Final Project: From Methodology to Execution

Digital Project Management

Step 1) Study the Scenario

Overview

You are a project manager for Yosemite, an eCommerce company that integrates brick-and-mortar stores onto its platform for a fee. It's the third Tuesday in September; you have been assigned to work with The Stefano Shop, a family-run business that had been a local success but was struggling to stay open. The primary business goal is to digitize the store's operations and sales and complete this project a week before Christmas in the U.S.

Integrating The Stefano Shop onto Yosemite means building the following features: a storefront on the platform, a social media integration, and a recommendation engine. The Stefano family, which consists of Papa Stefano, Mama Stefano, and Junior Stefano, will also require the training and knowledge to operate their digital store once it has been developed.

At Yosemite, you have access to the Engineering, Vendor Management, and Marketing teams. The Engineering team will need up-to-date information on the store's inventory from the customer. The Vendor Managers can onboard and train whoever will manage the storefront on Yosemite's platform. The Marketing team can set up the social media channels but will have to hand off the account's ongoing management to someone at the Stefano's.

Project Budget

The Yosemite storefront, training, and documentation can be delivered for $15,000 - a tight budget for the Stefano's. So Papa Stefano asked that you include a cost-benefit analysis in the project scope to reassure him this is a good investment.

For the cost-benefit analysis, your research shows:
- The Stefano Shop's current annual revenue is $120,000
- The eCommerce industry discount rate is 7%
- Yosemite promises a 30% increase in revenue ($36,000)
- And the cost of this project will be $15,000 upfront

Getting the Job Done

The Engineering team has to deliver three main features: the storefront, social media integration, and a recommendation engine. Each of those features can be completed in a two-week sprint. The tasks involved in each sprint are design, build, test, release. You, as the project manager, can recommend building out all

features before the store goes live on Yosemite. Or you can recommend releasing a minimum viable product—a live storefront—then later adding the other features: the social media integration and a recommendation engine.

The Vendor Managers, as part of the storefront deliverable, have the task of inputting all inventory data. That task would take a week and is dependent on the Engineering team completing the first deliverable. Then the Vendor Managers will spend a week onboarding and training the Stefano's on how to use the Yosemite platform. This task should occur before the store goes live. During or after the recommendation engine deliverable is released, the Vendor Managers will have to create a custom sales report that is automatically sent to the Stefano's with results on how the recommendation engine impacts sales. It takes a week to set up the automated report.

The Marketing team is tasked with creating the social media channels and handing off its ownership to Stefano's, which takes a week. But this task must occur before Engineering's second feature: social media integration.

The Cast of Characters

- Papa Stefano - store co-founder; he manages the floor and is averse to new technology. While he understands it's time to modernize the shopping experience and would like to gain new customers, he's wary of going over budget.
- Mama Stefano - store co-founder and certified accountant; she keeps spreadsheets to track inventory and has convinced Papa to work with Yosemite. Mama is more concerned about getting the store ready in time for Christmas shoppers.
- Junior Stefano - the Stefano daughter hopes to take over the family business one day; Junior creates social media posts on her own accounts for the store. She sees value in taking full advantage of Yosemite's services.
- Moe - the Yosemite Vendor Manager tends to be enthusiastic about upselling customers with additional services; not mindful of budget.
- Aliyah - the Yosemite Engineering Lead prefers to work in Agile sprints but understands that not all customers can keep up with that pace.
- Taylor - the Yosemite Marketing Manager tends to take on too many assignments and can delay getting tasks completed. Taylor often needs to be informed of their assignments ahead of time.
- Lou - the Yosemite Small Business Program Manager oversees all accounts that fall under the Small Business category. You report directly to Lou. Lou wants to showcase your project to the entire company if all goes well and expect regular communication, especially when things go wrong.

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Step 2) Write a Project Scope

The project scope consists of the following sections: business objectives and project value, deliverables and milestones, a timeline, resources, costs, and a proposed methodology. Use the above scenario to identify the information relevant to the project scope.

In three to four sentences, describe the business objectives for Yosemite and for the customer, The Stefano Shop.	The primary business goal is to digitize the store's operations and sales and complete this project a week before Christmas in the U.S. To achieve the business goal, the following themes need to be created: a storefront on the platform, a social media integration, and a recommendation engine. The project manager should a recommendation on releasing a minimum viable product—a live storefront—then later adding the other features: the social media integration and a recommendation engine.
List project milestones and deliverables.	Milestones would be to create a storefront on the platform, a social media integration and a recommendation engine, which can be completed in a two-week spring.
What resources as the project manager do you have to complete the project?	In addition to the $15,000 budget, the following resources are available: the engineering, vendor management and marketing teams are available.
Do the Cost-Benefit Analysis. Write out the formula, show the steps to get the cost-benefit ratio, and state whether the investment is positive or negative.	Present Value of the future benefit = future benefit / (1 + discount rate ^{n} Future Benefit = $36,000 Present Value of the future benefit = $36,000 / (1 + 7%)^1 = $33,645 Present Value of the project costs = Future costs / (1 + discount rate)^n Future costs = $ 15.000 Cost benefit ratio = PV of expected benefit / PV of project costs Cost benefit ratio = $33,645 / $15.000 = 2.24 2.24 > 1 -> Business is profitable
What are the minimum and the maximum number of weeks required to complete the project?	Minimum would be 3 sprints a 2 weeks = 6 weeks Maximum would be 15 weeks from 3rd Sep. to 17th Dec. to complete all goals one week before Christmas.
What methodology do you propose to use for organizing the project: Waterfall or Agile? Explain your answer.	The checklist below result in 6 to 4 for waterfall and I would choose the Waterfall method since the goal is clear and the budget is set up upfront.

Checklist Questions	Agile?	Waterfall?
1. Do you have a clear or evolving idea of the end result?		*Yes, the goal is to reach all milestones by one week before Christmas.*
2. Does the project have strict dependencies or is it open to adapting?		*Yes, because the dependency is strict, and the deadline is rigid.*
3. Will the project have one main output or be broken down into smaller deliverables?	*Yes, because the project can be broken down into multiple, smaller deliverables.*	
4. Will your project have a quick turnaround per release or will it require lengthy development?	*Yes, because each deliverable can be completed in a 1-4 Week Sprint.*	
5. Do we have upfront research or need customer feedback?	*Yes, need user feedback for the website.*	
6. What methodology and tools is the team accustomed to working with?		*Yes, because I assumed that the team is accustomed to Waterfall based on historical context.*
7. Has the budget been set upfront or is there room for justifying further investment?		*Yes, the budget has been set upfront*
8. Will the project require thorough documentation?		*Yes, documentation for maintaining the website needs to be thorough.*
9. Will you have a cross-functional team dedicated to just this project's deliverables or will your staff be working on multiple projects?	*Yes, there is a dedicated team.*	
10. Does the project need to meet a high standard of quality or need to be released into the market quickly?		*Yes, since the project has a maximum of 15 weeks it's a long time to create something on a high level*

	Total Number of "Yes"	4	6

What kind of meetings will you have with stakeholders and how often? Explain your answer based on the project methodology you have chosen.	*Before every loop I would have a kickoff to get everybody on the same page, which is a basic step in the waterfall method. In this meeting I would discuss the starting point, the team members and the goal of the phase.*

Step 3) Identify Your Stakeholders and Team

Classify the influence level and amount of authoritative power of each stakeholder as either high or low. Then accordingly, explain how you plan to engage this stakeholder and how they might affect the project in a negative or positive way. Your assumptions should, at a minimum, reference the profiles in *The Cast of Characters* section in Step 1.

Power-Influence Classification Grid

Stakeholder	Estimated Project Influence	Estimated Project Importance	Assumptions and Risks
Aliyah, Engineering Manager	*High*	*High*	*Is a modern working person who prefers sprints but customers can't keep up with her pace, can overwhelm the customers*
Papa Stefano, store co-founder	*High,*	*High*	*he understands it's time to modernize the shopping experience but authoritative and may override prioritization of features because he is averse to new technology, he's wary of going over budget*
Mama Stefano; store co-founder and certified accountant	*High*	*High*	*She keeps spreadsheets to track inventory but has concerns about the appointment track and could thus put unnecessary pressure on*
Junior Stefano; social media	*Low*	*Low*	*Hopes to take over the family business one day and is perhaps very committed but creates social media post on their own channel and could not fit into the overall concept or the*

			coordination with the team is missing.
Moe, Vendor Manager	*Low*	*Low*	*Tend to be enthusiastic about upselling customers with additional services but could go over budget*
Taylor, the Marketing Manager	*Low*	*Low*	*Is a committed person but takes on too many assignments and could delay getting tasks completed.*
Lou, the Program Manager	*High*	*High*	*Lou has good approaches but needs to communicate them with the team*
Me, the Project Manager	*High*	*High*	*is responsible for the correct choice of the project method and thus for the further course of the project*

Create a RACI chart for the project. It will break down the deliverables from the project scope into tasks, but you will have to show who should be responsible, accountable, consulted, and informed for each row. Add as many columns as necessary to represent who belongs in the RACI chart.

RACI Chart

Tasks	Stakeholders (Add/Remove Columns if You See Fit)							
	Papa Stefano, store co-founder	Mama Stefano; store co-founder & certified accountant	Junior Stefano; social media	Aliyah, Engineering Manager	Moe, Vendor Manager	Taylor, the Marketing Manager	Lou, the Program Manager	Me, the Project Manager
Build storefront	C	R; A	I	I	R	I	I	I
Input Inventory Data	A	R	I	I	I	I	R	C
Build social media integration	I	I	C	R, A	I	I	I	I
Train Stefano's on platform	I	I	I	R	I	I	I	A, C
Create social media channels	I	I	A	I	I	R	I	C
Train Stefano's on social media use	I	I	R	A, C	I	I	I	I
Build recommendation engine	I	I	I	R	C	C	I	A, C
Create Automated Sales Report	A	R	I	I	I	I	I	C
Engage stakeholders	R	A	I	I	I	I	I	R

Step 4) Create a Project Plan

In this step, you will reference the project scope, stakeholder analysis, and RACI chart to create a project plan for the proposed methodology.

Build a model of your plan for managing the Yosemite project. **It should be a snapshot in the planning phase of the project**. You can use the dates in your current year when creating the project plan.

Display this model in one of the two frameworks, a Gantt chart for Waterfall or a Scrum board for Agile. After you pick one model, be sure to include the information outlined in your project scope, stakeholder analysis, and RACI chart:

- Deliverables
- Tasks
- Assignments
- Schedule and order of tasks

Additional Instructions for a Waterfall Project Plan

If you choose a Waterfall project plan in Step 2, you should include tasks related to stakeholder engagement, team management, and closure activities. Assume that each additional task can take 1-3 days to complete, so it will affect your schedule. The additional tasks are

- A kickoff meeting,
- Scheduled status reports, and
- Documenting knowledge.

Create a **Gantt chart** for your project by filling in the *Gantt Chart Template* provided in the classroom. Export or save the spreadsheet as a .xls or .xlsx file. Add this spreadsheet to your project submission folder.

Additional Instructions for an Agile Project Plan

If you choose an Agile project plan in Step 2, you should organize the columns using Scrum phases:

- Sprint Planning
- Backlog
- Work In Progress
- QA

- Release
- Sprint Review

Include relevant tasks that occur in the initial and end phases of a Sprint. Those tasks include:

- Creating a Lessons Learned document
- Adding features to a backlog
- Presenting demos
- Adding tasks to a sprint
- Emailing status reports
- Reviewing Lessons Learned
- Creating documentation for a demo
- Hosting a Retrospective meeting

Create a new **Scrum board** on Trello and make it public.

- To make your board public, click on Private > Change Visibility: Public > "Yes, make board go public".
- To grab the public URL, go to Show Menu > …More > Link to This Board.

Paste the URL here:

[TODO: Add your link here]

Step 5) Analyze Risk and Select Response Strategy

Risk Scenario 1

The Stefano Shop project relies on the customer providing Yosemite with information on all products in its inventory. The Vendor Manager has reported that the Stefano's have not delivered that information when requested due to their analog way of handling inventory. They promised to deliver the inventory information in a few more days.

How might this risk affect the project?	*This risk shows the weakness of the Stefanos or could lead to the fact that the analog way of creating an inventory costs a lot of time and resources and is also more inaccurate than a digital capture.*
Which of these Risk Response Strategies would you have chosen if you had anticipated the risk prior to initiating the project: Avoid, Mitigate, Transfer, Actively Accept, Passively Accept, Escalate. Explain how you would apply the strategy.	*If I would be the Vendor Manager, I would escalate the risk/problem since I can't change the way of inventory form on to the other day without any permission, that's why I would escalate it to next level and show the risk/problem. Which also helps if the Vendor Manager already sketched a plan how to avoid this risk or to implement a new process*

Risk Scenario 2

When the Engineering team began designing the recommendation engine—a feature that takes up 20% of the current budget—they informed you that the task was more complicated than anticipated. The Engineering Manager said it would take a total of four weeks and cost an additional $3,500 to upgrade the AI service that powers the recommendation engine. That fee would have to be covered by the customer. Or the recommendation engine feature could be dropped from the project.

How might this risk affect the project?	*This risk considers two aspects. One budget is tight and maybe already spent for different things, the other aspects is that the release date is maybe in danger.*
Which of these Risk Response Strategies would you apply to the above risk: Avoid, Mitigate, Transfer, Actively Accept, Passively Accept, Escalate. Explain how you would apply the strategy.	*Nevertheless, these kinds of risks are coming up all the time and that's why I would install buffers for the budget and save lets say 10% for such risks and for the time issue I would check with all stakeholders if I can switch steps or drive a swimlane parallel instead of waiting for the final data. In this case I would mitigate the risk*

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Step 6) Plan Knowledge Share and Report Project Status

Knowledge Documentation

Throughout the project and before its closure, you asked the team to create documentation for the company Yosemite and the customers, the Stefano's. In your project plan, what documentation tasks did you include? List below what documentation tasks you came up with, who you assigned them to, how you scheduled them, and why it is important to document this task. Add more rows to the table if you see fit. Add these tasks to your project plan if you haven't already done so.

Task	Assignee	Deadline/Place in Timeline	Reason for Documenting This Task
Product Development (Storefront on the platform)	*Mama Stefano, Moe, Lou, Aliyah*	*2 days after the final loop is done*	*A knowledge share documentation type that shows what the product is and the thinking that went into developing it.*
Internal User documentation (social media integration)	*Aliyah, Taylor, Junior Stefano*	*2 days after the final loop is done*	*A knowledge share documentation type that would be accessed by an internal end user who works inside your organization and needs to know how to use the tool being created in your project.*
Technical Development (Recommendation engine)	*Aliyah, Mama Stefani, Papa Stefano, me*	*2 days after the final loop is done*	*A knowledge share documentation type that contains code or detailed information on the technical resources that went into deploying a release, likely for a software product.*

Status Report

In the Monitor and Control phase of project management, it is your responsibility to track how well the project is going and report to stakeholders the project status.

Where in your project timeline did you schedule or add the task for creating and sending a status report?	*I created a status report after every loop to inform the stakeholders about the whole Phase, how is it going and if there are any risks/blockers, which we are facing. These risks are categorized in time, costs and quality*
How do you plan to communicate the report to stakeholders, and how often?	*The status report should be made on a regularly bases to inform all stakeholders, that's why I put it on the end of very big loop to show the highlights and blockers.*

Create two **status reports** using the *Status Report Template* provided in the classroom based on the risks described in Step 5.

1. The first status report should be created on the day you discovered the Stefano's did not deliver the inventory information to the Vendor Manager on time.
2. The second status report should be created in the middle of the Engineering team building the recommendation engine. That is when you were informed by the Engineering Manager that the project would be more time-consuming and costly.

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Project Status Report #1

PROJECT TITLE: Inventory

COMPANY NAME: Yosemite, Stefano

PROJECT MANAGER: Fabian Stigler

DATE: 27.09.2022

PROJECT SUMMARY
The Vendor Manager has reported that the Stefano's have not delivered that information when requested due to their analog way of handling inventory. They promised to deliver the inventory information in a few more days.

PROJECT HIGHLIGHTS/BLOCKERS
Highlights: • *The Stefano Shop project relies on the customer providing Yosemite with information on all products in its inventory.*   **Blockers:**   • *Analog way of handling inventory may cause some risks (time, cost, quality)*

PROJECT HEALTH CHECK

Scope	Status	Tasks: Completed/Pending
Time	At Risk	**Completed:** • *Nothing completed in relation to inventory* **Pending:** • *Inventory still pending.*
Cost	At Risk	
Quality	At Risk	

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Project Status Report #2

PROJECT TITLE: Recommendation engine   COMPANY NAME: Yosemite, Stefano

PROJECT MANAGER: Fabian Stigler   DATE: 27.10.2022

PROJECT SUMMARY

Designing the recommendation engine with AI service.

PROJECT HIGHLIGHTS/BLOCKERS

Highlights:
- *Designing of the recommendation engine started*

Blockers:
- *Risk due to time and budget was raised. Project maybe falls behind expectations*

PROJECT HEALTH CHECK

Scope	Status	Tasks: Completed/Pending
Time	Behind	**Completed:** - *Design process was started.* **Pending:** - *Recommendation engine is ready yet and costs and time is running behind schedule.*
Cost	Over	
Quality	On Track	