

Operational Concept Description (OCD)

LiveRiot Video Editing System and social networking enhancement

Team 04

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Version History

Date	Author	Version	Changes made	Rationale
09/25/13	Team04	1.0	<ul style="list-style-type: none"> • Tailored from IICSM OCD Template • Section 1 added • Section 2 added • Section 3.1 added 	<ul style="list-style-type: none"> • To summarize and present the analysis of current system
10/10/13	Ye Tian	2.0	<ul style="list-style-type: none"> • Section 1.2 – Status of OCD updated • Section 3.2, 3.3, 3.4 added 	<ul style="list-style-type: none"> • Add new operation concept to the existing system
10/19/13	Ye Tian	2.1	<ul style="list-style-type: none"> • Section 1.2 – Status of OCD updated • Section 2.3 – System boundary and environment changed to make it more precise • Section 3.2.1 – Some capability goals which don't belong to our app deleted • Section 3.3.2 – Business flow out of our scope deleted • 	<ul style="list-style-type: none"> • Narrow the requirement scope to what we are working on in order to avoid scope creeping
12/08/13	Ye Tian	2.2	<ul style="list-style-type: none"> • Few update 	<ul style="list-style-type: none"> •

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1. Introduction

1.1 Purpose of the OCD

This document provides, in detail, the shared visions and goals of the stakeholders of the LiveRiot Video Editing System and social networking enhancement. The success-critical stakeholders of the project are LiveRiot, as the project owner; musicians, fans and venues, as users; members of CSCI 577a Team 04, as developer.

1.2 Status of the OCD

The status of the OCD is currently at the under-construction version number 2.1 in the Exploration Phase. The scope has been narrowed to social networking enhancement since another team is working on video editing part of this project. Currently the choice of this system's maintainer has not yet been decided. The most likely option is that LiveRiot will maintain it themselves.

2. Shared Vision

2.1 Overview of the system

Table 1: The Program Model

<ul style="list-style-type: none"> Fans would like to upload, edit videos on LiveRiot, Musicians would like to communicate on LiveRiot, Venues and musicians would use LiveRiot to improve their business 			
Stakeholders	Initiatives	Value Propositions	Beneficiaries
<ul style="list-style-type: none"> Developers LiveRiot Venues Fans Musicians Record labels Third-party E-commerce Service Providers 	<ul style="list-style-type: none"> Develop an online live music shows editing and sharing system Manage high user traffic Provide assistance to monetize live shows Create working campaign Partner musicians with venues and record labels Develop websites and apps with social functions 	<ul style="list-style-type: none"> Create a platform for high quality videos Increase exposure of unsigned artists Decrease piracy Maintain musicians' control over their art Enhance communications between musicians and fans Increase attendance to venues More cooperation between venues and record labels 	<ul style="list-style-type: none"> Musicians Venues Fans Record labels
Costs		Benefits	
<ul style="list-style-type: none"> Development costs Maintenance costs Hardware costs (recording devices) Web services costs Marketing campaign costs 		<p>Decreased:</p> <ul style="list-style-type: none"> Piracy <p>Increased:</p> <ul style="list-style-type: none"> Attendance at venues Musicians' control over their art Exposure of unsigned artists Quality of live show videos 	

2.2 Benefits Chain Diagram

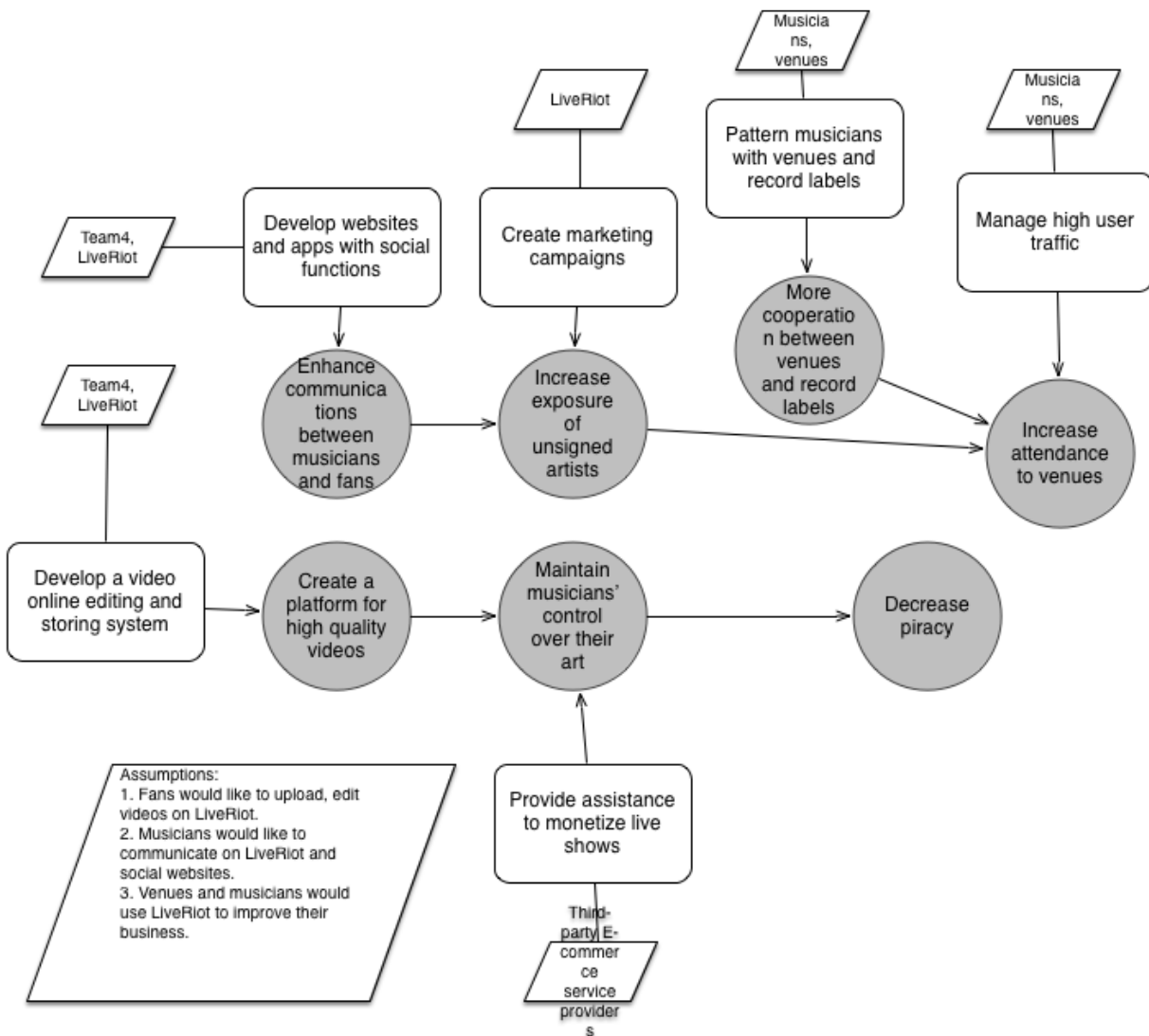


Figure 1: Benefits Chain Diagram

2.3 System Boundary and Environment

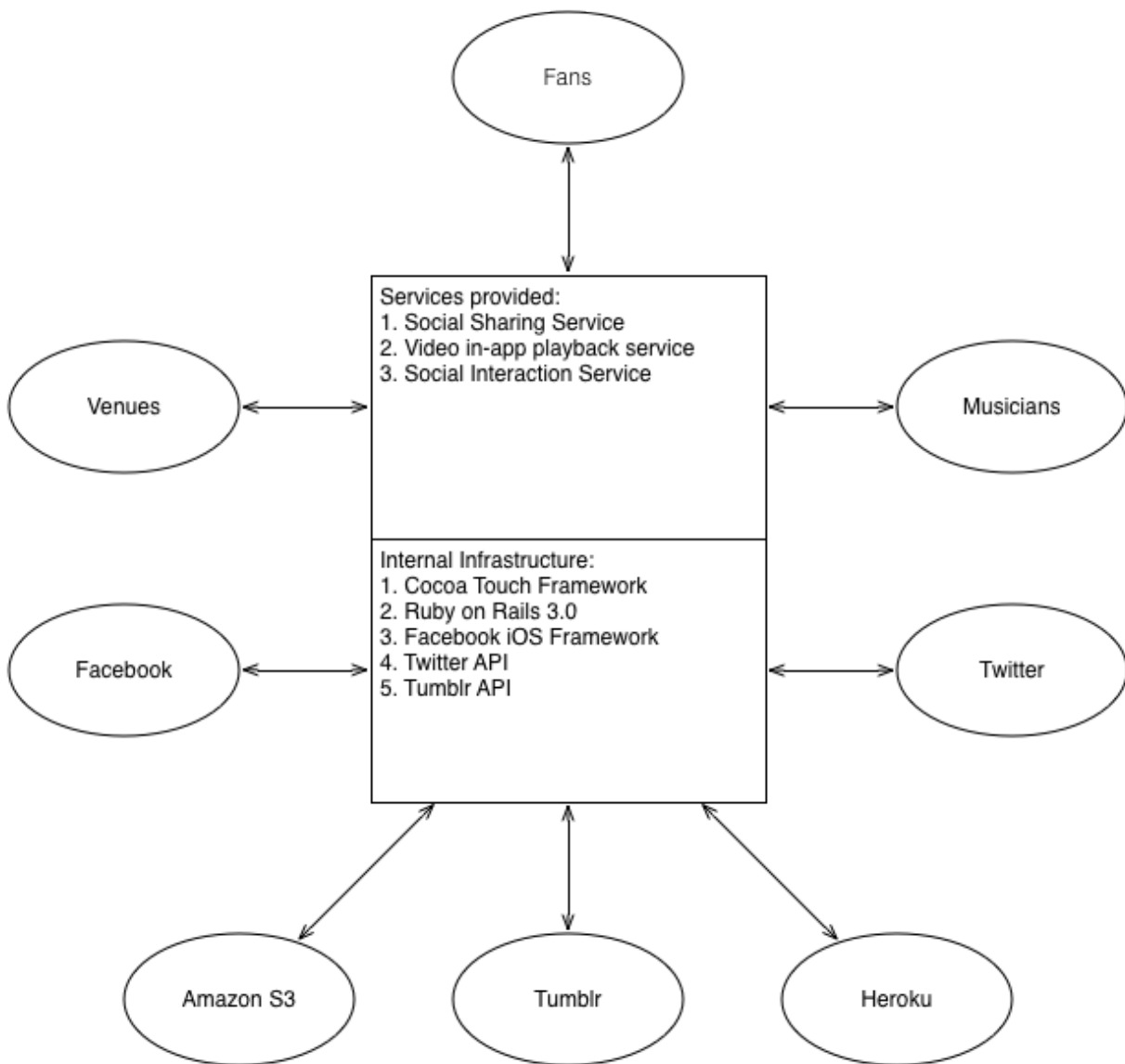


Figure 2: System Boundary and Environment

3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

1. Server side
 - 1) Operating system: Linux version 3.8.11-ec2 (gcc version 4.4.3 (Ubuntu 4.4.3-4ubuntu5.1))
 - 2) Database: PostgreSQL v 9.2.
 - 3) Web Server: written in Ruby on Rails and run on Amazon utilizing EC2 and S3
 - 4) Video Editor: Node.js and Express
 - 5) Digital Signal Processing: Faust
2. Client side
 - 1) Apps: video record app, audio record app
 - 2) Operating system: iOS
 - 3) Database: Sqlite
 - 4) Development platform: Mac OS

3.1.2 Artifacts

1. User Manual
Teach and guide the user how to use the product
2. Functioning Software System
The video recording app and website
3. System and Software Architecture Description
Object-oriented analysis and design (OOA&D) of the system being developed
4. Email notification system
Notify users when they create account and when new message come to them
5. Social video app template
Third-party video app templates

3.1.3 Current Business Workflow

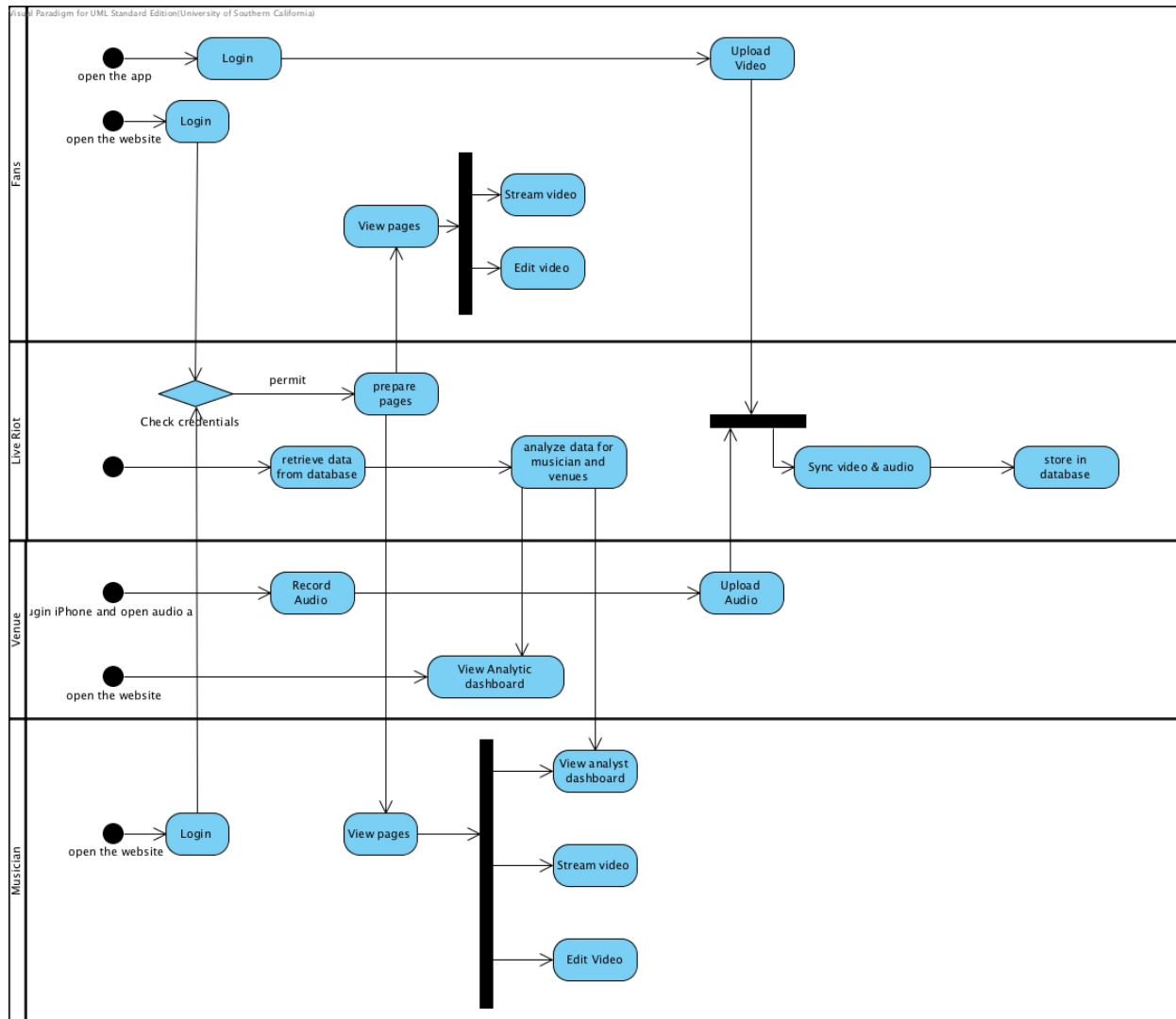


Figure 1: Current Business Workflow Diagram

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

Table 2: Capability Goals

Capability Goals	Priority Level
OC-1 Social function: The system is capable of sharing videos to famous social media, such as Facebook and Twitter.	Must have
OC-2 Featured videos lists: The app is capable of listing videos with features provided by LiveRiot server.	Must have
OC-3 Video tagging: The app is capable of tagging videos captured by fans and venues for effective searching.	Should have
OC-4 Video searching: The system is capable of searching for bands by genre, location, keywords and band name.	Should have

3.2.2 Level of Service Goals

This section is not applicable because clients didn't specify any level of service goals.

3.2.3 Organizational Goals

OG-1: Provide a platform for concert videos with high quality audio

OG-2: Increase venues' attendance

OG-3: Decrease piracy of musician works

3.2.4 Constraints

CO-1: App: App will be provided on iOS appstore

CO-2: Server: Website will be held on Amazon EC2 and written in Node.js

CO-3: Database: The backend database must use PostgreSQL

CO-4: Operating system: The system will run on Linux

3.2.5 Relation to Current System

Table 3: Relation to Current System

Capabilities	Current System	New System
Roles and Responsibilities		There aren't any new roles in the enhanced system.
User Interactions	Fans used video record app to record videos and upload them to LiveRiot.	Fans use video record app to record videos, upload them to LiveRiot, watch their own and others' videos and share them on social websites like Facebook and Twitter.
Infrastructure		Using the same infrastructure to support the web interface and iOS app.

Stakeholder Essentials and Amenities	Users can only share their videos by pasting the websites' links.	Users (Fans, musicians and venues) will be able to share their videos more conveniently and timely.
Future Capabilities	Users have limited methods to explore their business and build relations with one another.	Apart from plenty ways to edit and polish videos, users in the community will be able to have more methods to share their works

3.3 Proposed New Operational Concept

3.3.1 Element Relationship Diagram

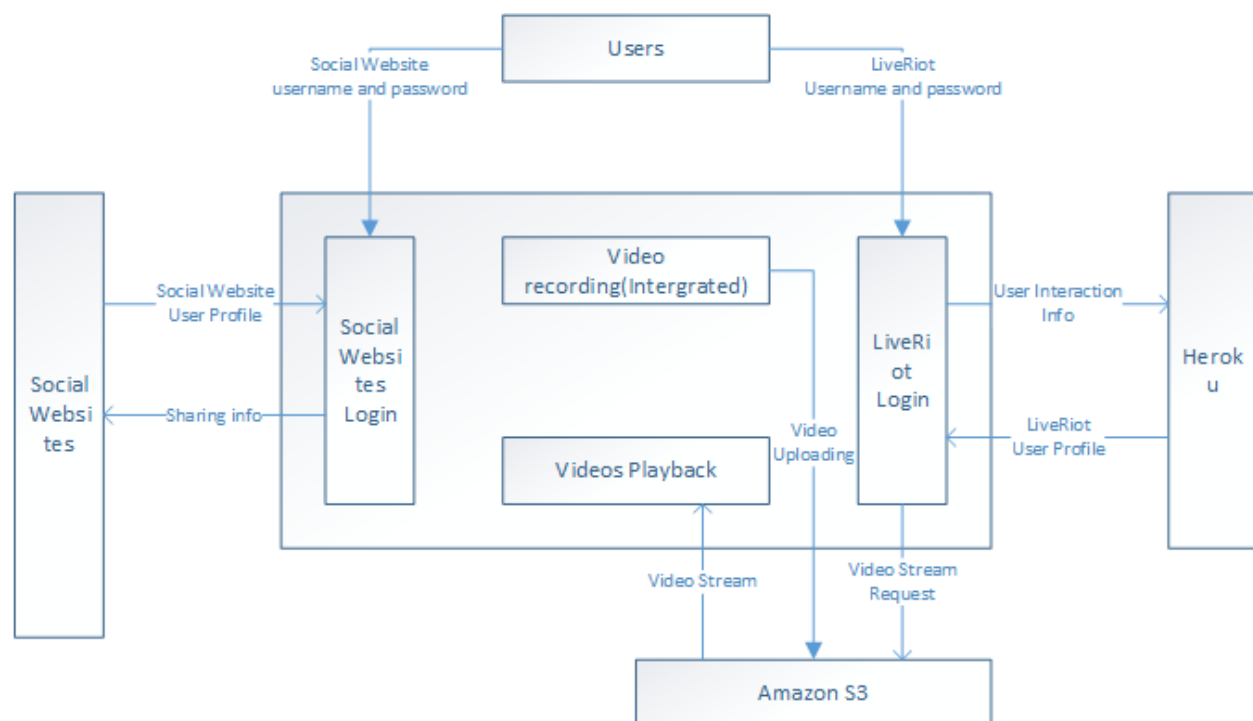


Figure 2: Element Relationship Diagram

3.3.2 Business Workflows

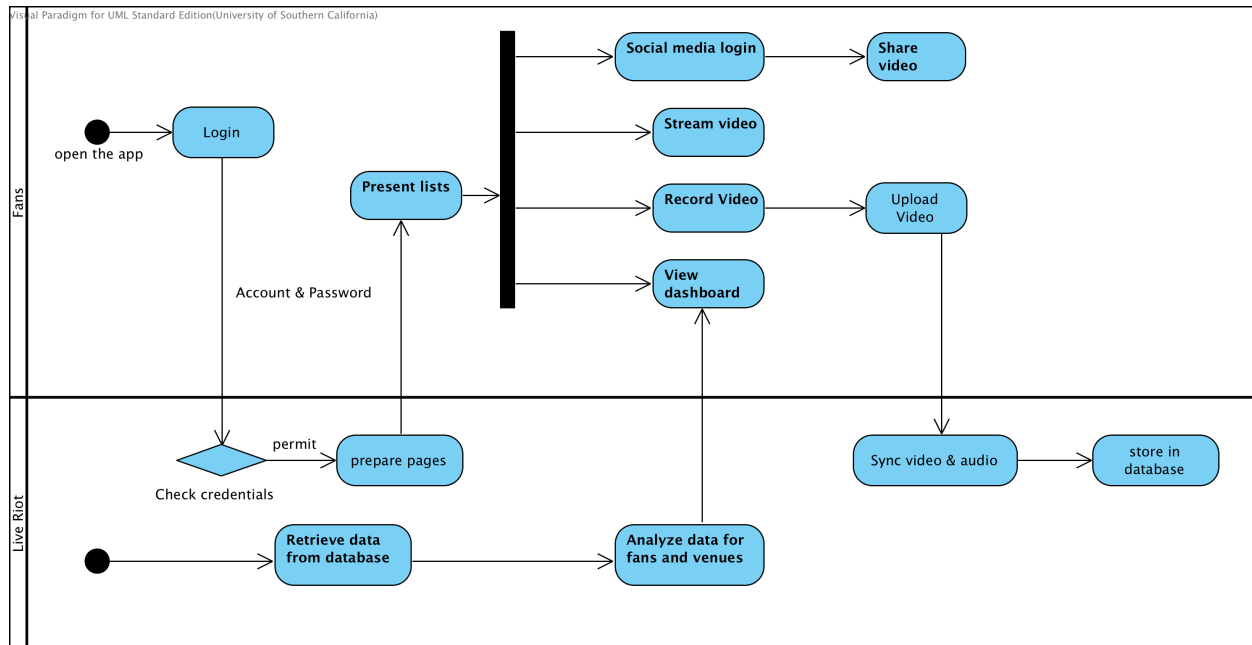


Figure 3: New Business Workflow Diagram

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

There won't be any significant organizational transformations since there was already such a video record app for fans and the whole system is just going through some enhancement.

3.4.2 Operational Transformations

- Fans will need to adapt to the new user interface of video record app, since iOS has been upgraded to a new version.
- After watching a video or reading the summary, fans can choose to share it to social websites (Facebook, Twitter).
- There will be featured video lists for fans, whose features (Top 10, newest) are fixed.
- Fans will be able to view their videos on both the website and the app.
- Searching for videos by tags, attributes (band name, genre, location and keywords) rather than going to various musicians' pages to watch videos.

