

FPD Drinking Metrics Dashboard – Project Plan
By Jonathan Sax
MSDS 475 – Project Management
26 August 2023

Table of Contents

EXECUTIVE SUMMARY	2
PROJECT SCOPE STATEMENT	5
PRIORITY MATRIX	7
WORK BREAKDOWN STRUCTURE (WBS) & WBS COST SPREADSHEET	8
COMMUNICATION MANAGEMENT PLAN & PROJECT ORGANIZATION CHART	11
ACTIVITY-ON-NETWORK (AON) DIAGRAM	13
RISK ASSESSMENT	15
FEASIBILITY AND CONCLUSION	19

Executive Summary

Business Problem and Solution

Here at FPD Beverage Company, our corporation generates hundreds of millions of dollars in revenue annually via three product lines (coffee, tea, and organic tea) sold in several packaging configurations to vastly different retailers: large-box, specialty chain, and grocery chains. With thousands of transactions occurring on a daily basis through multiple channels, there are thousands of opportunities for errors and mishaps from the moment our coffee, tea, and organic tea leave the production line.

Lately, our large-box retailers have been complaining about these issues. In order to to propel our drinking metrics to the very top of the beverage industry, a custom FPD DM state-of-the-art dashboard will alleviate these problems by utilizing the latest technology there is to offer.

This dashboard will effectively synchronize supply chain management, enterprise resource planning, operations, sales, and data analytics teams with a custom layout tailored to our company. By harnessing the power of the QlikSense cloud-based AI toolkit, capabilities of the dashboard include but are not limited to:

- eliminating faulty/inaccurate orders and late deliveries
- providing self-service data-prep capabilities and cloud data storage
- visualizing and analyze data with cutting-edge UX and geospatial analysis
- providing mobile app that supports offline analysis

Summary of Documents and Duration

Enclosed in this project plan is a comprehensive [work breakdown structure \(WBS\)](#) and corresponding [WBS cost spreadsheet](#) clearly laying out the planning, designing, data sourcing/analyzing, model validating, dashboard developing, training, and deploying phases of the project, along with their anticipated costs. The project will begin on July 1, 2023, and will take six months to complete. It is absolutely critical that the dashboard is launched by the end of 2023. In order to finish on time, we can add resources to reduce duration or “crash” certain parts of the project if necessary, as discussed in the below budget request.

A [priority matrix](#) will clearly lay out which aspects of the project will be constrained, enhanced, and accepted within the confines of our resources. The ensuing [communication management plan](#) will lay out which team members will be in charge of communication of what information to specific target audiences and when, denoting the method of communication in each instance.

An [activity-on-node \(AON\) network diagram & table](#) will demonstrate the traditional waterfall project management approach we will take in completing the dashboard. From there, a [project baseline budget](#) will represent the overall time-phased plan with cost, schedule, and resource allocation. This will serve as an anchor point for measuring performance. A [Gantt Chart](#) with milestones will complement the baseline budget.

As is true with any multi-month project, problems will likely arise. A [Project Risk Checklist](#) will be developed to mitigate these problems as they occur. A [hierarchical representation of the project organization chart](#) will be included. Finally, the [project plan self assessment](#) will demonstrate the overall likelihood of the project’s success.

Budget Request & Risk Contingency

This time-phased project includes nine major activities that will take place throughout a 24-week schedule. A \$250,000 budget was allocated toward the project. Fortunately, after our PMO Leads conducted several simulations of the project schedule, we were able to crash one activity (Test Dashboard) in order to not only complete the project on time, but also finalize the dashboard under budget, coming in at a total estimation of \$248,141.

With that said, this budget request includes a 10% contingency, citing possible risk of delays throughout the Test Dashboard and Develop Analytics Models nodes. This means that the entire project may need as much as $\$248,141 * 1.1 = \$272,955$ in order to complete in six months. For a full cost-estimating breakdown, including each activity's responsible project members, their estimated durations, interruptions, labor rates, and total costs, please reference Figure 3.

Key Assumptions

All team members of FPD DM have readily available access to all data necessary. All team members are trained with sufficient knowledge of project management and QlikSense AI toolkit. Team members are expected to continuously stay in communication on their findings, along with any updates that might affect the direction of the project through the six-month duration.

Recommendations and advise from stakeholders are taken into account every week.

FPD Drinking Metrics Team

Management and Team Members

Barbara Coffee, CEO
Paul Reporting, CFO/Project Sponsor
Maya Cappuccino, IT Manager
Jasmine Lavender, ERP Application Analyst
Salvatore Macchiato, Database Analyst
Dennis Hibiscus, Supply Chain Analyst
Kimberly Lapsang, Sales Operations Analyst
Jon Sax, Project Manager

Executive Oversight Committee (EOC)

Barbara Coffee, CEO
Paul Reporting, CFO/Project Sponsor
Jefferson Chalmers, COO/Stakeholder
Rosy Rooibos, CDAO/Stakeholder
Herb Grey, Head of Product/Stakeholder

Project Scope Statement

Product Objective

FPD Drinking Metrics will create a dashboard for sales and operations management to support decision making and planning.

There are several deliverables and milestones that will follow a hybrid estimating approach.

Project Deliverables

- Real-time reporting of order delivery performance
- Real-time reporting of distribution center shipping performance to customer
- Daily packaging performance updates

- Daily product line sales analysis
- Cybersecurity capabilities
- Scalable, reusable, and adaptable technology

Project Milestones

- Milestone 1. Aggregate all necessary training data, develop initial analytics models by the end of week 12 (target date: Friday, September 30).
- Milestone 2. After successful dashboard construction, user training, and dashboard testing, train internal users of dashboard and certify them by end of week 23 (target date: Friday, December 8).
- Milestone 3. Present the dashboard to the company (all staff members with access) at the end-of-year all hands meeting at the end of week 24 on Friday, December 15, 2023.

Technical Requirements for the Project

- QlikSense AI Toolkit
- Functional leads are responsible for compiling and presenting PowerPoint, Google Sheets, and Microsoft Word documents.

Limits and Exclusions

- Dashboard will be built based upon the original guidelines and specifications set out by FPD management and stakeholder needs, the EOC, and the project team members.
- Project team members are responsible for all code creation, dashboard aesthetics, user experience optimization, and technical mastery.
- All hardware/software requirements must be documented and submitted to the enterprise architect team for review and approval in accordance with FPD standards.
- Analytics modeling using cloud-based AI tools is the FPD direction. AI tools are available, but the project must use preliminary data with the AI tools to formulate/test the analytics models, then use these analytics models on the sourced data to populate the dashboard.

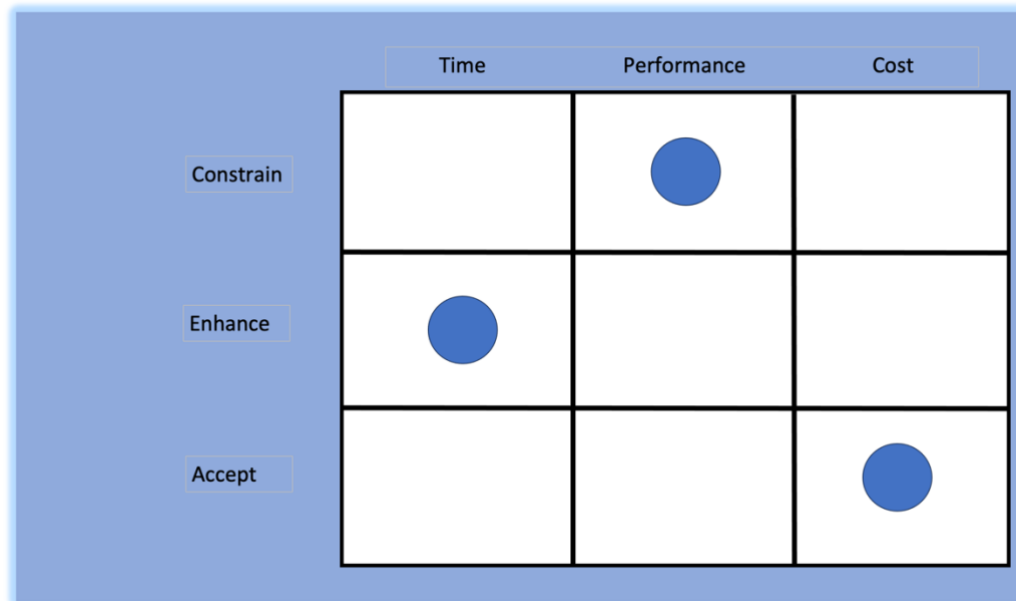
Review with Sponsor + Approval Request

- Paul Reporting, CFO/Project Sponsor, will review and approve the project scope statement.

Priority Matrix

It is critical to clearly establish the priorities of FPD DM before the project begins. This way, all members of the project team, the EOC, and stakeholders all possess shared expectations, avoid misunderstandings, and understand the tradeoffs. After all, it will be impossible to optimize time, performance and cost, as resources are limited.

Figure 1. Project Priority Matrix



The above Project Priority Matrix in Figure 1 demonstrates that we will enhance the time parameter. Time is of the ultimate essence, as the project must complete by the end of 2023. If we need to add resources, we will do so via the 10% contingency plan. Therefore, we are accepting cost. Performance will be constrained in order to make sure that the project finishes on time.

Work Breakdown Structure (WBS) & WBS Cost Spreadsheet

The next two pages highlight Figure 2 - Work Breakdown Structure (WBS) and Figure 3 – Cost Spreadsheet.. These are some of the most critical components of the project proposal. Starting with Figure 2, this is a deliverable-oriented breakdown of all nine activities, and their corresponding 24 work packages. There are six levels of the dashboard ranging from activity, to sub-deliverable, lowest sub-deliverable, cost account, and finally work package.

The corresponding cost spreadsheet, Figure 3, denotes which members of the functional teams are responsible for which work package, along with their labor rate and total costs. With these two documents, we have a full picture of how expensive the overall project will be, broken down to the most granular level possible. By factoring each activity's calendar duration and labor rates, we are able to calculate the overall project budget, itemized by staff member and work package. The activity we decided to crash – test dashboard – is denoted in the brown cells on Figure 3. We doubled the amount of resources by having two people take care of each work package instead of just one. This allows the activity to complete in the newly-allotted 11 weeks.

Figure 2. Work Breakdown Structure (WBS)

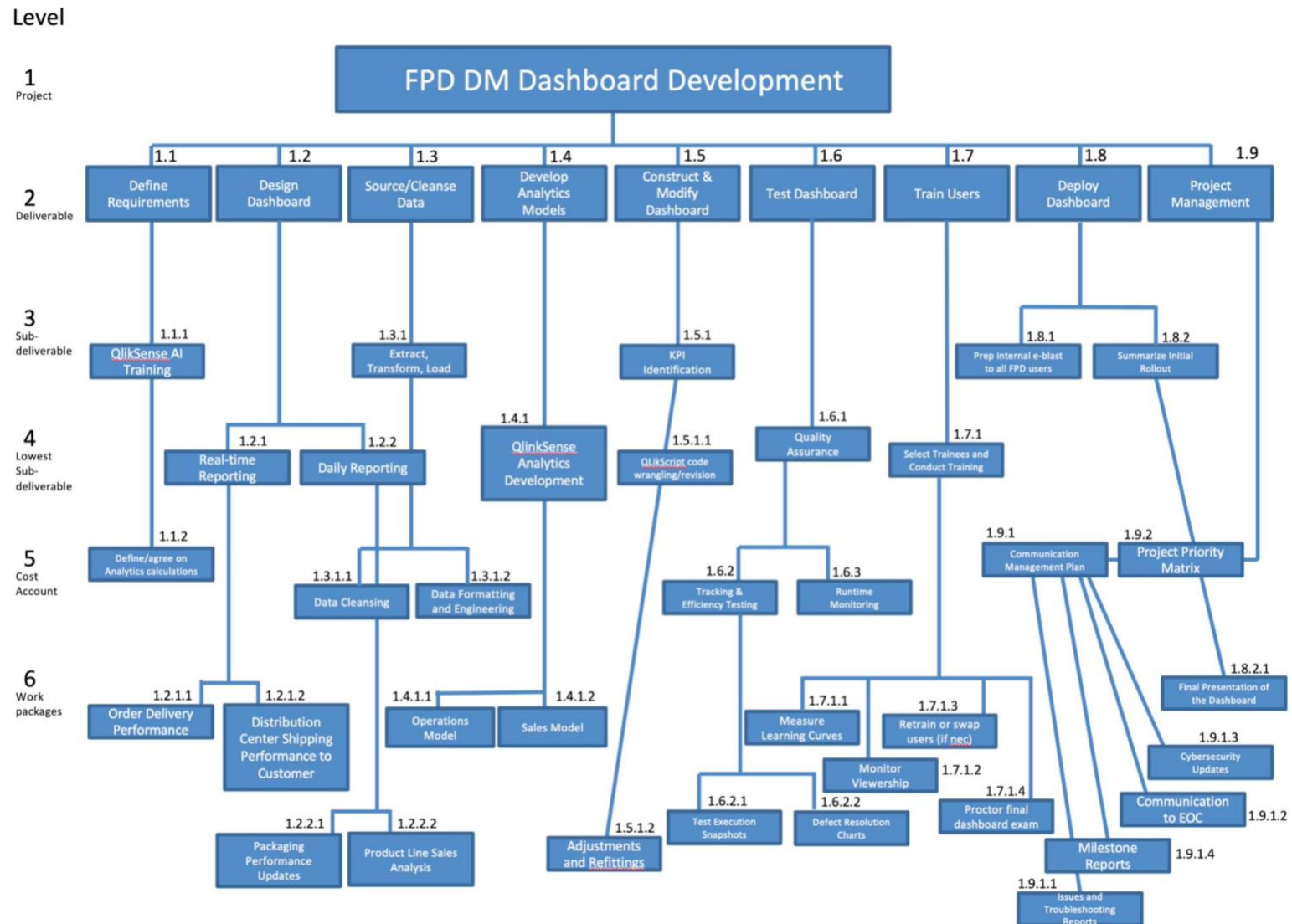


Figure 3. WBS Cost Spreadsheet

Time-Cost Labor Estimates (UPDATED WITH CRASHING)																
WB	Formula Bar	Task Description	Task Assigned to	Estimate (hrs)	Estimating Approach (work packages in blue)	Estimated Duration (hrs) (Estimate * 1.5)	Estimated Interruptions (hrs) (Estimate * 0.33)	Total Effort (hrs)	Labor Rate \$/hr	Labor Cost Total \$	Expenses	Total Costs	# of Resources	Calendar duration		
1.1.1		Conduct QlikSense AI tool Training (Don't factor the hours - Assume full time training for this only)	Maya, Sal, Jon	160	Expert			120.0	\$20	\$ 2,400	\$ 10,000	\$ 12,400	3	40.0		
1.1.2		Define/agree on Analytics calculations	Maya, Sal, Jon	32	Historical	48.0	10.6	58.6	\$20	\$ 1,171	0	\$ 1,171	3	19.52		
1.2 Design Dashboard (C)																
1.2.1		Real-time reporting	Jon, Dennis	52	Historical	78.0	17.2	95.2	\$30	\$ 2,855	0	\$ 2,855	2	47.58		
1.2.1.1		Order delivery performance	Kim	104	hybrid	156.0	34.3	190.3	\$30	\$ 5,710	0	\$ 5,710	1	190.32		
1.2.1.2		Distribution center shipping performance to customer	Sal	104	hybrid	156.0	34.3	190.3	\$30	\$ 5,710	0	\$ 5,710	1	190.32		
1.2.2		Daily reporting	Jon	52	hybrid	78.0	17.2	95.2	\$30	\$ 2,855	0	\$ 2,855	1	95.16		
1.2.2.1		Packaging performance updates	Dennis	104	hybrid	156.0	34.3	190.3	\$30	\$ 5,710	0	\$ 5,710	1	190.32		
1.2.2.2		Product line sales analysis	Kim	104	top-down	156.0	34.3	190.3	\$30	\$ 5,710	0	\$ 5,710	1	190.32		
1.3 Source/Cleanse data (B)																
1.3.1		Extract, Transform, Load	Maya, Sal, Jasmi	104	Function Points	156.0	34.3	190.3	\$40	\$ 7,613	0	\$ 7,613	3	63.44		
1.3.1.1		Data cleansing	Maya, Sal, Jasmi	104	hybrid	156.0	34.3	190.3	\$40	\$ 7,613	0	\$ 7,613	3	63.44		
1.3.1.2		Data formatting and engineering	Maya, Sal, Jasmi	104	hybrid	156.0	34.3	190.3	\$40	\$ 7,613	0	\$ 7,613	3	63.44		
1.4 Develop analytics models (D)																
1.4.1		QlikSense Analytics Development	Maya	340	Historical	510.0	112.2	622.2	\$40	\$ 24,888	0	\$ 24,888	1	622.2		
1.4.1.1		QlikSense Operations Model	Maya, Sal, Jasmi	340	hybrid	510.0	112.2	622.2	\$40	\$ 24,888	0	\$ 24,888	3	207.4		
1.4.1.2		QlikSense Sales Model	Maya, Sal, Jasmi	340	hybrid	510.0	112.2	622.2	\$40	\$ 24,888	0	\$ 24,888	3	207.4		
1.5 Construct/Modify dashboard (E)																
1.5.1		KPI Identification	Kim	104	Historical	156.0	34.3	190.3	\$40	\$ 7,613	0	\$ 7,613	1	190.32		
1.5.1.1		QlikScript code wrangling and revision	Maya, Sal, Jasmi	104	hybrid	156.0	34.3	190.3	\$40	\$ 7,613	0	\$ 7,613	3	63.44		
1.5.1.2		Adjustments and refittings	Maya, Sal, Jasmi	104	hybrid	156.0	34.3	190.3	\$40	\$ 7,613	0	\$ 7,613	3	63.44		
1.6 Test dashboard (F)																
1.6.1		Quality Assurance	Jon, Jasmine	192	Range	288.0	63.4	351.4	\$40	\$ 14,054	0	\$ 14,054	1	351.36		
1.6.2		Tracking and Efficiency Testing	Dennis, Jasmine	192	hybrid	288.0	63.4	351.4	\$40	\$ 14,054	0	\$ 14,054	1	351.36		
1.6.3		Runtime Monitoring	Kim, Jasmine	192	hybrid	288.0	63.4	351.4	\$40	\$ 14,054	0	\$ 14,054	1	351.36		
1.6.2.1		Test Execution Snapshots	Maya, Jasmine	192	hybrid	288.0	63.4	351.4	\$40	\$ 14,054	0	\$ 14,054	1	351.36		
1.6.2.2		Defect Resolution Charts	Dennis, Jasmine	192	bottom-up	288.0	63.4	351.4	\$40	\$ 14,054	0	\$ 14,054	1	351.36		
1.7 Train Users (G)																
1.7.1		Conduct dashboard training and select trainees with necessary access/clearance	Jon	26	Expert	39.0	8.6	47.6	\$30	\$ 1,427	0	\$ 1,427	1	47.58		
1.7.1.1		Measure learning curves	Jasmine	26	hybrid	39.0	8.6	47.6	\$30	\$ 1,427	0	\$ 1,427	1	47.58		
1.7.1.2		Monitor viewership of educational material	Jasmine	26	hybrid	39.0	8.6	47.6	\$30	\$ 1,427	0	\$ 1,427	1	47.58		
1.7.1.3		Retrain or swap users (if necessary)	Maya	8	hybrid	12.0	2.6	14.6	\$30	\$ 439	0	\$ 439	1	14.64		
1.7.1.4		Proctor final dashboard exam to certify staff	Jon	8	hybrid	12.0	2.6	14.6	\$30	\$ 439	0	\$ 439	1	14.64		
1.8 Deploy Dashboard (H)																
1.8.1		Prepare internal email blast to all FPD users	Jon	2	Consensus	3.0	0.7	3.7	\$20	\$ 73	0	\$ 73	1	3.66		
1.8.2		Summarize initial rollout	Kim	4	Consensus	6.0	1.3	7.3	\$20	\$ 146	0	\$ 146	1	7.32		
1.8.2.1		Final Presentation of the Dashboard	Jon, Kim	4	hybrid	6.0	1.3	7.3	\$20	\$ 146	0	\$ 146	2	3.66		
1.9 Project Management (all project management time here - assume half time and don't factor)																
1.9.1		Communication Management Plan	Jon, Sal, Jasmine, Dennis, N		Historical	broken out below	broken out below	broken out below	broken out below	broken out below	broken out below	broken out below	5			
1.9.2		Create Project Priority Matrix	Jon	16	Expert	24.0	5.3	29.3	\$20	\$ 586	\$0	\$ 586	1	29.28		
1.9.1.1		Issues and Troubleshooting Reports	Dennis	26	hybrid	39.0	8.6	47.6	\$20	\$ 952	\$0	\$ 952	1	47.58		
1.9.1.2		Communication to Executive Oversight Committee	Jon	104	hybrid	156.0	34.3	190.3	\$20	\$ 3,806	\$0	\$ 3,806	1	190.32		
1.9.1.3		Cybersecurity Updates	Maya	104	hybrid	156.0	34.3	190.3	\$20	\$ 3,806	\$0	\$ 3,806	1	190.32		
1.9.1.4		Milestone Reports	Jon	20	hybrid	30.0	6.6	36.6	\$20	\$ 732	\$0	\$ 732	1	36.60		
				Total Work Packages		24				Total Costs		\$ 248,141				
												Total Duration (Hours)		4945.62		
												Hours per employee per week		31.70		

Communication Management Plan & Project Organization Chart

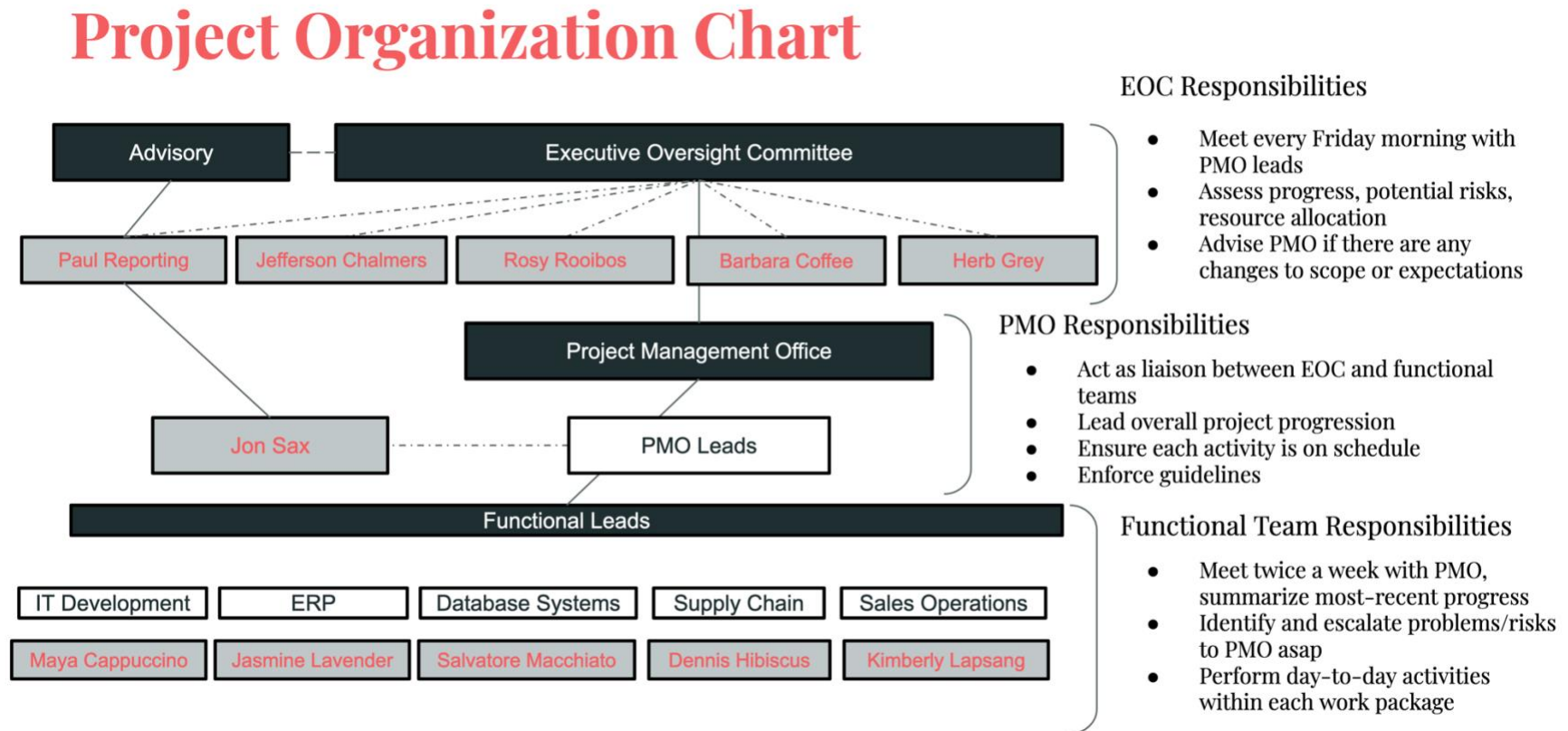
The communication management plan and project organization chart go hand-in-hand.

Figure 4. Communication Management Plan

<i>What Information</i>	<i>Target Audience</i>	<i>When?</i>	<i>Method of Communication</i>	<i>Provider</i>
Project Status Reports and Agendas	management and team members	weekly	e-mail	Jon Sax, Project Manager
Data Acquisition and Data Engineering Updates	management and team members	daily	meeting and email	Sal Macchiato, Database Analyst
Team Status Reports	management and team members	daily	meeting and email	Jasmine Lavender, ERP Application Specialist
Issues and Troubleshooting Reports	management and team members	when needed	e-mail and hardcopy	Dennis Hibiscus, Supply Chain Analyst
Milestone Reports	executive oversight committee (EOC)	bimonthly	e-mail meeting report	Jon Sax, Project Manager
Communication to Executive Oversight Committee	executive oversight committee (EOC)	weekly	in-person powerpoint presentation	Jon Sax, Project Manager
Cybersecurity Updates	management and team members	when needed	e-mail and hardcopy	Maya Cappuccino, IT Manager
Final Presentation of the Dashboard	entire company (all staff members with security clearance to access this data)	end of project	in-person powerpoint presentation with audio/video animations	Jon Sax, Project Manager

Figure 4 above demonstrates all of the information that will be disseminated on a routine basis over the course of the next 24 weeks. It details the information presented, method of communication, target audience, and provider.

Figure 5. Project Organization Chart



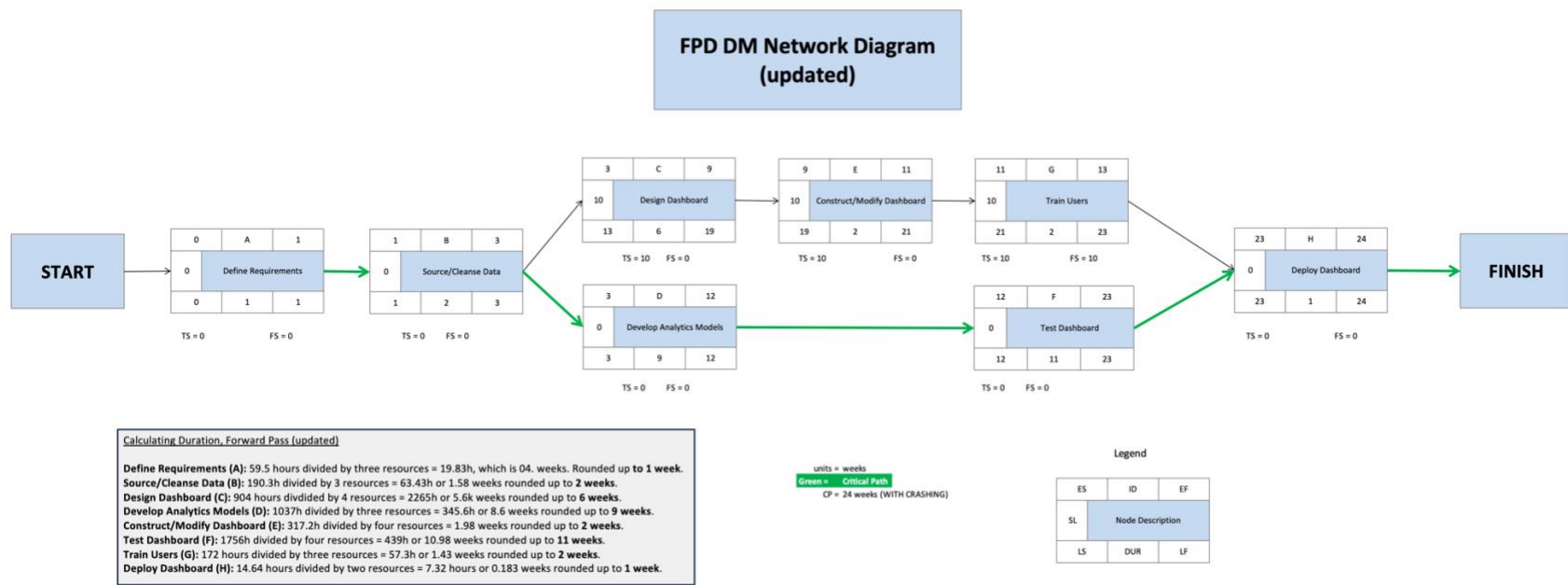
The above project organization chart, is a balanced matrix organization structure. As project manager, I am responsible for defining all work packages. In more depth, I am integrating the contributions of all functional leads, then on a weekly basis, I offer status reports to Paul Reporting. Every Friday, I communicate the latest updates to the Executive Oversight Committee (EOC). The implications of a balanced matrix organization structure imply that functional leads are responsible for assigning personnel and

executing their segment of each work package according to the schedule and standards that I have set. I am the liaison between the EOC and functional teams.

Activity-On-Network (AON) Diagram

This diagram was created based upon durations of each of the eight activities taking place throughout the 24-week project duration. In the lower left corner, you will be able to see how we calculated each activity's duration. From there, we did the forward pass throughout the project, which demonstrated that the project can complete in the allotted six month time span.

Figure 6. AON Diagram



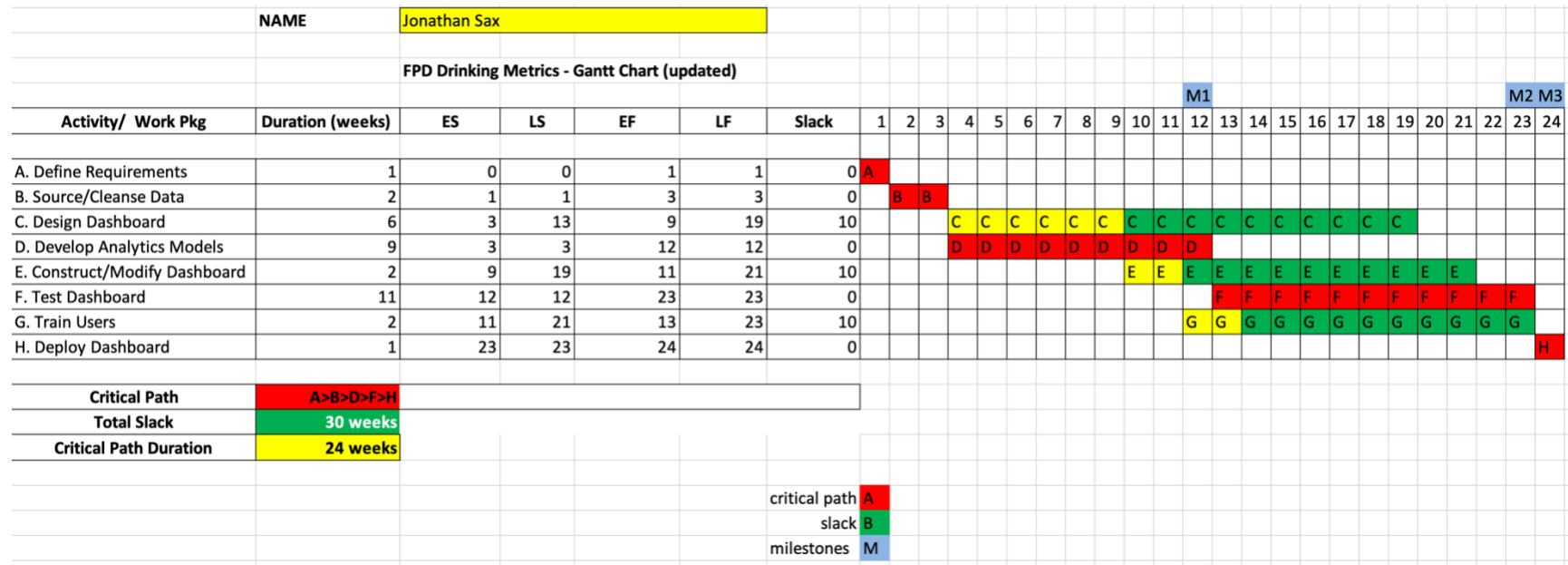
Once the forward pass was completed, we calculated the backwards pass, which then demonstrated to us which parts of the diagram have slack. With the forward and backward passes complete, we found that the critical path is through nodes A>B>D>F>H. The critical path duration is 24 weeks. Below is the corresponding project baseline budget (cost baseline) table that denotes the present value of the project as it progresses through each week of its lifecycle.

Figure 7. Project Baseline Budget (Cost Baseline)

	NAME	Jonathan Sax																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
--	------	--------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

The total BAC is equal to the cumulative present value after 24 weeks (there is a \$17 difference due to excel rounding). In the scope of earned value management, Figure 7 is an excellent representation of financial planning and reporting throughout this traditional/waterfall project management structure.

Figure 8. Gantt Chart with Milestones



The Gantt chart denotes each activity's duration along with calculated slack available throughout non-CP activities within the project. This Gantt chart is a complementary visualization of the AON network diagram, and also verifies the locations of each of the three milestones denoted in our scope statement.

Risk Assessment

We have identified five potential risk events within the FPD Drinking Metrics Dashboard. These five risks all carry varying levels of likelihood, impact, and detection difficulty.

Figure 9. Risk Assessment Matrix

Risk Event	Likelihood	Impact	Detection Difficulty	When
R1 - Low Data Integrity	5	4	1	Sourcing and Cleansing Data
R2 - Split Resources	3	5	2	Developing Analytics Model Building
R3 - Acceptance of Dashboard Metrics	4	2	1	UAT and End User Training
R4 - Lack of Skill	2	4	4	Post Training/Early Development
R5 - System Updates	1	5	2	Development/Analytics Model Building

Figure 10. Risk Severity Matrix

Likelihood	5				R1	
	4		R3			
	3					R2
	2				R4	
	1					R5
		1	2	3	4	5
	Impact					

Red zone (major risk)
 Yellow zone (moderate risk)
 Green zone (minor risk)

The ambitious nature of the project and the utilization of a new platform opens up the project to several risks in not being able to complete activities successfully, on time, and within budget. Low Data Integrity (R1) has been a recurring issue raised to us by our large-box retailer customers (Wal-Mart, Target, and Costco). Therefore, this is the most likely issue to arise. Fortunately, it is quite easy to detect, and this risk is one of the main reasons why this dashboard is being proposed.

Split Resources (R2) is another risk with potential high impact and complications. During the development of the analytics model, with so much new technology within the QlikeSense AI toolkit, there is high potential for scope creep. Issues with Dashboard Metrics (R3) will be monitored very closely by the Project Sponsor, Paul Reporting, with weekly check-ins with functional teams.

Once the construction and modification of the dashboard is complete, it will be time to train all users on the data analytics team at FPD. There is a risk that some of these users will not adapt to the new technology quickly enough (R4), in which case we will have to increase support during training sessions and hold periodic check-ins.

Lastly, over the course of the next six months, QlikeSense may release System Updates (R5) that will tinker with dashboard development. This is why we must stay on the same version of QlikSense throughout the project lifecycle. All of these risks are denoted in the risk response matrix below, with their corresponding triggers, contingency plans, and responsible parties within the functional team leads.

Figure 11. Risk Response Matrix

Risk Event	Response	Contingency Plan	Trigger	Responsible Party
R1 - Low Data Integrity	Mitigate: Detect and isolate the unclean data (large customers).	Focus on small/medium size customers until missing/unclean data is identified and cleansed.	Not detecting and isolating the missing data within 48 hours.	Maya Cappuccino, Sal Macchiato, Jasmine Lavender
R2 - Split Resources	Mitigate: Identify resources needed to meet the schedule as soon as possible.	Only allow absolutely necessary duties to dictate the need of additional resources.	Sourcing inadequate resources, skills, and team members required for a task.	Jon Sax, Kimberly Lapsang, Dennis Hibiscus
R3 - Acceptance of Dashboard Metrics	Avoid: EOC will review performance metrics as a part of the definition phase.	Utilize leadership to influence the user base on definition of performance metrics and how the metrics will drive business decisions.	User feedback during training and deployment.	Paul Reporting, Jefferson Chalmers, Rosy Rooibos
R4 - Lack of Skill	Retain: Accept risk since likelihood is slim.	Increase support during training sessions and hold periodic check-ins	Low performance on end-of-training assessment.	Jon Sax, Herb Grey
R5 - System Updates	Mitigate: Development with standardized out-of-the-box processes to mitigate impacts of changes in updates.	Stay on the same version of Qlik Sense throughout the project lifecycle.	Qlik Sense release during development of the dashboard.	Sal Macchiato, Maya Cappuccino

Overall, after weighing all five risks, the total average risk is 4 (Impact), 3 (Likelihood). This puts the entire project in a yellow / moderate overall risk category. With a 10% contingency plan in place, we are very comfortable assuming this risk as the benefits of the dashboard greatly outway the costs.

Figure 12. Likelihood / Impact Legend

Ranking	Description	Likelihood	Impact
1	Very Low	10%	Less than \$1,000 and one week
2	Low	20%	Less than \$10,000 and one month
3	Moderate	10%	Less than \$25,000 and six weeks
4	High	30%	Less than \$50,000 and three months
5	Very High	30%	Greater than \$100,000 and six months

Total Average Risk (all five risks combined): 4 impact, 3 likelihood (yellow region / moderate risk)

Feasibility and Conclusion

The FPD Drinking Metrics Dashboard is a powerful, cutting-edge, one-of-a-kind data engine that will catapult our company's technological aptitude to the top of the beverage industry. There are a cascade of positive externalities and improved company

systems that come with this incredible apparatus. Not only will it revolutionize our data integrity and synchronize multiple layers of our organization – it will also attract the top talent in data science, software engineering, UX design, and project management to our company for years to come. If this plan is approved, there are clear-cut metrics to measure its success: massive improvements in data integrity, on-time shipments and deliveries, real-time monitoring, and considerable increases in customer satisfaction. Furthermore, with the arrival of such a robust toolkit also comes the ability to amend and enhance it well into the future. The first iteration of this dashboard, launching by the end of 2023, will become a benchmark for FPD's technological accomplishment well into the future. Please consider this project plan as a formal request for approval and authorization to proceed to the execution phase.

Project Plan Self Assessment

Project Plan		Name: Jonathan Sax						
Student Self Assessment				Some Elements of Competency	Done with some Major Flaws	Mostly done with Min Flaws	Completely Present	
Project Plan Components	Points	Not Done	Some Elements	Some Elements of Competency	Done with some Major Flaws	Mostly done with Min Flaws	Completely Present	Score
Executive Summary	15	0	3	5	8	11	15	15
Project Scope Statement	10	0	2	4	6	8	10	10
Priority Matrix	5	0	1	2	3	4	5	5
Work Breakdown Structure & WBS Cost Spreadsheet	10	0	2	4	6	8	10	10
Communications Plan	5	0	1	2	3	4	5	5
AON Network Diagram & AON Spreadsheet	10	0	2	4	6	8	10	10
Project Baseline Budget	10	0	2	4	6	8	10	10
Gantt Chart w 3-4 milestones	10	0	2	4	6	8	10	10
Risk Assmt, Severity, & Response Matrices; FPD Project Risk Impact Summary	5	0	1	2	3	4	5	5
Project Organization	5	0	1	2	3	4	5	5
Feasibility	5	0	1	2	3	4	5	5
Integration	10						10	10
Scope ties with WBS								
Comm Plan identifies key stakeholders								
WBS ties to Gantt Chart								
WBS ties to Project Baseline Budget								
AON Diagram consistent w/ Gantt Chart								
Risk identification ties to WBS								
Extra Credit: enhances story								
Responsibility matrix	5	0	1	2	3	4	5	
Other	0	0	1	2	3	4	5	
Project Plan Total	100							100
25% Course Grade - 600 points							Points Earned	600