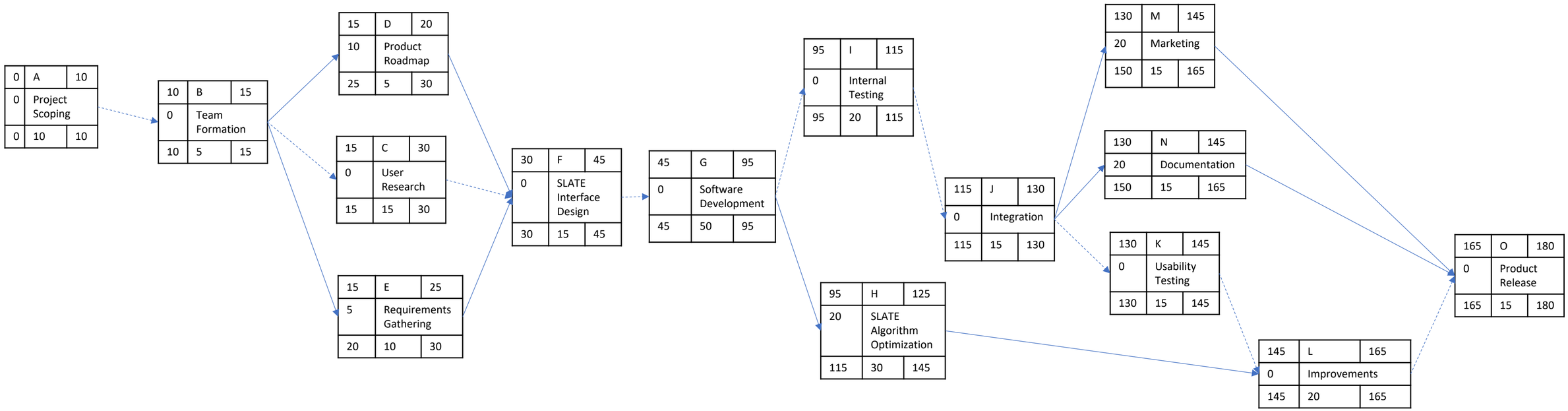
IMT 587 – 8A
Project Planning

Harshi Thaker

Project Network with backward and forward pass



Legend

ES	Early Start
EF	Early Finish
SL	Slack
LS	Late Start
LF	Late Finish
DUR	Duration

ES	ID	EF
SL	Description	
LS	DUR	LF

ID	Description	Preceding Activity	Activity time
A	Project Scoping	None	10
B	Team Formation	A	5
C	User Research	B	15
D	Defining Product Roadmap	B	5
E	Requirements Gathering	B	10
F	SLATE Interface Design	C, D, E	15
G	Software Development	F	50
H	SLATE Algorithm Optimization	G	30

ID	Description	Preceding Activity	Activity time
I	Internal Feature Testing	G	20
J	Integration with Google Calendar	I	15
K	Usability Testing	J	15
L	Improvements to SLATE	H,K	20
M	Marketing	J	15
N	Documentation	J	15
O	Product Release	L, M, N	15

Change Request

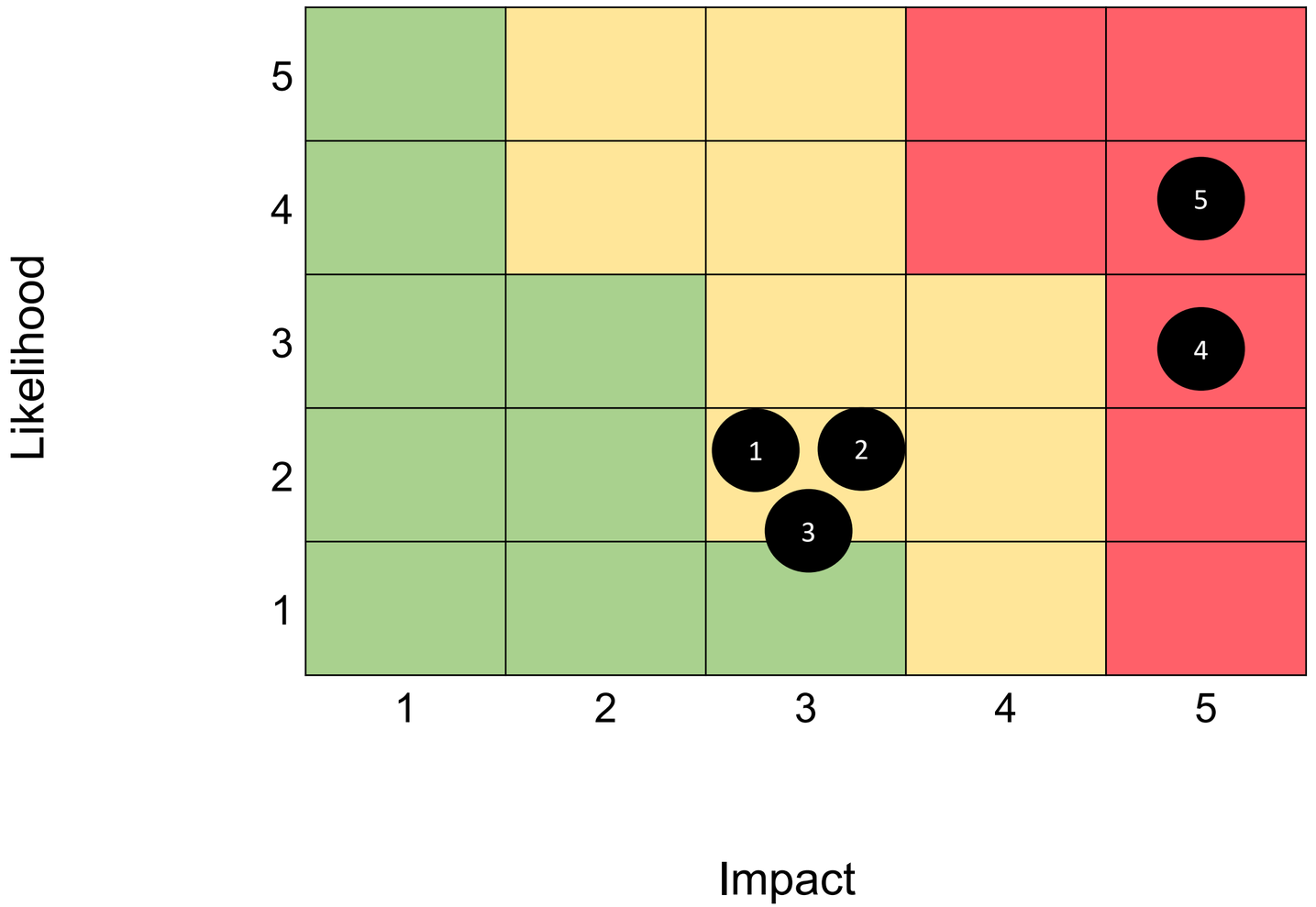
1. Change Request Information			
Project Name	SLATE by Google Calendar		
Project Status	The original scope for the MLP of this project involved SLATE automatically scheduling meetings for the meeting organizer, based on the participants' availabilities. The project is **on schedule.**		
Name of Request	Meeting times being suggested before scheduling		
Requested by	Harshi Thaker – Product Manager	**Date**	November 29, 2022
Request Number	A78392	**Priority**	Medium
Change Description	**Give the meeting organizer meeting time suggestions before scheduling the meeting automatically.** SLATE should give the organizer potential timings that the meeting could be scheduled for before actually going ahead and scheduling the meeting. The organizer then has the option to take a look at all the potential timings and select the time they want SLATE to schedule the meeting for. The meeting organizer can also look at the different participants available at the different meeting timings and can choose which timing to meet at based on the priority level of participants.		
Change Reason	**With this change a lot of initial risks of irregular meeting timing can be avoided.** There may be a scenario in which the model malfunctions and schedules a meeting automatically at a wrong time. This can be carried out for the first iteration of the feature, until we are sure of the algorithm SLATE runs on. That way, we can also save up some more time in development and proceed to launch earlier than decided.		
Proposed Action	**Mainly, we believe that the development team should shift focus from developing a machine model to developing an algorithm that suggests meeting times instead.** SLATE will still need to have the functionality to schedule meetings and send the invitations to all the participants with availabilities. This step will only happen once the meeting organizer has selected the most preferred meeting timing. The developers need to keep working on the machine learning model in the background in a way that does not affect the launch of the SLATE feature.		

2. Analysis of Change Request		
Impact of Change	**Impact on Scope**	**The scope of the project, now becomes more accomplishable.** Since we are breaking the main functionality of the feature into two smaller parts, the work load for the engineers becomes slightly lesser.
	Impact on Risk	**The risk handling capability of the feature is enhanced.** • By distributing the risk over a longer time duration, we will be able to manage any issues that arise with the feature better. • The team is better equipped to respond to the risks of erratic scheduling. • By implementing the change request, we can now spend more time in making the machine learning model more accurate. • This, in turn, mitigates the usability risks of deploying the feature.
	Impact on Schedule	**The schedule is rendered shorter after the change request is implemented** Since the work load on the engineers is reduced for the MLP functionality scope, the schedule is anticipated to be completed sooner by two weeks. The proposed change will be covered in the **second sprint** of this project timeline. It will span over Q2 2023.
	Impact on Budget	**The budget remains mainly unaffected by this change.** The man hours spent in breaking up the basic functionality of the feature are compensated for man hours in risk mitigation. Therefore, the estimated budget does not change on the implementation of this change request.

Risk Severity & Mitigation Plan

ID	Risk	Owner	Risk Description	Likelihood (1-5)	Impact (1-5)	Risk Value	Response Strategy	Response Strategy Description	Likelihood (1-5)	Impact (1-5)	Risk Value	Residual Risk Contingency Plan
1	User Interface not being intuitive	UX Designer, Product Manager	The users are not able to find and use the additional SLATE functionality for scheduling their group meetings.	2	3	6	Avoid	• Make sure at least 3 rounds of usability testing are carried out with different sets of target users, iteratively. • Ensure that a tutorial is set in place for onboarding new users to the newly added SLATE functionality	1	2	2	n/a
2	More time being spent on scheduling than before	Product Manager	After using SLATE, users end up spending more time in the end-to-end meeting scheduling process than they did in regularly coordinating availabilities and scheduling group meetings.	2	3	6	Mitigate	• Again, ensure that new users are onboarded onto the SLATE functionality to minimize the time on the learning curve. • Add intuitive cues for users to utilize while following the flow of SLATE functionality.	1	2	2	n/a
3	Going over budget and utilizing more than allocated resources	Project Manager, Product Manager	In the ideation phase, we misjudged and underestimated the budget and resource requirements, and the project will take more funds and time to completion.	2	3	6	Avoid	• Have budget check meetings bi-weekly to ensure that the project is running within the estimated and projected budget according to the timeline. • Do the same for all resources being utilized.	1	3	3	Make sure to have a buffer budget that can be utilized in case of overspending.
4	Preference given to existing third party applications	Marketing team	Users do not like how SLATE sits onto the Google Calendar interface. They would rather prefer using Calendly, when2meet or doodle for figuring out the group's availability.	3	5	15	Mitigate	• Market the SLATE functionality in a way that incentivizes the users to stick to the Google ecosystem for all their scheduling needs.	2	4	8	n/a
5	Malfunctioning of the machine learning model	Software Engineers	The machine learning model is not given enough training and testing data to ensure excellent accuracy that matches Google industry standards, due to which it malfunctions and schedules meeting automatically at odd times.	4	5	20	Avoid	• Test the model extensively on different sets of testing data. • Try out the functionality of different models to see which one gives the best results and accuracy.	2	5	10	Have an external set of eyes look and test the models for anything that the working team might be missing.

Failure Mode and Effects Analysis (FMEA)



Colour	Zone
Red	Major
Yellow	Moderate
Green	Minor

In what types of organizational structures would they be helpful? Why?

Project Network
- A project plan would be helpful in an organization that is project prioritized.
- Why? Because this is the main document that will be referenced or even created before beginning any project. It helps the team know exactly how to go about with the project

Change Request
- A change request would be more helpful in organizations that are larger and more product prioritized.
- Why? Because in larger organizations the documents are really required to ensure that the updates are being made correctly to the product. Additionally, there are more changes that need to be documented if the change is being made to the product strategy.

Risk Severity and Mitigation Plan
- This document would be more helpful in an organization of a larger size and one that is product prioritized
- Why? Because larger organizations have the budget to separately deal with risks and mitigation plans. Product prioritized because again, there is the ability to go deep within a product team

In what types of organizational structures would they be unnecessary? Why?

Project Network
- A project network would not be as useful in a product prioritized organization.
- Why? Because the implementation of the project would not be the focus here, it will be centered around the product more

Change Request
- A change request would not be as useful in a smaller organization and also one that is more project prioritized.
- Why? Because documentation would not really hold great value in start-up type organizations. Moreover, project prioritized organizations would not need a document to track changes in the product.

Risk Severity and Mitigation Plan
- This document would not be as useful in a smaller organization.
- Why? Because as mentioned earlier too, start-up type organizations would not have either the time or resources to work with these documents.