

Operational Concept Description (OCD)

We Are Trojans

Team No.1

Team members	Roles
Eirik Skogstad	Project Manager, Life Cycle Planner
Min Li	Feasibility Analyst, Operational Concept Engineer
Pittawat Pamornchaisirikij	NDI/NCS Acquirer & Evaluator, Tester
Punyawee Pakdiying	System Architect, Feasibility Analyst
Saloni Priya	Requirements Engineer, UML Modeler
Ameer Elkordy	IIV&V, Quality Focal Point
Suleyman Erten	Operational Concept Engineer, Requirements Engineer
Kamonphop Srisopha	Prototyper, UML Modeler

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Version History

Date	Author	Version	Changes made	Rationale
10/10/14	ML, PP, SE	0.5	<ul style="list-style-type: none">• Original template for use	<ul style="list-style-type: none">• Initial draft for use

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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 status of this document is currently at the initial version in the valuation phase, version 0.5 for the Draft Foundations Commitment Package. The initial phase of prototype developed was accepted by the clients. The scope of the project has been extended by including three separate types of “WAT” Points. The requirements can still evolve with the development of the system, to limit the scope so as to get the project completed within the allotted time. Some details of this project still need to be evaluated.

2. Shared Vision

Legend: Benefits are added to the program model:

Assumptions <ul style="list-style-type: none"> • 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)
<ul style="list-style-type: none"> • Developers • Maintainers • Clients • Gift/Book stores 	<ul style="list-style-type: none"> • Develop the system • Monitor the system • Advertize the system to USC community • Partner with schools • Negotiate deals with on-campus bookstore/gift store 	<ul style="list-style-type: none"> • Increase camaraderie between Trojans • One-stop shop to answer any USC related queries • Increase communications between students across schools 	<ul style="list-style-type: none"> • USC students • USC alumni • USC faculties
Cost (Cost factors) <ul style="list-style-type: none"> • Development costs • Maintenance costs • Advertising/Marketing costs • Web server, Web hosting, Domain name 		Benefits (Key performance indicators – KPIs) <ul style="list-style-type: none"> • The number of active users in “WAT” network increases. 	

2.1 Benefits Chain

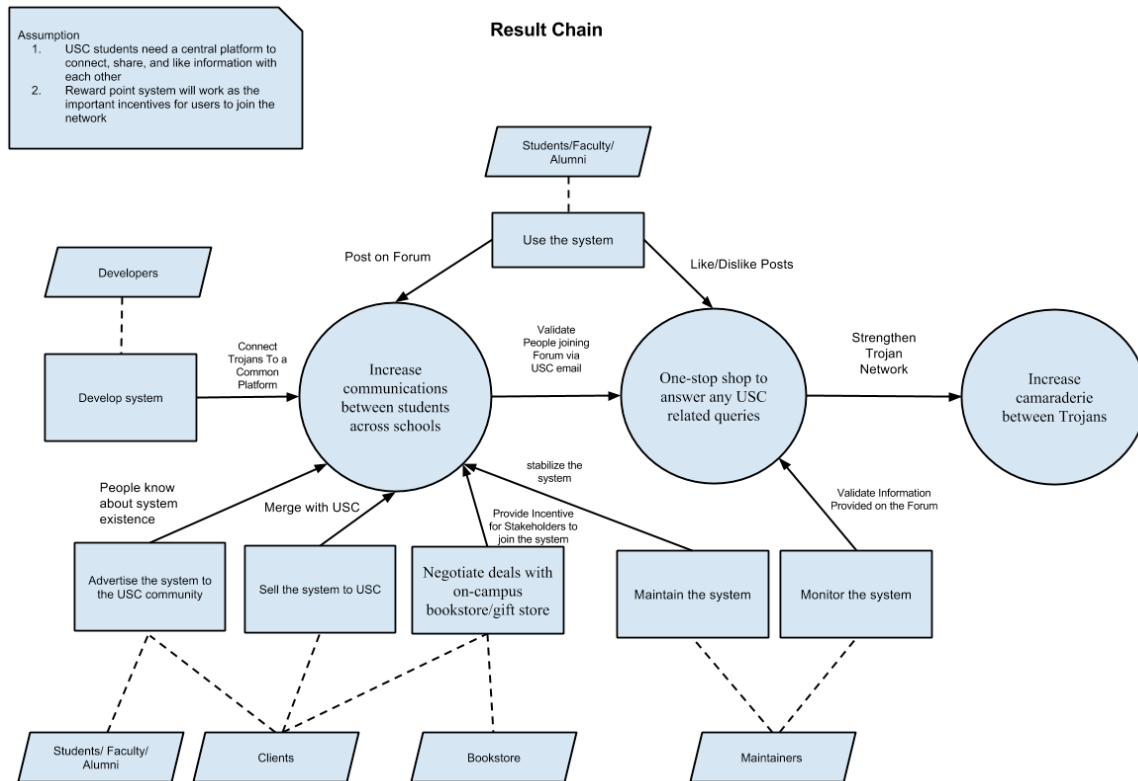


Figure 1: Benefits Chain Diagram of Volunteer Tracking System

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.
 - Increase communication between students across schools
 - Increase camaraderie between Trojans
 - One-stop shop to answer any USC-related queries
- A compelling reason for the customer to buy/use the system.
 - 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.
 - 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.
 - All questions can be answered in a single place.
- The closest competitor:
 - D2L forums
 - Piazza

- The system's primary differentiation from, or benefit over, the closest competitor or alternative approach, if there are competitors or alternatives at the time
 - WAT Network rewards users who contribute to the system by giving them WAT points.

2.3 System Boundary and Environment

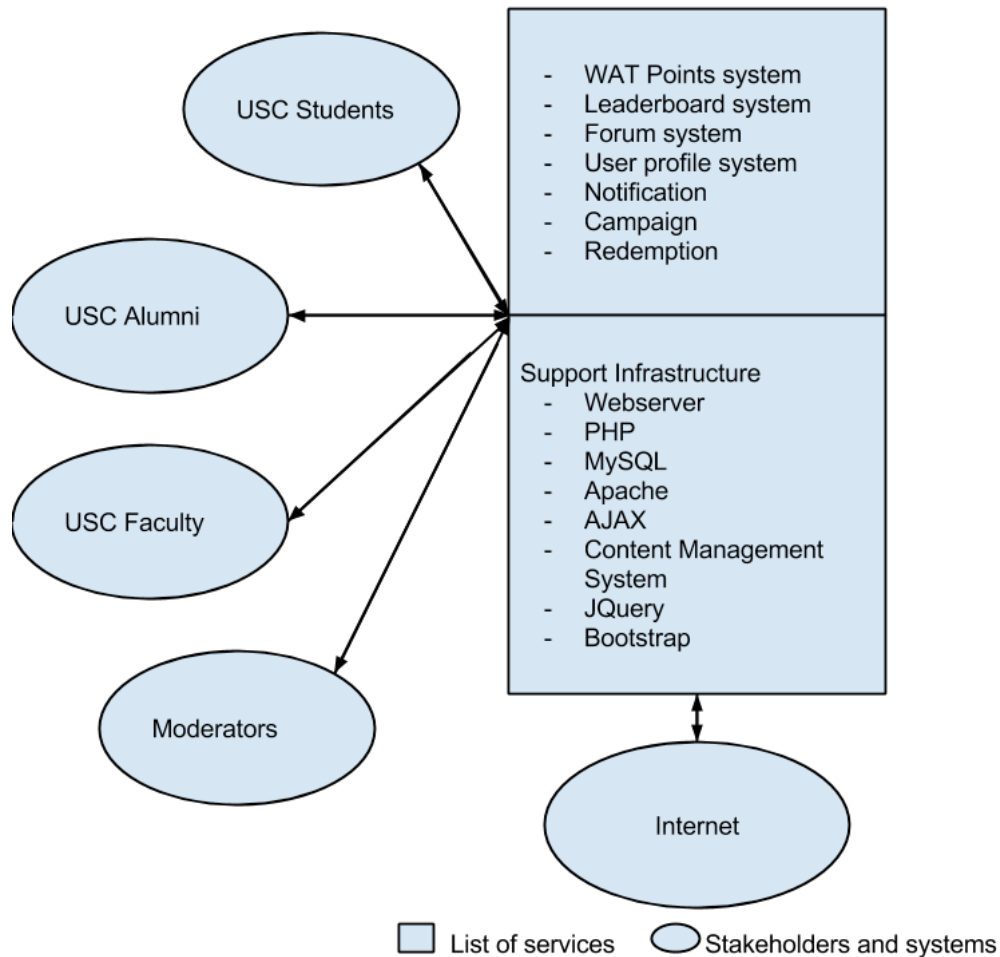


Figure 2: System Boundary and Environment Diagram of Volunteer Tracking System

3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

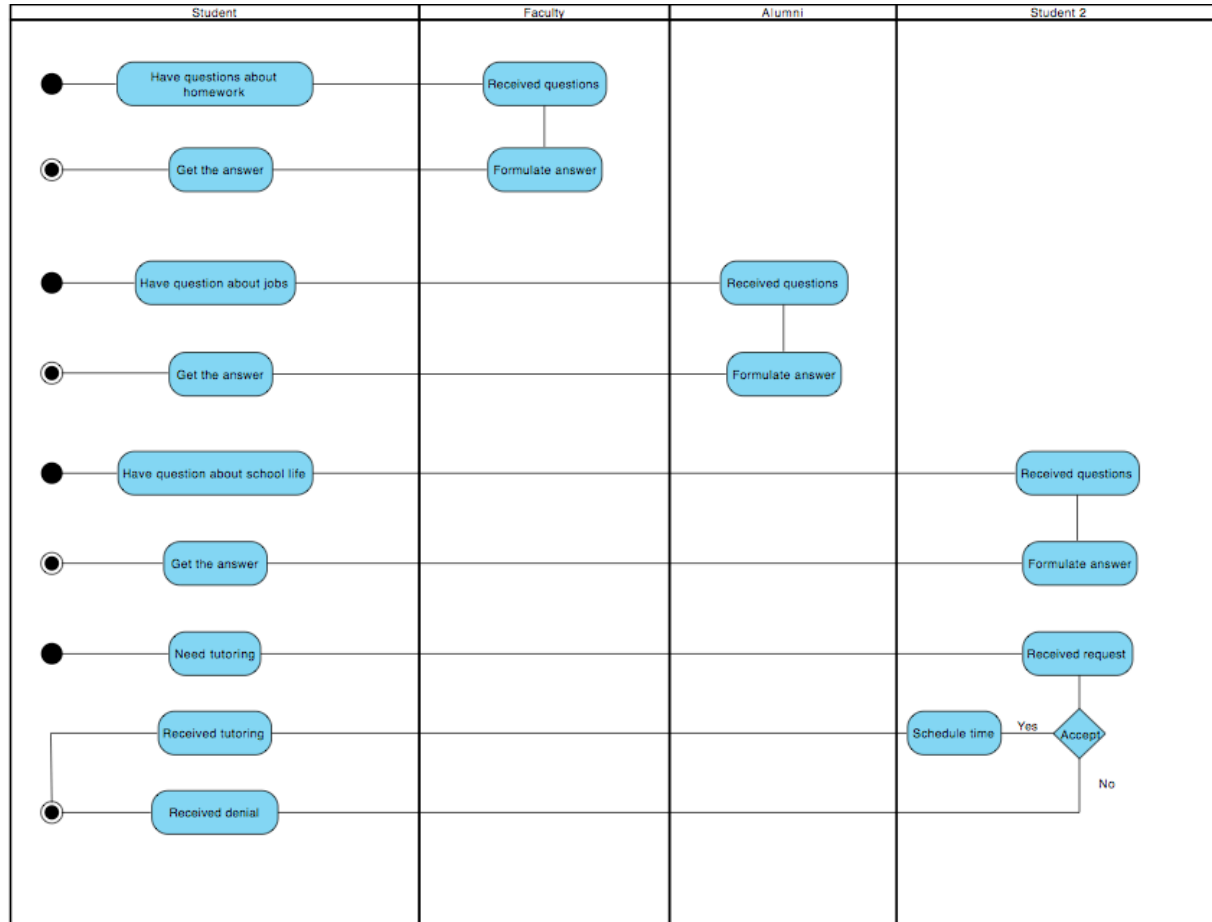
There is no current infrastructure.

3.1.2 Artifacts

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

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



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.

Capability Goals	Priority
OC-1 Post/Edit/Delete a thread: Users are able to post/edit/delete questions and answers	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 comments	3
OC-4 Make a comment: Users could comment on the post.	2

OC-5 Redeem the gift card: Users could use the usable points to redeem the gift card	5
OC-6 Automated useless posts/comments deletion: The system is capable of deleting the useless posts/comments.	6
OC-7 Automated notification: The system is able to notify the users the number of like/dislike/comment and recent events.	7
OC-8 Post/Edit/Delete the event: The moderator is able to post/edit the event on the event activity board.	8

3.2.2 Level of Service Goals

Table 1: 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: Concurrent users: The system should allow at least 50 posts	1
LOS-2: The system shall render correctly on mobile platforms.	4
LOS-3: The system shall not be down more than 24 hours in one month.	3
LOS-4: The system shall be user-friendly and intuitive.	2

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 student 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 2: Relation to Current System

Capabilities	Current System	New System
Roles and Responsibilities	<ul style="list-style-type: none"> • USC Students ask, and answer question tutoring • USC Alumni provide information about career • USC Faculty provide USC information 	<ul style="list-style-type: none"> • USC Students ask, and answer question tutoring • USC Alumni provide information about career • USC Faculty provide USC information • Moderator monitoring WAT system • IT Staff maintain WAT infrastructure
User Interactions	<ul style="list-style-type: none"> • Asking other User for a favor • Asking USC Alumni for career information • Asking USC Faculties for USC information 	<ul style="list-style-type: none"> • Search for an answer for their question. • Posting some question in WAT forum and wait for answers. • Redeem giftcard/item from WAT system
Infrastructure	there is no infrastructure	<ul style="list-style-type: none"> • Webserver • Database system
Stakeholder Essentials and Amenities	<ul style="list-style-type: none"> • USC students • USC Alumni • USC Faculties 	<ul style="list-style-type: none"> • 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

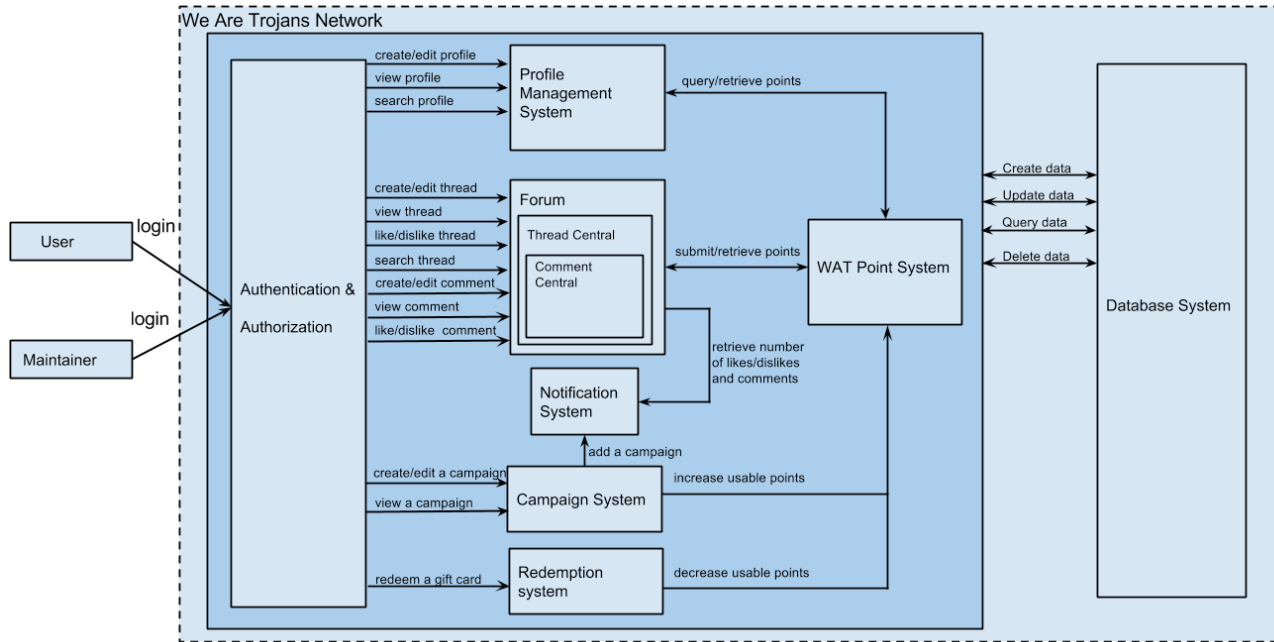


Figure 3: Element Relationship Diagram of Transportation Grant Fund system (NDI-intensive project)

3.3.2 Business Workflows

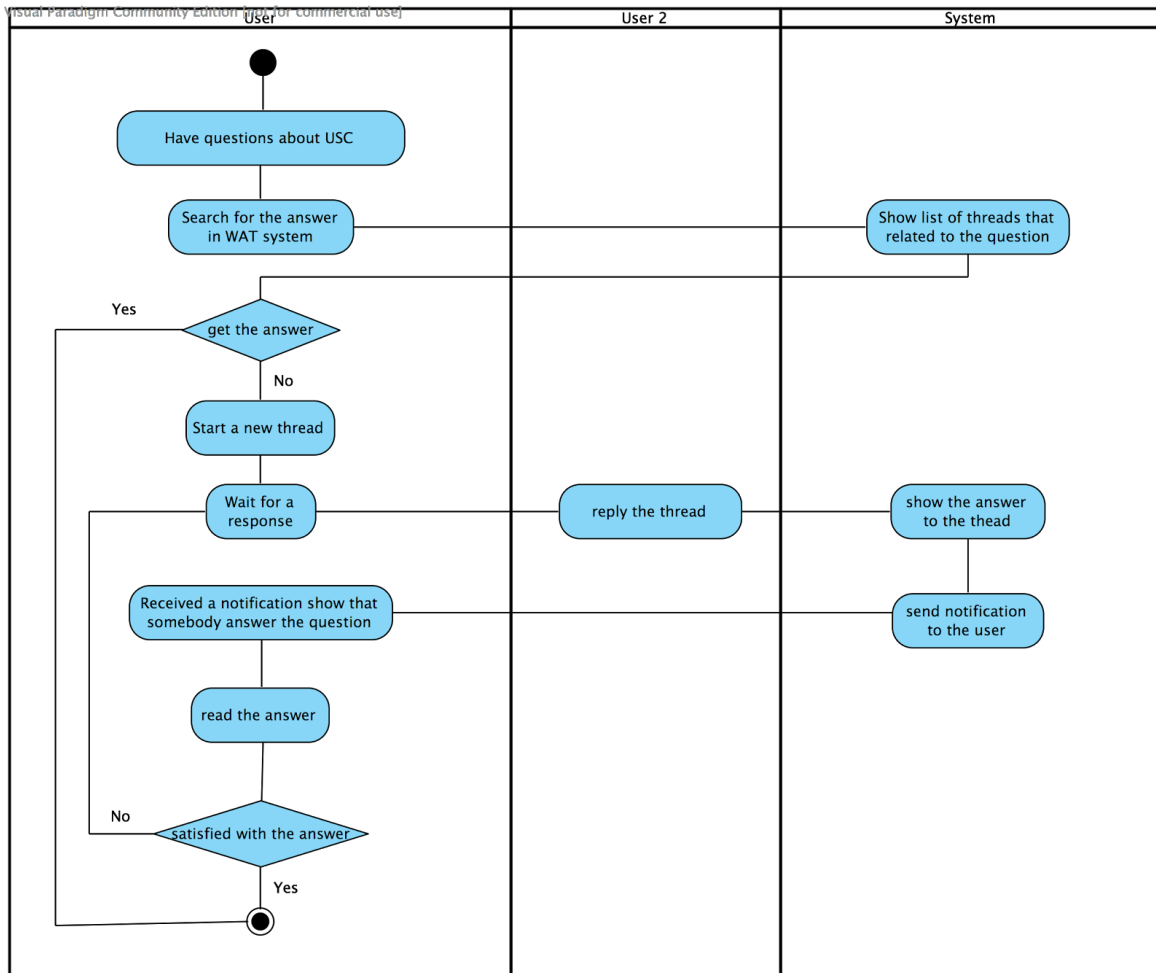


Figure 4: Business Workflow Diagram of Volunteer Tracking System

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.