Architecture Assessment Report

Prepared by

International Technology Ventures, Inc.

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# Executive Summary

# SWOT Analysis Summary

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats – and is a well-known acronym in the world of analysis. SWOT Analysis seeks to identify critical areas for review by segmenting the analysis into these four vectors.

## Strengths

## Weaknesses

## Opportunities

## Threats

# Design Concerns

## Forces

### Change Drivers

### Frequency of Change

### Areas of Change

## Constraints

### Time

### People

### Budget

### Organizational

### Legal

### Legacy

# Infrastructure Architecture

## Network

### Firewalls

### Virtual Private Networks (VPNs)

### Network Segmentation

### Load Balancers

## Server Hardware

### Server XYZ

|  |  |
| --- | --- |
| Server Name |  |
| IP Address |  |
| CPU Count |  |
| CPU Speed |  |
| Memory |  |
| Memory (L2 cache) |  |
| Disk Space (total) |  |
| Disk Space (free) |  |
| Operating System |  |
| Latest Patch Applied |  |
|  |  |

## Virtualization

## Storage

### Serverless

## Monitoring

## Backup/Recovery

# Data Architecture

## Data Flows - Overview

## Data Sources - Internal

## Data Sources – External

## Canonical Message Models

## Data Models - Conceptual

## Data Models - Logical

## Data Models - Pysical

# Enterprise Architecture

## Overview

# Application Architecture

# System Archtecture

# Batch Processing

## Batch Jobs - Daily

### Schedule Overview

## Batch Jobs – Weekly

### Schedule Overview

## Batch Jobs – Monthly

### Schedule Overview

## Batch Jobs – Quarterly

### Schedule Overview

## Batch Jobs - Annually

### Schedule Overview

## Batch Jobs – Special

## Batch Jobs- Ad Hoc

# Integration Architecture

## Batch Integrations - Inbound

### Patterns Utilized

#### Inventory

## Batch Integrations – Outbound

### Patterns Utilized

#### Inventory

## APIs – Internal

### Patterns Utilized

#### Inventory

## APIs – External

### Patterns Utilized

#### Inventory

## Messaging

### Patterns Utilized

#### Inventory

## Event Driven Architecture

### Patterns Utilized

#### Inventory

## Extract-Transform-Load (ETL)

### Patterns Utilized

#### Inventory

# Data Analytics and reporting

# Security

## Facilities

## Authentication

## Authorization

### Roles

### Permissions

## Multi-Factor Authentication (MFA)

## Password Reset

## User Account Lockout

### Conditions / Triggers

## User Account Unlock

### Process

## User Termination – Access revocation

## Browsers

## Application Servers

## Database Servers

## Encryption

### Encryption At-Rest

### Encryption In-Motions

### Post-Quantum Encryption (PQC)

## Network

### Threat Management Gateway

### Firewall

### Load Balancer

### Secrets Manageemnt

### Certificate Mangement

### DDoS

### Data Loss Prevention (DLP)

### Intrusion Detection

### IP Blacklist

### IP Whitelist

# Operations

## Monitoring & Alerting

## Deployment Processes

## Job Scheduling

## File Transfers

## Logging

## Incident Management

# Performance

## Transaction Frequency

## Transaction Volume

## SLA: Response Time Requirements

## Data Storage Requirements

## Data Caching

## Content Distribution Network (CDN)

## CPU Utilization

## Memory Utilization

## I/o Stats

## Network Bandwidth Utilization

## Thread Utilization

## Database Connection pooling

# Software Development

## Project Management

## Configuration Management

## Version Control System (VCS)

## Release Management

## Skills and Training

## Continuous Integration

## Continuous Deployment

# Testing

## Test Driven Design

## Unit Testing

## Integration Testing

## Performance Testing

# Findings

# Recommendations

## Urgent

## Important

## Suggested