Team Charter Group 5

PJM 6005: Project Scope Management
Prof. Caleb Hampton

Group Members:

Priyen Bawa

Ankita Yadav

Vatsal Shah

Aabhas Maru

Tanya Yadav

March 3rd, 2022

Contents

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GROUP 5
TEAM CHARTER

PJM 6005
Winter 2022
QUARTER

Purpose of the Team

The purpose of our team is to actively collaborate and team up throughout the PJM 6005 Scope Management course. We strive to submit quality work through the assigned projects and aim for excellence in our performance. This class will enhance team members' understanding of new topics and expand their knowledge. We will effectively communicate, support each other, and submit our work in a timely manner. We will also analyze individual strengths and perform to the best of our abilities.

Team Background and Composition

Priyen Bawa	
Education Background	Bachelor of Civil Engineering. I am pursuing my master's in Project Management with Construction Management.
Professional Experience	5 years of experience as a construction project manager
Strengths	Critical Thinking, Team Leadership, Management, Problem Solver, Detail – Oriented,
Ankita Yadav	
Education Background	Bachelor of Science in Zoology and Education. I am pursuing my master's degree in Project Management with an Agile concentration.
Professional Experience	5 years of experience in the education sector
Strengths	Communication skills, Creative Thinking, Detail and solution-oriented approach
Vatsal Shah	
Education Background	Bachelor of Engineering in Civil Engineering. I am pursuing my master's degree in Project Management with a concentration in Construction management.
Professional Experience	2 years of experience as a Construction Project manager and Design Analyst in the Construction Industry Business Analyst in e-commerce start–up.
Strengths	Critical Thinking, Analysis, Team Leadership, Problem-solving
Aabhas Maru	
Education Background	Diploma in Business Management and Bachelor's in Commerce. Plus, currently I am enrolled in MS in Project Management with a customized concentration in analytics and business analysis.

Northeastern University

GROUP 5
TEAM CHARTER

PJM 6005
Winter 2022
QUARTER

Professional Experience	2 years of work experience but only as part-time and internships. I have worked in the marketing field, construction field as project manager intern and in a retail chain as operational head.
Strengths	Multi-tasker, strategic planning, critical thinking & reasoning, time management, problem solver, leadership.
Tanya Yadav	
Education Background	Bachelor's degree in electrical and electronic engineering, I'm currently pursuing a Master's degree in project management with a focus on data analytics.
Professional Experience	2 years of experience as an IT Analyst at IBM.
Strengths	Effective communication and management abilities

Table 1: Team Information

Contact Information

Name	Best Email Address	State (Time Zone)	Phone
Priyen Bawa	bawa.p@northeastern.edu	EST	+1(857)-263-1957
Ankita Yadav	yadav.ankit@northeastern.edu	EST	+1(617)-800-6861
Vatsal Shah	shah.vatsal@northeastern.edu	EST	+1(857)381-5936
Aabhas Maru	maru.a@northeastern.edu	EST	+1(857)-869-6710
Tanya Yadav	naveenyadav.t@northeastern.edu	EST	+1(857)437-9064

Table 2: Team Contact Information

Communication Tools and Techniques

Communication is one of the significant elements of teamwork. To facilitate effective communication, we have created a group on WhatsApp. The prime objective is to reach out to the team members immediately when required. Microsoft Teams will be used to exchange content documents, do individual work, and conduct team meetings. Team meetings are scheduled every Monday and Thursday. The team will meet in person on Fridays before or after the class.
Overall, the communication tools and techniques are listed below,

- MS Teams meeting twice a week
- Quick chat on WhatsApp
- Brainstorming, data/content gathering, unanimous decision making for assignments.
- Document sharing and collating together on Teams
- Phone calls when required
- One in a week in person meet

Northeastern University

GROUP 5
TEAM CHARTER

PJM 6005
Winter 2022
QUARTER

Membership Roles and Responsibilities

Roles	Description
Leader/Manager	• Clear doubts and expectations of the assignment • Encourage collaboration and communication across the team • Assign tasks equally and as per the strengths • Mediator between the team and the instructor • Must act as a liaison to facilitator and team as when required • Ensure there is no conflict within the team
Facilitator	• Schedule team meetings as per the schedule and when required • Supervise assigned tasks and deadlines. • Remind and help the non-contributing team members • Make sure that group stays on task and performs efficiently • Clear team's doubt before the submission
Recorder	• Record and share the duties among the team members as decided in the team meetings • Compiling individual submissions to create a cohesive document that is grammatically and technically correct. This must be done with sufficient lead time to provide an opportunity for group editing and commenting. • Assemble individual submissions, edit, proof-read and collate the document • Also make sure the team has enough time to check and approve the document.
Quality Checker	• Set quality standards for the assignments • Analyze the work submitted aligns with the assignments' goals and outcomes • Inform the team members whose work needs improvement in terms of time and effort • Once the assignment is ready for submission after final review, inform the leader/manager

	• Makes a weekly report of the work performed by the group member and assigns them points as per their performance.
Supporter	• Collect content-related research papers, reviews and share with the team to enhance the topic understanding • Assist the struggling team members • Advise solutions on problems faced by the team

Table 3: Membership Roles and Responsibilities Description

Team Roles Rotation Schedule

The team members decide that the roles will be cycled during the six-week course for a better experience in the second quarter, but the responsibilities of each member of the designated role remain the same:

Class Tenure						
Roles	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**
Leader	Vatsal	Ankita	Tanya	Aabhas	Priyen	Ankita
Facilitator	Priyen	Vatsal	Ankita	Tanya	Aabhas	Priyen
Recorder	Priyen	Aabhas	Vatsal	Ankita	Tanya	Aabhas
Quality Checker	Aabhas	Priyen	Ankita	Tanya	Ankita	Tanya
Support	Vatsal	Aabhas	Priyen	Tanya	Vatsal	Ankita

Table 4: Team Roles Rotation Schedule

Northeastern University

GROUP 5
TEAM CHARTER

PJM 6005
Winter 2022
QUARTER

Ground Rules

- All assignments will be in accordance with academic integrity
- Team members will communicate regularly and contribute equally towards the assignments
- All team members will respect everyone's time by being punctual for the meetings
- Team members participate in discussions and collaboratively work towards achieving the project goals
- Team members will respect each other's opinions and offer constructive feedback when necessary
- Final document will be submitted to Canvas after consent of the team members
- The team will format and proof-read the document before final submission
- We will complete our tasks 1-2 days prior to the final submission deadline
- Team members will take ownership of their work and submit quality work along with appropriate citations in APA format
- Abide by the team rules to avoid unnecessary disputes

Decision-Making Process

- Team members will be actively involved in the decision-making process.
- They will freely express their views and opinions pertinent to the project. However, the final decision would be made using the majority consensus
- Problems will be analyzed mutually. In case of confronting difficult situations or disagreements, we will weigh our alternatives, impact, and take decisions keeping in mind the project goals.

Conflict Management Approach

While working on the team assignments, conflicts may arise over differences in opinions, work delegation, etc. To effectively resolve them, we will follow the following steps:
- Conduct a group meeting and talk with the team members
- Analyze the issue
- Derive a mutual resolution for both parties using a critical problem-solving approach.
- If the resolution is still not accepted and the conflict continues, escalate it to the instructor

Team Performance Assessment

The performance of the team will be evaluated on a weekly basis using the following steps:

Northeastern University
GROUP 5
TEAM CHARTER
PJM 6005
Winter 2022
QUARTER

- Team members are expected to submit their work evaluation if it meets the objectives of the given assignment. Therefore, work should be submitted as per the quality standards as it will impact the team's scores.
- Each team member will be assessed based on his participation in class assignment discussion and punctuality for the meetings.
- Team members will be assessed for their timely submission of their work. In case they are not able to meet the deadline they must inform their peers immediately.
- Team members will be assessed on their respectful behavior towards others' views and opinions and the quality of their work.

Sign off

Team Member Name	Signature	Sign Date	Comments
Priyen Bawa	*Priyen Bawa*	03/03/2023	I agree with this document
Ankita Yadav	*Ankita Yadav*	03/03/2023	I agree with this document
Vatsal Shah	*Vatsal Shah*	03/03/2023	I agree with this document
Aabhas Maru	*Aabhas Maru*	03/03/2023	I agree with this document
Tanya Yadav	*Tanya Yadav*	03/03/2023	I agree with this document

Project Scope Statement

Class PJM6005

Group 5

Prof. Caleb Hampton

COLIN CO: NEW PRODUCT DEVELOPMENT

PSS VERSION HISTORY			
Version #	**Date**	**Author**	**Key Differences**
1	03/12/2022	Ankita Yadav, Tanya Yadav, Vatsal Shah, Priyen Maru, Aabhas Maru	

TABLE OF CONTENTS

1   Executive Summary

COLIN is a well-known brand for garment care products based in Santa Barbara, California. It was founded originally by Chris Martin in 1946. They top the market for 20 years with profound experience in garment steamer products that account for its sales and profit. The business involves products like dry irons, steam irons, and garment steamers. COLIN's work consists of approximately 70% OEM (Original Equipment Manufacturer) and 30% ODM (Original Design Manufacturer) projects. Although COLIN has its own industrial design, research, and development team, they outsource the product manufacturing to the OEM suppliers in China.

The latest Bristol project is about developing an innovative garment steamer in which they plan to develop their internal manufacturing design and R&D team with an earning target of $20 million in the first year. However, the company has a time-sensitive deadline for research and development, manufacturing, and marketing of the product. Customer demands are the top priority of this project. COLIN's development team aims to meet the customer needs by resolving the product issues, thus aligning business objectives to the production strategy. Ever since the company was founded, it has set a goal of providing quality products and fulfilling customer requirements. Therefore, the project will target the quality needs of the customer while delivering the new product (Wu *et.al,* 2017).

2   Project Objective Statement

To complete the new product 'Bristol' with a goal to earn 20,000,000 in revenue in the first year

3   Business Requirements

To uncover the problems while establishing a new product category of a new garment steamer of COLIN Co., the business requirements are as follows:

1. Introducing low temperature setting in the product which will restrain from damaging the sensitive fabric. Customers require low heat steam. As a result, after two years, consumer satisfaction is expected to rise by 25% if this is implemented

2. Creating an efficient workflow to meet the project needs and deadlines

3. Tracking delivery and reporting progress to the retailers/ stakeholders (Costco. Kmart) so that Bristol doesn't lose the display shelves

4. Implement the change management system to analyze the customer requirements, before assigning work to the manufacturers

5. Developing a reasonable product that will help achieve a turnover of $20M by the fiscal year 2017

4   Solution Requirement

Req #	Solution Requirement	Prioritization (MoSCoW)	Acceptance Criteria	Who will approve/accept deliverable?
1	Steam volume and temperature control	Must have	It must be capable to operate on various temperatures according to the fabric	Quality Engineer: Tyler
2	Better design and better outer body for heat resistance	Must have	As it has water it can heat up quickly hence the outer body should be made of a martial that is heat resistant.	Quality Engineer: Tyler
3	Good technical support team, for any damage or technical (hardware issues in the product)	Should have	The technical team should be well trained to resolve any issues or complaints by the costumers	Product Manager: Sally

Req #	Solution Requirement	Prioritization (MoSCoW)	Acceptance Criteria	Who will approve/accept deliverable?
4	There should be no dripping, dripping can be a major problem.	Must have	Should use excellent quality containers for carrying the water (steam)	Quality Manager: Tyler
5	Should operate on low temperature without losing steam, by dual heating plate technology.	Must have	Should operate on low temperature for at least 25 to 45 mins	Engineer (R&D): Erik
6	At least a 1.5 years or 2 years of warranty	Must have	As it is used on a daily basis, the product lifetime should be a major concern. Should work for at least 3 hrs. with temperature and steam control	Product manager: Reva

5 Exclusions (Out of Scope)

There are some items that are not specifically talked about, and which are out of scope currently.

- The product does not include the automatic temperature control system of steam

- The product does not include a detachable steamer

- The product is not wireless

- There is no touch control to the product

- Managing new projects not related to the garment steamer production

6 Project Constraints

Following the reading of the COLIN case, we will discuss as part of the 'Bristol Project,' the following restrictions have been established, and the team will make every effort not to break these restrictions during the duration of the project.

- As part of a contract with 'Kmart' to make available the product widely and exclusively to their store locations, one of the most important requirements is that the 'Bristol Project' be launched in nine months, as it will be displayed in their major retail outlets.

- The steamer must not cost more than $109, making it a product in the mid-price bracket of the product market. By selling the goods in huge quantities, 'COLIN' would be able to generate higher earnings.

- Also, crucial to remember is that external patents from companies like ALICE cannot be utilized because doing so would lead to the payment of royalties, which would have a detrimental influence on the company's bottom line in the not-too-distant future.

Below are the milestones that COLIN will follow to establish the new product:

Milestone	Feature	Delivery Date
Milestone 1	Contract Signing/Initiation	February 6th, 2023
Milestone 1	Project Planning	May 4th, 2023
Milestone 1	Product Testing	September 26th, 2023
Milestone 1	Quality Check	October 16th, 2023
Milestone 1	Project Launch/Closure	January 14th, 2023

7   Assumptions & Risks

While planning Project Bristol, the following assumptions are made:

- ALICE cooperation's one of the COLIN's major suppliers and BUREY cooperation has no prior commitments and will begin working on the Bristol project as soon as our contract is signed

- The currency exchange rate of China and the USA will stay stable, with no impact on production costs.

- Government rules and restrictions will have no impact on or change US-China trade ties.

The possible risks related to the project are:

1. If the Bristol project duration is reduced, then the overall quality will be hampered

2. If the Bristol project work is not completed within the fiscal year, then it will not be able to earn the project target of 20,000,000

3. If the resources are not highly skilled in the manufacturing, management, and R & D of the project, there will be discrepancies in the cost, scope, schedule, and quality of the project

4. If the time zones between US and China is not managed well by the resources, then it will cause a delay in the project deadlines and cost

5. If the product fails to be innovative, then the company would lose the customers

8 Approvals

Approver (Position in Organization)	Role in Project	Approved (Signature = Approval)	Date of Approval
List the position in the organization – e.g., Director of Programming	*List the role in the project – e.g., Project Sponsor*	*Leave blank*	*Leave blank*
R&D Director	Design & Developer		
Finance Vice President	Resource Manager		
Operations Vice President	Product Manager / Project Manager / Marketing Manager		
Quality Vice President	Quality Management		
Project Manager	Project Manager		

9   References:

- Wu, C., Pun, H., & Zhang, Z. (2017). Colin Co: New Product Development. Ivey Publishing.

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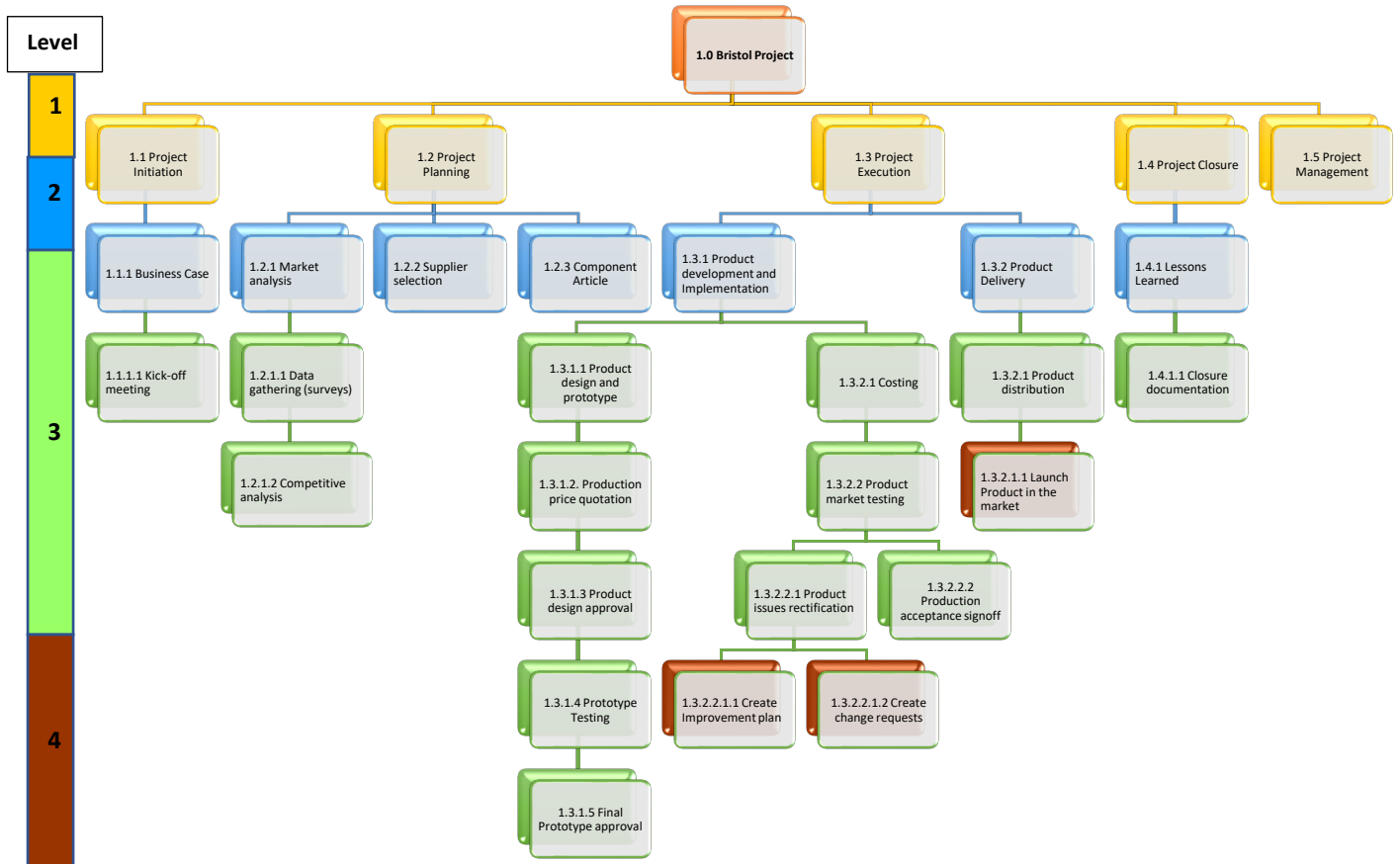
WBS VERSION HISTORY

Version #	Date	Author	Key Differences
1.0.0	8/8/2021	Ankita Yadav, Tanya Yadav, Priyen Bawa, Vatsal Shah, Aabhas Maru	

TABLE OF CONTENTS

Work Breakdown Structure (WBS)

Level

1 — 1.0 Bristol Project

1.1 Project Initiation	1.2 Project Planning
1.3 Project Execution	1.4 Project Closure
1.5 Project Management	

2

- 1.1.1 Business Case
- 1.2.1 Market analysis
- 1.2.2 Supplier selection
- 1.2.3 Component Article
- 1.3.1 Product development and Implementation
- 1.3.2 Product Delivery
- 1.4.1 Lessons Learned

3

- 1.1.1.1 Kick-off meeting
- 1.2.1.1 Data gathering (surveys)
- 1.2.1.2 Competitive analysis
- 1.3.1.1 Product design and prototype
- 1.3.2.1 Costing
- 1.3.2.1 Product distribution
- 1.4.1.1 Closure documentation
- 1.3.1.2. Production price quotation
- 1.3.2.2 Product market testing
- 1.3.2.1.1 Launch Product in the market
- 1.3.1.3 Product design approval
- 1.3.2.2.1 Product issues rectification
- 1.3.2.2.2 Production acceptance signoff

4

- 1.3.1.4 Prototype Testing
- 1.3.2.2.1.1 Create Improvement plan
- 1.3.2.2.1.2 Create change requests
- 1.3.1.5 Final Prototype approval

WBS Dictionary

			Bristol Project			
WBS Level	WBS Code	Element Name	Statement of Work	Deliverable(s)	ROM (Business Days)	ROM Cost (USD)
1	1.0	Bristol Project	Production and delivery of the garment steamer products	Launch of the new product category (garment steamer)	263 days	$1052950
2	1.1	Project Initiation	This phase starts with authorizing the project and assignment of the Project Manager. All necessary steps are completed to begin a project with success	Project opening	24 days	$50000
3	1.1.1	Business Case	The project is approved by evaluating the need, worth of the business need and analyzing the benefits of the proposal	Project authorization	20 days	$15000
4	1.1.1.1	Kick-off meeting	The project manager gives an overview of the project goal, schedule, project organization, expectations towards team members, and other critical information.	Project Introduction	4 days	$1000

1	1.2	Project Planning	The planning phase involves product discovery, understanding of the problems potential customers face, and the solution can target by gathering additional information	Information compilation	90 days	$203150
2	1.2.1	Market analysis	Industry trends will be examined. The research involves both qualitative and quantitative research that will help the business get its arms around the real opportunity	Market research	60 days	$30000
4	1.2.1.1	Data gathering	Data collection in form of surveys focus groups and interviews will be conducted to study the trends and calculate the total addressable market	Data collection	35 days	$3000
4	1.2.1.2	Competitive Analysis	Recognize the potential options competitors in the market by surveying the competitive landscape	Competitor identification	25 days	$5000
3	1.2.2	Supplier selection	Evaluate the equipment and design manufacturing suppliers (OEM & ODM)	Supplier range choice	7 days	$40000

3	1.2.3	Component article	Design specifications will be outlined and accordingly, the component will be collected	Component selection	23 days	$65000
1	1.3	Project Execution	The Project Execution Phase is all about deliverables & outputs. The intended product is delivered to the customer for approval. The major goals will be to manage people, manage processes and communication	Project deliverables and change requests	118 days	$700000
2	1.3.1	Product Development and Implementation	All required steps required to take a product from a concept to market availability will be carried out	Product Improvement	100 days	$550000
4	1.3.1.1	Product Design and Prototype	Design specifications will be outlined as per the business needs. Considering the design specifications, various prototypes will be created, animated, and presented to the stakeholders	Designing and prototyping the product	35 days	$340000
4	1.3.1.2	Production price quotation	The sourcing leader will send the design drawings to the equipment	Quotation	5 days	$16000

			manufacturing suppliers for their production price quotation			
4	1.3.1.3	Product design approval (Milestone)	After analyzing the prototype presentation and considering the production price quotation, the design of the product is approved	Product design selection	7 days	
4	1.3.1.4	Prototype testing	The early product sample will be tested to ensure the design selection meet the requirements	Prototype assessment	13 days	$65000
4	1.3.1.5	Final prototype approval (Milestone)	The sample product is evaluated, finalized, and approved by the stakeholders	Prototype confirmation	10 days	
4	1.3.2.1	Costing	After research, planning, prototyping, and sourcing are done, all information will be gathered to decide the cost of goods sold (COGS) and therefore, determine a retail price and gross margin	Product cost determination	10 days	$64000

4	1.3.2.2	Product market testing	Marketing strategies will be performed in which the viability of the product will be assessed by the test engineers and the target groups based on the performance. The marketing team will determine the advertising strategies.	Product Market analysis	30 days	$80000
4	1.3.2.2.1	Product issues rectification	Potential customer problems regarding the product are recorded	Product Improvement	20 days	$3000
5	1.3.2.2.1.1	Create Improvement Plan	The project manager along with the key stakeholders will discuss and outline pertinent improvement plan to update the product	Upgradation	12 days	
5	1.3.2.2.1.2	Create Change requests	Appropriate changes will be ordered and Change control board will assure change requests approval	Change management	8 days	
4	1.3.2.2.2	Production acceptance signoff (Milestone)	It is a go for the manufacturing suppliers' to manufacture quality components in sufficient quantities	Mass production of components	5 days	

3	1.3.2	Product delivery	The product is set to make its appearance in the market. The marketing team will have the branding voice ready for the business		18 days	$150000
4	1.3.2.1	Product distribution	The product will be distributed to the pertinent retailer customers	Product shipment to the distribution center and retail stores	15 days	$12550
5	1.3.2.1.1	Launch the product	The 'Bristol' product will be launched in the market according to the project plan	Product Release	3 days	
2	1.4	Project Closure	The project manager will assure that all work has been completed, project management processes have been executed, and agreement of all stakeholders in the project completion	Project Closing	20 days	$9500
3	1.4.1	Lessons Learned	The project team answers what went well and what could have been improved. It helps the organization to avoid or repeat mistakes, reduce learning curves on future and/or new work or projects	Feedback recording	3 days	

4	1.4.1.1	Closure documentation	PM records details about each phase of project management. It is like an assurance that the tasks have been completed and hence, the project. It makes sure that all the parties agreed-upon the deliverables and the objections so that no problems can arise at the end.	Knowledge documentation	17 days	
2	1.5	Project Management	Project management practices and documents will be created across all knowledge areas according to the latest Project Management Institute (PMI) standard and guide (PMBOK, 2021)	Successful project estimation and completion	263 days	$90,000

The value of an effective WBS Dictionary

One of the most important tools for managing project scope is the WBS dictionary. It is a detailed addition to the WBS that defines each deliverable and its execution to achieve the final deliverable of the project. It comprises deliverables, WBS Code, statement of work, schedule and cost estimation, and resources. It is one of the important parts of the scope baseline, the other two are a work breakdown structure (WBS) and a project scope statement (PMI, 2017)

An effective WBS dictionary (WBSD) allows a quick comparison between the real and planned work scope. In this way, the project manager is able to evaluate the progress of the project if it is behind or ahead of schedule. Moreover, it enables the project manager to discover the project tasks that caused the delay. Outlining an effective WBS dictionary provides good control over the project. A well-articulated work breakdown dictionary facilitates efficient project management ensuring all tasks are assigned to appropriate resources and that all the dependencies are correctly identified. Additionally, it will reduce ambiguity in the project flow ensuring all tasks are completed precisely (Lopez, 2021) .

WBS adhering to the 100% Rule

Our WBS adheres to the 100% Rule by embracing all work to be done for the project. The work breakdown structure should cover all the tasks included in the project scope statement, according to the 100 percent rule. It ensures all tasks must be finalized before delivering the Bristol product to the customers. The work package of our WBS at several levels fulfills the 100% rule. For instance, the WBS elements in level 3 contain the sum of 100% of the work required to complete the parent sub-deliverable in level 2.

Why is 100% Rule an effective tool to manage Project Scope?

The 100 percent Rule is a vital aspect of the work breakdown structure. The project manager must employ the 100 percent rule to confirm that there are no unrelated items in the hierarchy and that the necessary activities are well captured. Additionally, utilizing the 100% rule provides more assurance that the relevant activities are defined by the project scope. This rule allows effective

decomposition of the WBS. Since the WBS is outcome-oriented, it outlines everything that needs to be done under the 100 percent rule, regardless of work style or scheduling changes. Methodologies and activity schedules may change over the project, but the work breakdown structure should not.

The work breakdown structure is the foundation of the planning process. If the project's outcomes aren't outlined explicitly, it will fail. The use of the 100 percent rule permits all outcomes to be defined prior to the commencement of schedule planning. Additionally, it ensures that project costs are appropriately reported in the accounting system after it has begun. This is true for all projects, regardless of whether they are conducted for other divisions of a corporation or for a regular paying customer. The 100 percent rule enables exact costing, which is required for future budgeting of related undertakings. As a result, the 100 percent rule makes it easier to maintain track of all deliverables thereby, achieving key stakeholders' and project sponsors' prospects *("The 100% Rule"*, 2022).

Project Tradeoffs

Sr. No	Overview	Tradeoff
1	KMART is asking for 9 months for the delivery of the project. But the general timeline for COLIN's company is 10 months. So, for maintaining effective relations and finalizing their spot in Kmart COLIN has to deliver the project within 9 months	The project schedule is very tight for the project team. The limited schedule will affect the quality and progress of the project
2	COLIN's manufacturing facilities are in China so for delivering the order it takes avg 35 days by sea. To avoid those delays in shipping COLIN can get those shipped to them by air, though this would take 7-10 days for delivery but can cost more	The project cost will increase if we save the distribution time

3	Alice, the main manufacturing partner of COLIN has the patent for the same kind of product as COLIN's product. Using the same patent will decrease the schedule almost by 40%. Also, decrease the cost of R&D as well.	✓ We have to give up on the quality of the Bristol product ✓ Alice can become our competitor if it starts its own production. It may ask royalty for the patent, increasing the price in the next production cycle
4	Burey corporation is another supplier and has a long commitment to COLIN. They are based in China and have the top operating facility and can provide large quantities of high-quality products within a short time. This company could be an option to reach the 9-month deadline of KMART. However, Burey does not have a devoted R&D department for upgrading or modifying the product design created by COLIN.	Burey can expedite the product delivery, but we will have to compromise on the product quality as it would not comply with COLIN's standards.

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