analytics and Tools

ICS will provide better ways to understand the needs of its members in various areas. For instance, "The Vineyard" project could provide better ways for Priesthood leaders to know what the service needs are, based on the conversations they are having on Social Networks they belong to. ICS will be identifying influencers, as well as anti-Mormon influences that we need to be adjusting our messaging towards (or against).

In addition, ICS will build better workflow tools to help manage the process of submission of content posted to Social Networks. Tools need to be built to handle translation, as well as cross-posting to multiple Church networks. They will make the Correlation process easier and faster for managing a Social Network presence.

Social Networking and Social Media Applications Development

There are many projects within the Church that need a specific Social Networking application written to improve the way members communicate, collaborate, and share online. To start, ICS will create a social experience around Scripture Mastery, enabling those memorizing and learning their scriptures to share their success with and challenge their friends. Various Facebook Pages need custom tabs created to allow better sharing of content with the friends of those visiting each Page. The YSA project needs developers to build out social components that focus the experience on content each user's friends are interested in, rather than a categorized view. This initiative will help lead a community of volunteers to build such projects.

International Expansion Efforts

2011 will be a key year for the Church to become a leader in many countries and languages of the world in expanding its message through Social Media. ICS will work with Areas and Area Authorities to build and integrate ways that members, in their own lands, languages, and tongues, can share the Gospel online through the use of Social and other relationship-building tools and technologies that are applicable to the culture of the individual areas they belong. This will become an even greater focus throughout the year, and should be a major focus of the group, for which existing Engineering talent should be focused. Later in the year there may need to be a sole resource devoted to Social Media in International areas of interest for the Church.

Initiative: Community Volunteers \$592,000

Summary

Enable Church members to donate their time and talents to the building of the kingdom. Facilitate ICS to magnify its efforts by building the kingdom through Community. Enable portfolios to reach their 2011 community goals.

Objectives

- Improve ICS' use of Community by providing products and services that fulfill unmet needs.
- Double the number of contributing community volunteers used in 2010 by ICS.
- Make the starting of new projects frictionless.
- Provide community best practices that can be easily duplicated and followed.
- Improve community volunteers' experience in the following areas: Quality Assurance,
 End User Support, Area Projects, and Mobile Development.

ICS Key Deliverables

- Quality Assurance / End User Support Volunteers who would like to test the quality of ICS products will be able to easily join and quickly get started on a chosen product. We will also provide a mechanism for those that want to provide end user support for the products they are helping on. The community talent pool will be improved to better engage these groups.
- General Community Development Build on the pattern of success established in 2010 for mobile projects by further defining common standards for communication, process engagement, development tools, key service metrics and portfolio development. Provide a resource to champion and lead this standardization effort.
- Tools / Process We will provide tools and process that will allow project teams to easily communicate with and engage community volunteers. We will also provide expert advice as to when Open Source software may be a good solution for portfolio consideration.
- Update <u>tech.lds.org</u> to enable a more frictionless environment for the community to engage with project teams. Infrastructure will be updated to become enterprise-worthy.

Non-Initiative Work

Hardware, Software and Tools \$600,000

Events, Marketing and Miscellaneous \$150,000

Administrative Overhead \$355,200