Operational Concept Description (OCD)

Yanomamo Interactive DVD/Online

Team No. 6

Reetika Rastogi - Project Manager, Life Cycle Planner
Rohit Mani - Requirements Engineer, Life Cycle Planner
Sanjay Kutty - Feasibility Analyst, Software Architect
Shruti Sannabhadti - Software Architect, Prototyper
Tushar Saxena - Operational Concept Engineer, Requirements Engineer
Cristina Cano - Prototyper, Feasibility Analyst

09/27/2013
## Version History

<table>
<thead>
<tr>
<th>Date</th>
<th>Author</th>
<th>Version</th>
<th>Changes made</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/27/13</td>
<td>TS</td>
<td>1.0</td>
<td>• Original for CSCI577a; Tailored from ICSM OCD Template</td>
<td>• To fit CS577a VC Package</td>
</tr>
</tbody>
</table>
# Table of Contents

Operational Concept Description (OCD)............................................................................................................ i
Version History.................................................................................................................................................. ii
Table of Contents ............................................................................................................................................... iii
Table of Tables ................................................................................................................................................... 1
Table of Figures ................................................................................................................................................ 1

1. Introduction ................................................................................................................................................... 3

2. Shared Vision ................................................................................................................................................. 4
   2.1 Overview of the system ............................................................................................................................. 4
   2.2 System Boundary and Environment ...................................................................................................... 6

3. System Transformation .............................................................................................................................. 7
   3.1 Information on Current System ............................................................................................................ 7
   3.2 System Objectives, Constraints and Priorities .................................................................................... 9
   3.3 Proposed New Operational Concept ................................................................................................... 11
   3.4 Organizational and Operational Implications ..................................................................................... 14
Table of Tables

Table 1: The Program Model .............................................................................................................................................. 4
Table 2: Level of Service Goals ........................................................................................................................................... 9
Table 3: Relation to Current System ................................................................................................................................... 10
Table of Figures

Figure 1: Benefits Chain Diagram......................................................................................................................... 5
Figure 2: System Boundary and Environment Diagram........................................................................................... 6
Figure 3: Current Business Workflows Diagram..................................................................................................... 8
1. Introduction

**Purpose of the OCD**

To describe the success-critical stakeholders' (also known as “key stakeholders”) shared vision of the project being undertaken. The OCD will be used constantly throughout the project's life cycle as the proposed system is being developed based on the new operational concepts. In addition, it will be heavily used during the beginning of the project as the requirements are still being gathered and the design of the proposed system is being developed.

This document provides, in detail, the shared visions and goals of the stakeholders of the Yanomamo Interactive DVD/Online Project Team.

The client is Dr. Gary Seaman, head of USC Department of Anthropology. The users of the system are students, professors and researchers. The webmaster will be appointed by the client. The developer is Team #06. Dr. Gary Seaman is project-specific stakeholder and his role is to supply existing project assets to developers.

**Status of the OCD**

The status of the OCD is currently at the Valuation Commitment Package version number 1.0. This is the initial version of the LCP.
2. Shared Vision

2.1 Overview of the system

In order to understand or know what projects or related initiatives are required for program management we create a Program Model as shown below. The model helps in designing and managing programs. Understanding the concept of a program – how it is different from traditional projects and what it brings to them – is the first major step to embarking on the route to effective, proactive benefits management. The Program Model starts out as shown in the table below

Table 1: The Program Model of Yanomamo Interactive DVD/Online

<table>
<thead>
<tr>
<th>Assumptions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) It will help students to learn a new culture</td>
<td></td>
</tr>
<tr>
<td>2) The System will be used to supplement the course material.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Initiatives</th>
<th>Value Propositions</th>
<th>Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Client</td>
<td>• Develop System</td>
<td>• Availability of course material</td>
<td>• Students</td>
</tr>
<tr>
<td>• Professors teaching the course</td>
<td>• Provide access to students enrolled in course.</td>
<td>• Wider/modern reach, increased availability.</td>
<td>• Professors</td>
</tr>
<tr>
<td>• Web Master</td>
<td>• request access to use system in course</td>
<td>• Creates a better learning environment</td>
<td>• Researchers</td>
</tr>
<tr>
<td>• Developers</td>
<td>• Ensure the system is up to date and running.</td>
<td>• The course material is provided in the correct form and available when required.</td>
<td></td>
</tr>
<tr>
<td>• Maintainer</td>
<td>• Provide the system in a DVD</td>
<td>• Increases academic prestige.</td>
<td></td>
</tr>
</tbody>
</table>

Cost:
• Web server cost, Web Hosting cost
• Maintenance cost, Cost of appointing a Maintainer,
• Publishing cost for DVD.

Benefits:
• Increased availability, wider outreach of Course material,
• Better Learning Environment,
• Helps in deeper learning and information access about the culture.
• Increased academic prestige.
Figure 1: Benefits Chain Diagram
2.2 System Boundary and Environment

The system boundary and environment diagram contains a list of services and functions that the project team will be responsible for developing and delivering, as well as the system environment showing the stakeholders' organizations and other systems for which the project has no authority or responsibility, but with which the delivered system must interface in order to deliver the desired benefits. The figure below shows the basic structure context diagram used to define the system boundary. Below is a template and an example of a system boundary and environment diagram.

![System Boundary and Environment Diagram](image)

**Figure 2: System Boundary and Environment Diagram**
3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

Current Infrastructure:

- The client only has the CD-ROM along with the user manual.
- The client also possesses an old Mac machine which is capable of running the software.
- The video file is available and is being rendered at the client’s side for better quality.
- The CD-ROM was unable to run on a virtually setup Windows OS Environment, on Team’s machine.
- The client is unaware if the previous source code is available or not. Client will check and confirm.
- The client is also unaware of any documentation that may have been used for the development of current system. Client will check and confirm.
- The client is also unaware of any assets available for the system, e.g. document files, images, maps, that can be used for development.

3.1.2 Artifacts

<table>
<thead>
<tr>
<th>Artifact</th>
<th>Description</th>
<th>Requested / Shown / Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Software</td>
<td>Software in the form of a CD-ROM.</td>
<td>Received</td>
</tr>
<tr>
<td>User Manual</td>
<td>User manual for operating the software.</td>
<td>Received</td>
</tr>
<tr>
<td>Old Mac System</td>
<td>Mac system with classic Mac OS</td>
<td>Shown and available to Team</td>
</tr>
<tr>
<td>Source Code</td>
<td>Source code for existing software.</td>
<td>Requested</td>
</tr>
<tr>
<td>Project Documentation</td>
<td>Documentation related to the development of the current project.</td>
<td>Requested</td>
</tr>
<tr>
<td>Project Assets</td>
<td>Documentation for the text information, sets of images, maps, graphs and a document with description and mapping of the same.</td>
<td>Requested</td>
</tr>
</tbody>
</table>
3.1.3 Current Business Workflow

![Current Business Workflow Diagram]

Figure 3: Current Business Workflow
3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

<< Provide a brief enumeration of the most important operational capability goals. A “capability” is simply a function or set of functions that the system performs or enables users to perform. To facilitate traceability between capability goals listed in the OCD and references to them from other artifacts (WinWin Agreements, SSAD, LCP, and FED), assign each capability a unique designation (e.g. OC-1) and a short descriptive name. 

<table>
<thead>
<tr>
<th>Capability Goals</th>
<th>Priority Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;&lt; OC-1 Automated Report Generation: The system is capable of generating the report in PDF format. &gt;&gt;</td>
<td>&lt;&lt; Must have&gt;&gt;</td>
</tr>
</tbody>
</table>

3.2.2 Level of Service Goals

<< Identify in a table the desired and acceptable goals for the proposed new system's important levels of service. Example can be found in ICSM EPG. >>

<table>
<thead>
<tr>
<th>Level of Service Goals</th>
<th>Priority Level</th>
<th>Referred WinWin Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2.3 Organizational Goals

<< List briefly the broad, high-level objectives and aspirations of the sponsoring organization(s) and any organizations that will be using and maintaining the new system. The goals should be expressed in terms of (or referenced to) the Value Propositions, and should only include the goals that indicate what the organization wishes to achieve by having the proposed system (e.g., increase sales, profits, and customer satisfaction). Each goal in this section should relate to one or more of the Value Propositions. >>
Provide a brief enumerated list of goals. To facilitate traceability, assign each goal a unique number (e.g. OG-1).

For example:
OG-1: Increase sales and profits via more efficient order processing.
OG-2: Improve speed via faster order entry.

More examples can be found in ICSM EPG. >>

OG-1: <Goal>

### 3.2.4 Constraints

<< Identify constraints of the project. Constraints will be derived from your WinWin negotiation and/or client’s meeting. Constraint is a limitation condition that you have to satisfy for your development project. Examples of Constraints are:

**CO-1: Windows as an Operating System:** The new system must be able to run on Windows platform.
**CO-2: Zero Monetary Budget:** The selected NDI/NCS should be free or no monetary cost.
**CO-3: Java as a Development Language:** Java will be used as a development language. >>

### 3.2.5 Relation to Current System

<< Summarize the relations between the current and new systems in a table. Include key differences between the current and new roles, responsibilities, user interactions, infrastructure, stakeholder essentials, etc. Example of Relation to Current System can be found in ICSM EPG.>>

**Table 3: Relation to Current System**

<table>
<thead>
<tr>
<th>Capabilities</th>
<th>Current System</th>
<th>New System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles and Responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Interactions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Essentials and Amenities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future Capabilities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.3 Proposed New Operational Concept

<< This section contains information about the transformation of new operational concept that will be introduced to the system. >>

3.3.1 Element Relationship Diagram

<< The element relationship diagram summarizes the major relationships among the primary elements and external entities involved in the proposed new system. The entities include actors or users as well as external systems and components that interface with the system. The dashed box represents your proposed system, the boxes outside the dashed box represent external element that your system has to communicate with.

Note that the example is more in the style of a data flow diagram than in the style of Chen's ER diagram or of an EER diagram; any of these notations is fine, as the content is far more important than the style. The followings are an example and a template for Element Relationship diagram. >>
Figure 1: Element Relationship Diagram of Transportation Grant Fund system

Figure 2: Element Relationship Diagram of the Los Angeles Community Garden Inventory and Locator
3.3.2 Business Workflows

<< Characterize the new operational concept in terms of the flow of works through the proposed new system. The workflows will be illustrated in the form of business activity diagram(s). It will show the overview of the business activities flowing in proposed new system. As appropriate, indicate future capabilities of the new system or major differences from the current system as well. >>
3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

<< Identify and describe any significant changes in organizational structure, authority, roles, and responsibilities that will result from transitioning to the new system. Identify the major operational stakeholders affected by the changes, and indicate their concurrence with the changes. Examples of organizational transformations:

- The need to hire a new system maintainer to take care of the system
- The elimination of the need for current, time-consuming management approvals before initiating delivery actions >>
3.4.2 Operational Transformations

<< Identify any significant changes in operational procedures and workflows that will result from transitioning to the new system. Identify major operational stakeholders affected by the changes, and indicate their concurrence with the changes.

Examples of operational transformations:

- Having the financial, delivery, and administrative processing concurrently progress rather than sequentially to decrease response time, subject to the check for payment validity before shipping an order.

- The option for new potential volunteers to fill out the applications online, or on paper and submitted in person. >>