**Project Management Plan**

**Financial Dashboard 2.0 – Auto Industry**

**<Simply-bi>**

**Simply-Bi**

**780 S Federal St, Suite 1007**

**Chicago, Il - 60605**

**PLAN CREATION DATE: September 13, 2018**

|  |  |  |
| --- | --- | --- |
| **Version History** | | |
| **Version Number** | **Version Date** |  |
| **2.0** | **October 26, 2018** |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Introduction

**Context:**

* A significant number of business intelligence tools available
* More and more companies are adopting them
* Most of those companies struggle to really seize their benefits

As a result of this capstone, Simply-BI requires to provide an additional layer to those business intelligence tools for companies to facilitate the creation of tangible added value to their analysis

Project deliverable(s) will be consist of developing a dashboard, fetching data to develop important KPI’s for publicly traded auto companies on the US Exchange, which in turn will be used by privately held equity firms to monitor their own performances. Transform and integrate the data into a cloud-based server. Consume and build data analytical models leveraging cloud-based business intelligence tools. Create Text Analytics module to alert when key components of the business are deemed off.

The project deliverables will address the sponsor needs by building and providing solid data architecture for production mode, which will then later be improved or expanded on the ad-hoc requirements of sponsor’s client companies.

Tentative Technologies to be used, may change going forward in the project.

* **Cloud-based server used:** Azure MySQL
* **Project Management:** Trello
* **Project Content Version Control:** Box, GitHub
* **Programming language:** Python, SQL
* **Cloud-based business intelligence tools:** Qlik, Mode Analytics, PowerBI
* **Target user group:** users of business intelligence tools

# Project Management Approach

The Project Sponsor is the Head of Data Science at AXA Partners Americas who also does numerous independent research projects. The Sponsor is responsible for the overall project and will provide direct supervision to the project team. The sponsor agreed to meet on a weekly basis to get the status update and also agreed to be available on call in case of emergency.

The IDS 560 project team consists of (Aditya Bhandari, Mallika Trakanpasakul, Akshat Verma, Prakher Gupta). The team member who will serve as primary Point of Contact is Akshat Verma.

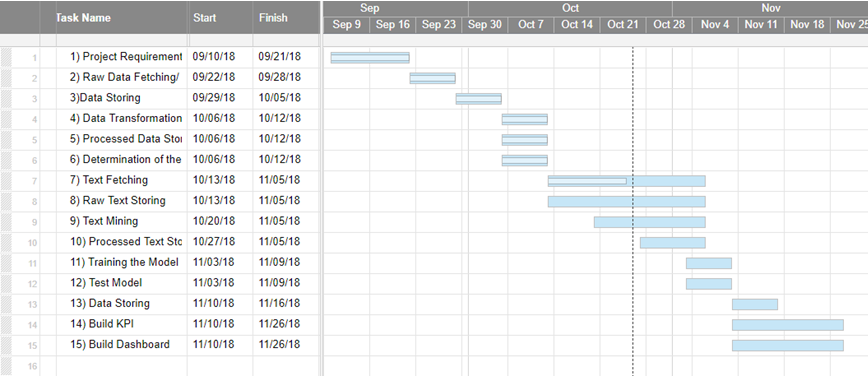
The project team’s point of contact has responsibility for coordinating team efforts to ensure the goals of the project are met and for all defined team communications with the project sponsor and course instructor.

The project team responsibilities will include: data determination, data acquisition, data prep, modeling, testing, BI reporting, etc.. All project and subsidiary management plans will be reviewed and approved by the project sponsor. All funding decisions will also be made by the project sponsor.

# Milestone List

The below chart lists the major milestones for the Project. This chart is comprised only of major project milestones such as completion of a project phase or gate review. There may be smaller milestones which are not included on this chart but are included in the project schedule and WBS. If there are any scheduling delays which may impact a milestone or delivery date, the project manager must be notified immediately so proactive measures may be taken to mitigate slips in dates. Any approved changes to these milestones or dates will be communicated to the project team by the project manager.

|  |  |  |
| --- | --- | --- |
| Milestone | Description | Date |
| Complete Requirements Gathering | All requirements for the Project must be determined to base design upon | 09/21/18 |
| Complete Data Acquisition and Preparation | Data Pipelines and ETL procedures to be stored for automatic data fetching, cleaning, and storing | 11/02/18 |
| Complete Modeling and Testing | Fine tuning of models used in data analysis with development code and configurations | 11/16/18 |
| Complete Model Deployment and Handoff | Completed software and documentation transitioned to operations group to begin production | 11/26/18 |



# Schedule Baseline and Work Breakdown Structure

The Project schedule will be derived from the Work Breakdown Structure with input from <all project team members>. The schedule will be reviewed and approved by the Project Sponsor. The schedule will be maintained as a <MS Project/other> Gantt Chart by the Project Team Point of Contact.

Any proposed changes to the schedule will follow a defined change control process. Change requests will be submitted to the Project Team Point of Contact. The Point of Contact and team will determine the impact of the change on the schedule, cost, resources, scope, and risks. If it is determined that the impacts will exceed the boundary conditions then the change will be forwarded to the Project Sponsor for review and approval.

If the change is approved by the Project Sponsor then it will be implemented by the Point of Contact who will update the schedule and all documentation and communicate the change to all stakeholders in accordance with the Change Control Process.

The Project Schedule Baseline and Work Breakdown Structure are provided in Appendix A, Project Schedule and Appendix B, Work Breakdown Structure.

# Change Management Plan

The following steps comprise the Project Team change control process for all projects and will be utilized on the Financial Dashboard 2.0 – Auto Industry project:

Step #1: Identify the need for a change (Any Stakeholder)

Requestor will report a change request to the Point of Contact

Step #2: Log change in the weekly status report (Point of Contact)

The Point of Contact will maintain a log of all change requests for the duration of the project

Step #3: Conduct an evaluation of the change (Point of Contact, Project Team, Requestor) The Point of Contact will conduct an evaluation of the impact of the change to cost, risk, schedule, and scope

Step #4: Submit change request to Project Sponsor (Point of Contact)

The Point of Contact will submit the change request and analysis to the Project Sponsor for review

Step #5: Project Sponsor decision (Project Sponsor)

The Project Sponsor will consider the proposed change and decide whether or not it will be approved based on all submitted information

Step #6: Implement change (Point of Contact)

If a change is approved by the Project Sponsor, the Point of Contact will update and re-baseline project documentation as necessary as well as ensure any changes are communicated to the team and stakeholders

Any team member or stakeholder may submit a change request for the Project. The Project Sponsor will chair the CCB and any changes to project scope, cost, or schedule must meet his approval. All change requests will be logged in the change control register by the Project Manager and tracked through to completion whether approved or not.

# Communications Management Plan

This Communications Management Plan sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project and will be updated as communication requirements change. This plan identifies and defines the roles of project team members as they pertain to communications. It also includes a communications matrix which maps the communication requirements of this project, and communication conduct for meetings and other forms of communication. A project team directory is also included to provide contact information for all stakeholders directly involved in the project.

The Point of Contact will take the lead role in ensuring effective communications on this project. The communications requirements are documented in the Communications Matrix below. The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it, and to whom to communicate.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Communication Type** | **Description** | **Frequency** | **Format** | **Participants/ Distribution** | **Deliverable** | **Owner** |
| Weekly Status Report | Email summary of project status | Weekly | Email | Project Sponsor, Team and Stakeholders | Status Report | Point of Contact |
| Weekly Team Member Updates | Meeting to review action register and status | Weekly | In Person | Project Team | Updated Action Register | Point of Contact |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Project team directory for all communications is:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Title** | **E mail** | **Office Phone** | **Cell Phone** |
| Aditya Bhandari | Data Engineer | [Abhand9@uic.edu](mailto:Abhand9@uic.edu) | (312)823-0622 | (312)823-0622 |
| Akshat Verma | Business Analyst | [Averma30@uic.edu](mailto:Averma30@uic.edu) | (203)502-9519 | (203)502-9519 |
| Prakher Gupta | Data Analyst | [Pgupta37@uic.edu](mailto:Pgupta37@uic.edu) | (312)818-9534 | (312)818-9534 |
| Mallika Trakanpasakul | BI Consultant | [Mtraka2@uic.edu](mailto:Mtraka2@uic.edu) | (312)792-5719 | (312)792-5719 |
| Renaud Viot | Project Manager/Advisor | [renaud.voit@simply-bi.com](http://renaud.voit@simply-bi.com) | (646)220-5676 | (646)220-5676 |
| Kyle Cheek | Course Instructor | [kdcheek@uic.edu](http://kdcheek@uic.edu) | (312)355-0246 | (312)355-0246 |
|  |  |  |  |  |
|  |  |  |  |  |

Communications Conduct:

Meetings:

The Point of Contact will distribute a meeting agenda at least 24 hours prior to any scheduled meeting and all participants are expected to review the agenda prior to the meeting. During all project meetings a timekeeper will ensure that the group adheres to the times stated in the agenda and the recorder will take all notes for distribution to the team upon completion of the meeting. It is imperative that all participants arrive to each meeting on time and all cell phones should be turned off or set to vibrate mode to minimize distractions. Meeting minutes will be distributed no later than 24 hours after each meeting is completed.

Email:

All email pertaining to the Project should be professional, free of errors, and provide brief communication. Email should be distributed to the correct project participants in accordance with the communication matrix above based on its content. All attachments should be in one of the organization’s standard software suite programs and adhere to established company formats. If the email is to bring an issue forward then it should discuss what the issue is, provide a brief background on the issue, and provide a recommendation to correct the issue. The Point of Contact should be included on any email pertaining to the Project.

Informal Communications:

While informal communication is a part of every project and is necessary for successful project completion, any issues, concerns, or updates that arise from informal discussion between team members must be communicated to the Project Manager so the appropriate action may be taken.

# Project Scope Management Plan / Schedule Management Plan

Project scope and schedule will be managed through the weekly status updates provided to the Project Sponsor. Variances to the approved scope or schedule will be implemented through the Change Control Process.

# Quality Management Plan

All members of the project team will play a role in quality management. It is imperative that the team ensures that work is completed at an adequate level of quality from individual work packages to the final project deliverable. The following are the quality roles and responsibilities for the Project:

The Project Sponsor is responsible for approving all quality standards for the Project. The Project Sponsor will review all deliverables to ensure compliance with established and approved quality standards. Additionally, the Project Sponsor will sign off on the final acceptance of the project deliverable.

The Point of Contact is responsible for quality management throughout the duration of the project. The Point of Contact is responsible for ensuring all tasks, processes, and documentation are compliant with the plan. The Point of Contact is also responsible for communicating and tracking all quality standards to the project team and stakeholders.

The remaining members of the project team, as well as the stakeholders will be responsible for assisting the Point of Contact in the establishment of acceptable quality standards. They will also work to ensure that all quality standards are met and communicate any concerns regarding quality to the Project Manager.

Quality assurance for the Project will ensure that all processes used in the completion of the project meet acceptable quality standards. These process standards are in place to maximize project efficiency and minimize waste. If any changes are proposed and approved by the Project Sponsor, the Point of Contact is responsible for communicating the changes to the project team and updating all project plans and documentation.

# Risk Management Plan

Every effort will be made to proactively identify risks ahead of time in order to implement a mitigation strategy from the project’s onset. The most likely and highest impact risks were added to the project schedule to ensure that the assigned risk managers take the necessary steps to implement the mitigation response at the appropriate time during the schedule. Risk managers will provide status updates on their assigned risks in the bi-weekly project team meetings, but only when the meetings include their risk’s planned timeframe.

Upon the completion of the project, during the closing process, the project manager will analyze each risk as well as the risk management process. Based on this analysis, the project manager will identify any improvements that can be made to the risk management process for future projects. These improvements will be captured as part of the lessons learned knowledge base.

# Risk Register

Documents results of the qualitative(prioritizing by probability and by impact) and quantitative(Analyzing effects in objectives) Risk Analysis and Risk Response Planning.

Helps us in tackling the “Triple Constant” – Scope(deliverables), Time, and Cost which in turn impacts the overall quality of the project.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Risk** | **Description** | **Category** | **Cause** | **Probability** | **Impact** | **Proposed Responses** | **Owner** | **Status** |
| 1. | DB Change | MongoDB complexity to store tabular data | Data Preparation | Data Fetching and Storing | 0.8 | Critical | Move to MySQL | Mallika | Closed |
| **2.** | Data Volume | Only 9 Statements/Company | Modeling | Annual Data | 0.4 | Moderate | Use Quarterly 10-Qs/SEC available journals | Akshat | Closed |
| **3.** | Field Inconsistency | Inconsistent field names across the companies | Data Acquisition/Transformation | Not regulated by SEC, non- US companies | 0.9 | Critical | Identify groups and harmonize fields to make them similar | Aditya | Closed |
| **4.** | Text Fetching Module | Inconsistent file formats | Data Acquisition/Transformation | Data not present in single format | 0.7 | Critical | Use .htm format throughout to generalize text fetching | Prakher | Open |

Source: PMI

# 

# Project Team Roles and Responsibilities

**Point of Contact (Business Analyst)** – Akshat Verma, responsible for all management for the Project.

* The Project Manager is responsible for planning, creating, and/or documenting all work activities, variances, tracking, reporting, communication, performance evaluations, staffing, and internal coordination with functional managers.
* Reporting, Making Software Installation Guides and Product Handover

**Data Engineer,** Aditya Bhandari – Data Acquisition, Data Transformations, Data Storing, and Data Wrangling

**BI Consultant,** Mallika Trakanpasakul – Designing KPIs, Dashboard Presentation, and Data Analysis

**Data Analyst,** Prakher Gupta – Data Modeling, Model Deployment and Knowledge Transfer

# Resource Calendar

The Project will require all project team members for the entire duration of the project although levels of effort will vary as the project progresses. The Project is scheduled to last 16 weeks. Additional resources may be requested from the Project Sponsor on an as-needed basis.

# Quality Baseline

The Project must meet the quality standards established in the quality baseline. The quality baseline is the baseline which provides the acceptable quality levels of the Project Sponsor. The project deliverable must meet or exceed the quality baseline values in order to achieve success.

|  |  |  |
| --- | --- | --- |
| **Item** | **Acceptable Level** | **Comments** |
| Smart Dashboard | 5 KPIs/company | Each KPI will be added as a widget card |
| Model Accuracy | 90% Minimum | Models trained to identify the KPIs |
|  |  |  |

# Sponsor Acceptance

Approved by the Project Sponsor:

Renaud Viot Date: 9/26/2018

Simply BI

Founder, CEO