Operational Concept Description (OCD)

We Are Trojans (WAT) Network

Team01

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10/10/2014

Version History

Date	Author	Version	Changes made	Rationale
10/10/14	ML, PP, SE	0.5	• Original template for use	• Initial draft for use
10/18/14	ML, PP, SE	1.0	• Complete all section • fixed inconsistency word	• Update information information according to the comment from the ARB session
10/29/14	SE	1.1	• Level of Service	• Level of Service update from Winbook

Table of Contents

Table of Tables

Table of Figures

1. Introduction

1.1 Purpose of the OCD

This document lists out details of win-conditions negotiated among success-critical-stakeholder of the We Are Trojans (WAT) Network. The success-critical stakeholders of the project are Matthew Wong, our client; USC students and staff, as users; Team #1, as a software development and maintenance team.

1.2 Status of the OCD

The OCD is currently in version 1.0 for FCP. We completed all of the section in OCD and also update the information according to the ARB session.

2. Shared Vision

Legend: Benefits are added to the program model:

Table 1: The Program Model

| Assumptions			
• **USC students need a central platform to connect, share, and like information with each other** • **Reward point system will work as the important incentives for users to join the network**			
Stakeholders (Who is accountable for the initiatives)	**Initiatives** (What to do to realize benefits)	**Value Propositions** (Benefits i.e Why)	**Beneficiaries** (Who derives value)
• Developers • Maintainers • Clients • Gift/Book stores	• Develop the system • Monitor the system • Advertise the system to USC community • Partner with schools • Negotiate deals with on-campus bookstore/gift store	• Increase camaraderie between Trojans • One-stop shop to answer any USC related queries • Increase communications between students across schools	• USC students • USC alumni • USC faculty
Cost (Cost factors) • Development costs • Maintenance costs • Advertising/Marketing costs • Web server, Web hosting, Domain name		**Benefits** (Key performance indicators – KPIs) • The number of active users in "WAT" network increases.	

2.1 Benefits Chain
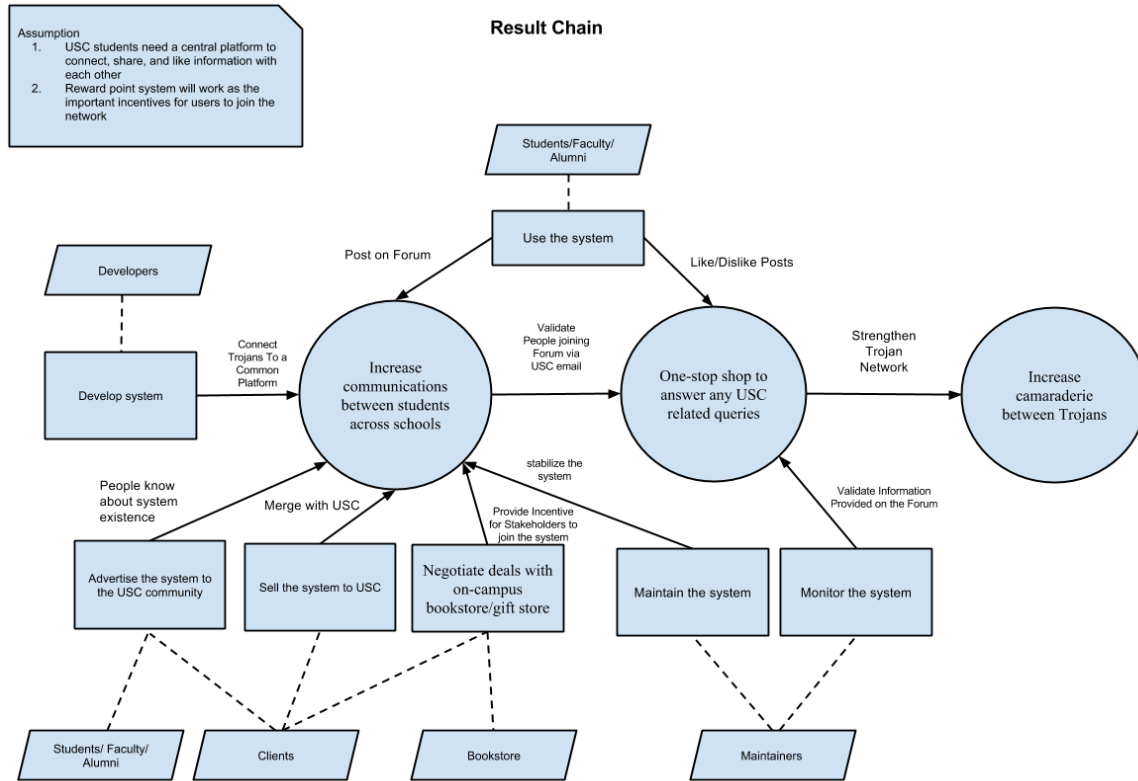
Figure 1: Benefits Chain Diagram of WAT Network

2.2 System Capability Description

- The We are Trojans (WAT) Network is a social collaboration website.
- The target customers are USC students, USC alumni, and USC faculty.
- The need or opportunity that will be satisfied by the system.
    - o Increase communication between students across schools
    - o Increase camaraderie between Trojans
    - o One-stop shop to answer any USC-related queries
- A compelling reason for the customer to buy/use the system.
    - o This system will facilitate the users to ask questions to other students by just logging into the system and searching for the existing thread or post a new one in the forum.
    - o For a user who contributes to the We Are Trojans system, he or she will get WAT points which can be redeemed for items/giftcards.
    - o All questions can be answered in a single place.
- The closest competitor:
    - o D2L forums
    - o Piazza
    - o Facebook
- The system's primary differentiation from, or benefit over, the closest competitor or alternative approach, if there are competitors or alternatives at the time
    - o WAT Network rewards users who contribute to the system by giving them WAT points.
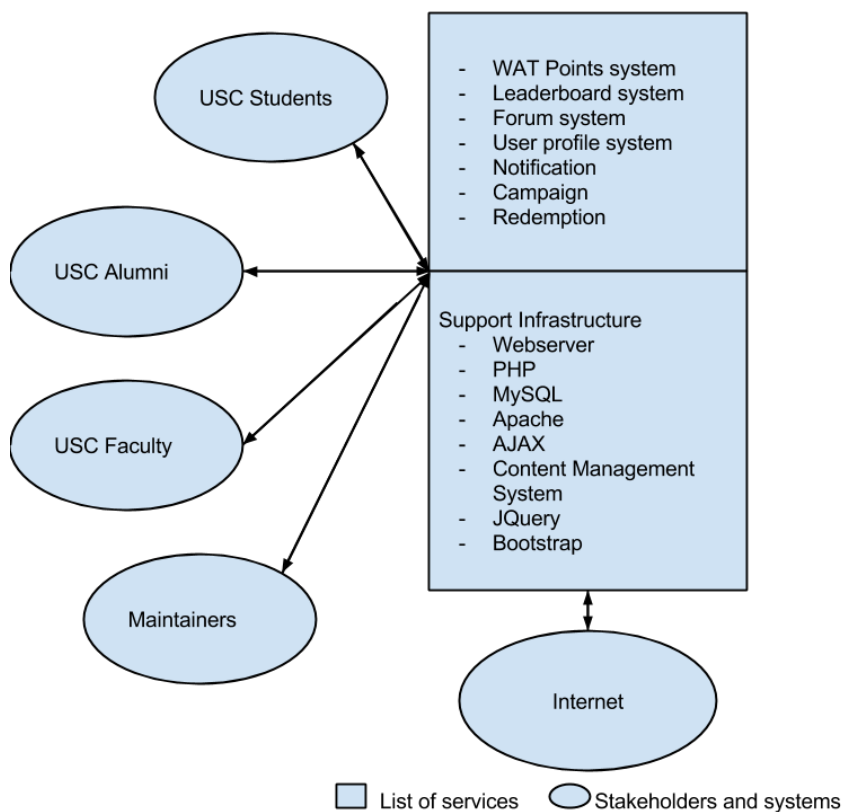
2.3 System Boundary and Environment

Figure 2: System Boundary and Environment Diagram of WAT Network

3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

There is no current infrastructure.

3.1.2 Artifacts

Currently, there are no artifacts. However, we will probably be using artifacts listed below.

Table 2: Artifact Descriptions

Artifacts	Description
CMS (Joomla, Drupal, Wordpress)	Provide general functions for manage content on website
DBMS (MySQL)	For keeping, managing, and retrieving data storage used in the system
Webserver (PHP-based)	Infrastructure for our system
JQuery	Provide DOM manipulation methods
CSS framework (ex. bootstrap, foundation)	CSS API to customize user interface on website

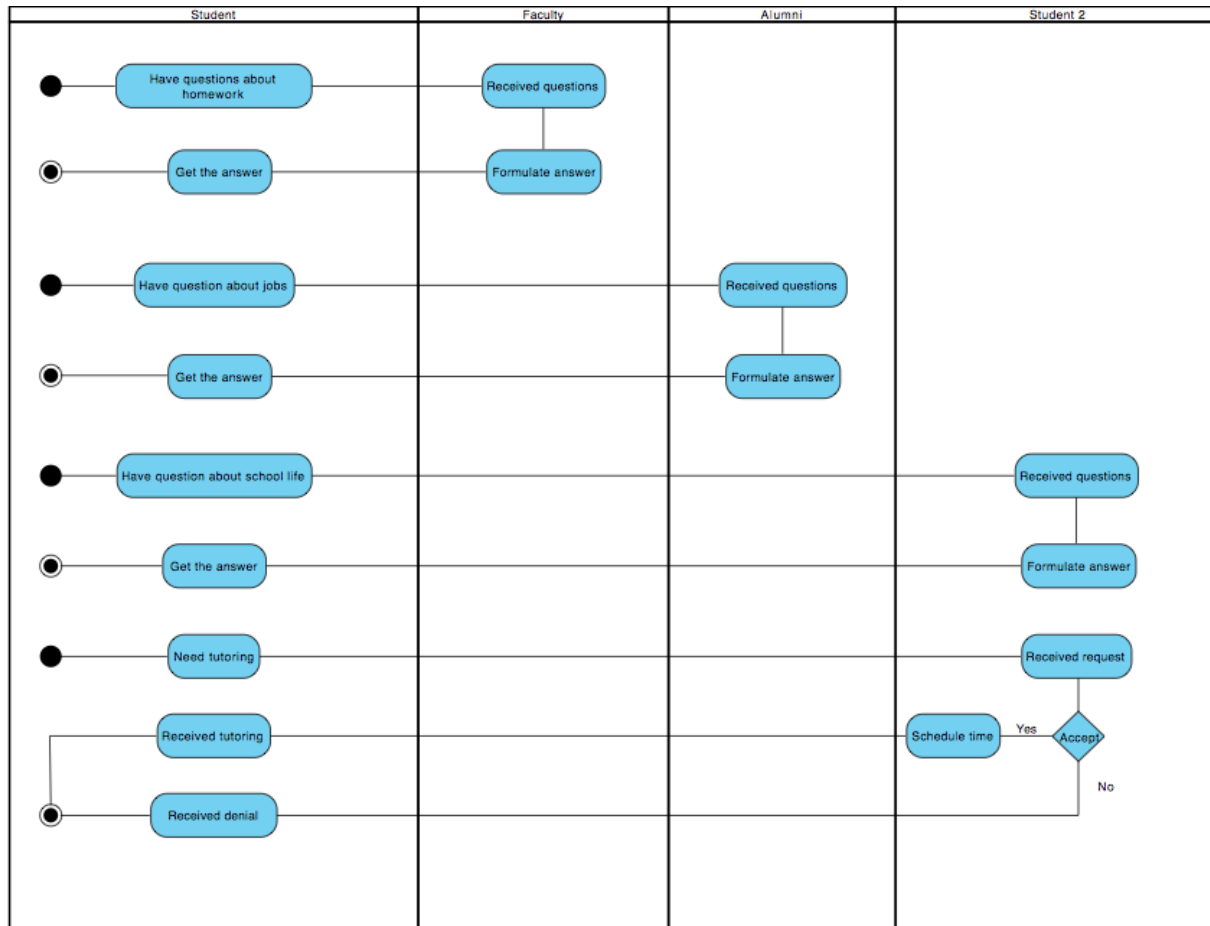## 3.1.3 Current Business Workflow

Figure 3: Current Business Workflow

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

The Priority Level ranges from 1-10; 1 is the highest level priority and 10 is the lowest level.

Table 3: The Capability Goals

Capability Goals	Priority
OC-1 Post/Edit/Delete a thread: Users are able to post/edit/delete a thread.	1
OC-2 Calculate the WAT points: The system should correctly calculate three types of WAT points.	4
OC-3 Like/Dislike : Users are able to like or dislike threads and posts	3
OC-4 Make a post: Users could post on the thread.	2
OC-5 Redeem the gift card: Users could use the usable points to redeem the gift card	5
OC-6 Automated useless posts deletion: The system is capable of deleting the useless posts.	6
OC-7 Automated notification: The system is able to notify the users the number of likes/dislikes/posts and recent campaigns.	7
OC-8 Post/Edit/Delete the campaign: The maintainer is able to post/edit the campaign on the campaign activity board.	8
OC-9 Categorization function: The system could categorize the posts	9

3.2.2 Level of Service Goals

Table 4: Level of Service Goals

The Priority Level ranges from 1-10; 1 is the highest level priority and 10 is the lowest level.

Level of Service Goals	Priority Level
LOS-1: The system shall be user-friendly and intuitive.	1
LOS-2: The system shall render correctly on mobile platforms.	2
LOS-3: The system shall not be down more than 24 hours in one month.	3

3.2.3 Organizational Goals

OG-1: Increase the connection among students by providing them with an easy-to-use forum. **OG-2:** Increase the credible information via like/dislike ratio.
OG-3: Increase the speed at which the users receive answers to queries via tracking the number posts on the forum.
OG-4: Increase USC brand via estimating the increase in the number of active users.
OG-5: Reduce workload of USC staff to answer students question by providing an alternative way to answer the questions.

3.2.4 Constraints

CO-1: Zero Monetary Budget: The COTS or NDI/NCS should be free of charge.
CO-2: Only Web-based platform : Users can only use the platform via web right now.
CO-3: Only non-negative points on a post : Points on each post cannot be negative.

3.2.5 Relation to Current System

Table 5: Relation to Current System

Capabilities	Current System	New System
Roles and Responsibilities	- USC Students ask, and answer question tutoring - USC Alumni provides information about career - USC Faculty provides USC information	- USC Students ask, and answer question tutoring - USC Alumni Provides information about career - USC Faculty provides USC information - Moderator monitoring WAT system - IT Staff maintain WAT infrastructure
User Interactions	- Asking other User for a favor - Asking USC Alumni for career information - Asking USC Faculties for USC information	- Search for an answer for their question. - Posting some question in WAT forum and wait for answers. - Redeem gift cards/items from the WAT system
Infrastructure	there are no infrastructures	- Webserver - Database system
Stakeholder Essentials and Amenities	- USC students - USC Alumni - USC Faculties	- USC students - USC Alumni - USC Faculties - Moderators - IT staffs

Future Capabilities	there is no future capabilities	Integrate with USC to be able to give more information to the user, and gain more credibility for WAT system.

3.3 Proposed New Operational Concept

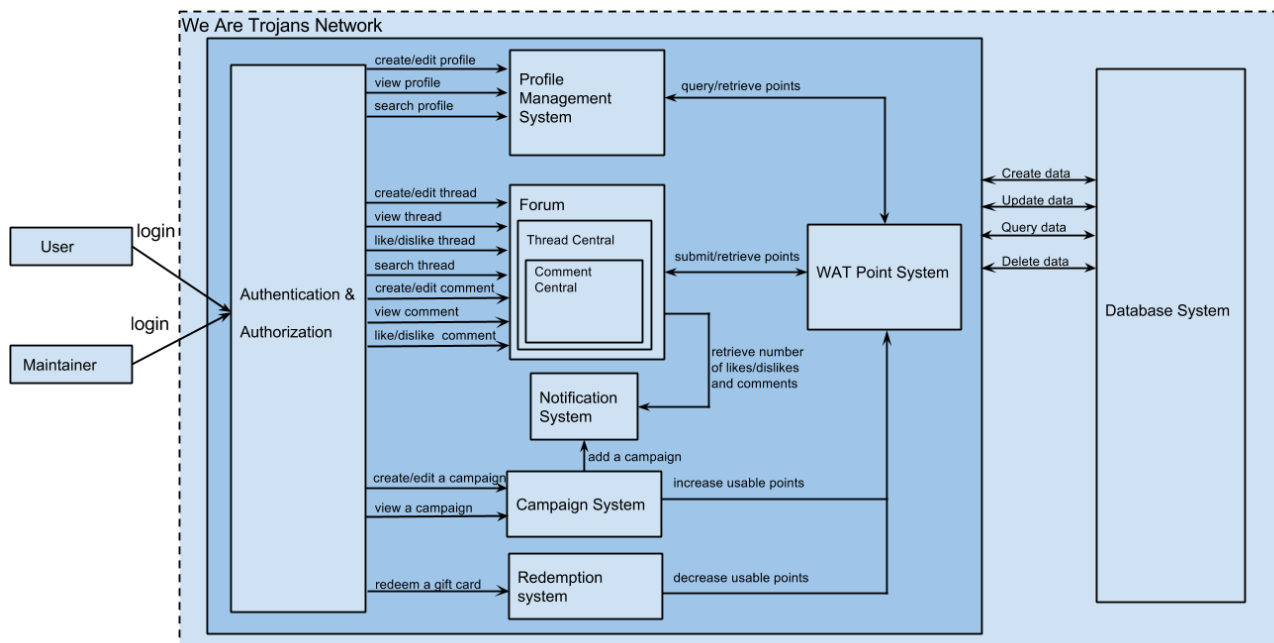## 3.3.1 Element Relationship Diagram

**Figure 4: Element Relationship Diagram of WAT system
(NDI-intensive project)**
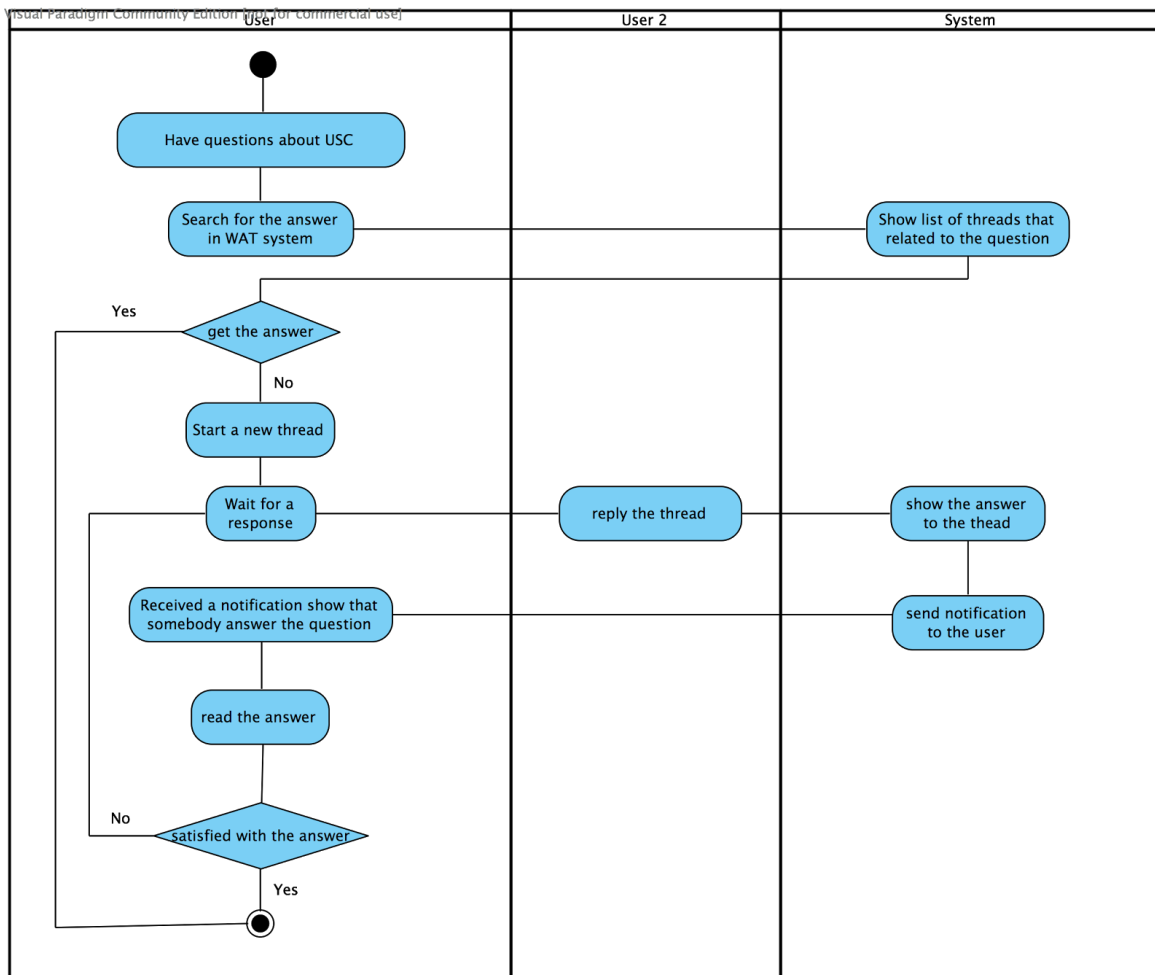
3.3.2 Business Workflows

Figure 5: Business Workflow Diagram of WAT System

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

- The need to hire moderators to monitor the system
- The reduction in workload of USC faculty that have to answer USC students' questions.
- The need to have some IT personals to maintain We Are Trojans system.

3.4.2 Operational Transformations

- The option for USC students to ask questions in a common system instead of calling USC staff or asking other students in person.
- Using old items that cannot sell in the USC bookstore in a more useful way by allowing We Are Trojans users to redeem WAT Points for it.
- Having a friendly competition among the USC community by using WAT point systems.