EY: Nittany Lion National Bank Project Document

Phase 5: Execute, Monitor, and Control

Course: IST 302

Group: EY Team 2

Document Revision #1

Revision Log

Revision	Date	Explanation	
0	02/01/2019	Templates drafted	
1	02/07/2019	Phase 1 completed	
2	02/25/2019	Phase 1 Revisions/Phase 2 completed	
3	02/27/2019	Phase 3 completed	
4	03/21/2019	Phase 4 complete/AoA diagram complete	

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Executive Summary

Nittany Lion National Bank (NLNB) is one of the largest Northeastern banks in the United States. NLNB handles commercial, retail, and banking as well as running operations for loans, savings, real estate lending, and wealth management. In December of 2018, the Nittany Lion National Bank (NLNB) experienced a massive failure of their banking applications which caused a majority of their customers the inability to access their accounts. Our team's main focus will be to revamp the mobile applications operated by the users by creating a much more secure and reliable system.

Ernst and Young will be the consultants to the Nittany Lion National Bank that will analyze the technologies that are in use at the bank. Our team will make proposals to help upgrade several different areas of the bank's infrastructure to further improve the end user experience and security and risk assessment. Our team's deliverables will enable Nittany Lion National Bank to improve many of their issues with their mobile application, infrastructure, and ATM machines that are causing many customers to have poor experiences.

Stakeholder Register

Prepared by: EY2 Date: 1/6/19

Stakeholder names and contact information

Stakeholder	Contact Info	Organi zation	Role	
Name	Email address	Phone number		
Briley V Marchetti	Briley.Marchetti@ey.c om	N/A	Ernst & Young LLP	Subject Matter Advisor
Joshua lovine	jmi5127@psu.edu	609-276-5821	Penn State	Business Analyst
Alexander Sayther	ams7975@psu.edu	973-229-3773	Penn State	Business Analyst
Jogesh Chabria	jogesh@psu.edu	484-758-7577	Penn State	Business Analyst
Ryan Bogniak	rjb5876@psu.edu	814-403-0423	Penn State	Business Analyst
Harold Trakhman	hpt5042@psu.edu	732-675-2499	Penn State	Business Analyst
Ayush Chhabra	akc5562@psu.edu	484-354-1826	Penn State	Team Lead
Connor Wayne	cwayne@nlnb.com	732-475-8535	NLNB	CEO

Stakeholder Management Strategy (Includes Communication Analysis below)

Prepared by: EY2 Date: 1/6/19

Name	Level of Interest	Level of Influence	Potential Management Strategies
Briley V Marchetti	High	Medium	Briley is our advisor who will be guiding us onto the right path and helping us with any issues we have. We plan to have weekly and sometimes bi-weekly phone conferences on Tuesdays and Thursdays.
Connor Wayne	High	High	He is the CEO of NLNB in which we will report to him as well as update him on new things that come up, weekly and monthly.

Stakeholder Communications Analysis

Stakeholders	Document Name	Document Format	Contact Person	Due
Conner Wayne	Status Update	Progress Report		Bi-weekly

Business Case

1.0 Introduction/ Background

The Nittany Lion National Bank is among the most recommendable invested banks throughout the United States, however, it has come to the concern of many customers and investors that the IT systems briefly failed causing \$100 million left to be left unaccounted for. Our team has been given the task of devising a plan to fix and implement certain IT problems found within the Nittany Lion National Bank. These certain IT issues that we will target include new software development, the end-user experience, troubleshooting log-in problems, Graphical User Interface issues, as well as business and other system functions. We will be working alongside a consulting member from Ernst & Young, Briley Marchetti, to assist us with the specifications, time-frame goals, and productivity targets to provide a brand new operating system on schedule and within our set budget.

2.0 Business Objective

Part of our business plan is to ensure that our team follows a strict schedule to utilize the most time spent on this project while also being proficient in our work. We will work with our stakeholder to ensure we are meeting the deliverables that best suits the customers' requests and needs. To closely monitor the business-related functions of the project we must emphasize to our members the importance of refining programs even after a general blueprint is set for the project.

3.0 Current Situation and Problem/Opportunity Statement

The current challenge that the Nittany Lion Bank is facing regards IT system security. Recently, a massive failure of their banking applications has resulted in users not being able to access their financial accounts. We will utilize our IT knowledge, and communication skills to develop solutions to the problems with the bank's infrastructure that will eventually improve the applications, and satisfy the users.

4.0 Critical Assumption and Constraints

1. Our group of six may struggle to coordinate times to meet with our conflicting schedules, but we will be sure to plan ahead and communicate remotely to ensure that we remain in touch.

2. Time will also be a constraint because the customers need to get access to their valuable accounts as soon as possible. A failure like this requires a lot of effort as well as accuracy, and because our time is constrained we must work efficiently.

5.0 Analysis of Option and Recommendation

- 1. Currently, NLNB integrates and monitors all financial transactions within the bank at one centralized location. Having a single location to monitor transactions creates a critical point of failure. Splitting the infrastructure decrease the chance for a catastrophic event such as the bank's recent economic incident to increase control over essential processes.
- 2. Our recommendation will be a combination of risk reduction strategies that include, but are not limited to, decentralization of monitoring and of financial transactions. There may be outside sources that are unnecessary and could be replaced by more consistent and reliable in house.

6.0 Preliminary Project Requirements

 Our team will need to have a complex and thorough understanding of how the IT systems function under NLNB's processes.

7.0 Budget Estimate and Financial Analysis

In September 2018, a software upgrade froze the banks systems, causing \$100 million in costs and compensation. By evaluating the controls the bank has put in place, we will create a risk assessment for NLNB to help with their IT infrastructure. The budget estimate is going to be roughly \$225,000. IT personnel carry high wages, therefore this is an early over-estimation. This will include paying for the necessary tools to complete the project, as well as other unforeseen costs that may come up in the future.

8.0 Schedule Estimate

Our team will be moving swiftly and staying on schedule. The risk assessment should be complete by April 18th, 2019. We will initiate the project by February 19th. The plan scope and time will be delivered by February 28th. By March 21st we will have the plan cost and quality. Afterward we will execute, monitor and control the plan by April 4th. Lastly, we will close the project with the completed risk assessment by April 18th.

9.0 Potential Risks

When you are working sensitive data such as the financial data of a large number of people there will always come risks. We must keep these records securely to avoid exploiting them, and we must make sure we work meticulously to prevent error. Also, we must ensure that we complete the project, and meet the scope to ensure an effective, but timely finished product. If we do not meet these goals we will risk losing clients, and damaging the reputation of the bank.

10.0 Exhibits

NLNB recently had a malfunction in their system that resulted in a loss of \$100 million unaccounted for. NLNB is looking for a risk assessment as well as other recommendations for the future.

Project Charter

Project Title: Ernst and Young Team 2 Nittany Lion National Bank Project Plan

Project Start Date: February 7, 2019
Projected Finish Date: April 18, 2019

Budget Information: \$225,000 **Project Manager:** Ayush Chhabra

Project Objectives: The main goal is to fix the IT infrastructure of NLNB. Our team's objectives are to revamp the security behind the Automated Teller Machines(ATM), adjust a new mobile application that will allow users and customer to have a better experience, and finally improving the network infrastructure to allow for a more efficient

service to end-user experience.

Main Project Success Criteria: This project will help provide the Nittany Lion National Bank with solutions and an analysis of their network infrastructure, mobile application, ATM machines, and a general improvement to the overall user experience. CEO, Connor Wayne will need to sign off the project as well as received advice from other stakeholders

Approach:

- Examine the current IT infrastructure at Nittany Lion National Bank
- Collaborate with the IT professional at Nittany Lion National Bank to receive a more accurate analysis of the current situation
- Hold a weekly meeting to review the progress of the project
- Provide Nittany Lion National Bank with a risk assessment survey to help figure out the organizational risks of the network infrastructure, mobile applications, and the ATM

2.3 Assumptions

Number	Name	Explanation
1.	Cost	The total cost of the project would cost around \$175,000 however the initial estimating is \$225,000 for extra costs that may come up
2.	Number of Hours Spent	Our team calculated that it would approximately take around 1900 man hours to complete the project. This would be divided by having the project manager work a total of 400 hours and the rest of the staff would work a combined 1500 hours
3.	Deadline	The deadline for this project is April 18th, 2019. By this date we will have a detailed risk assessment regarding the IT systems which failed, causing \$100 million left to be accounted for.
4.	Risk Analysis Survey	This survey will help our team analyze all the potential risks of NLNB's ATM, application services, and infrastructure
5.	NLNB Compliance	The NLNB has agreed to comply with our risk assessment, and the use of our proprietary software and hardware technology.
6.	Risks	Our team will have to be careful during the implementation phase. The user's and NLNB adoption of any redesigns will need to be taken into account, as well as any potential bugs missed.
7.	Communication	The team will be communicating with Briley Marchetti and Conor Wayne throughout the project in order to keep all parties involved and up to date on any changes that may occur throughout the project lifecycle.
8.	Technology	The team will use various forms of software and hardware to increase project effectiveness

3 Project Scope

3.1 Scope Management Plan

The main essential goal of the project is to create a newly developed platform for Nittany Lion National Bank's users and clients. With the newly renovated platform, clients and users will have the ability to have an overall better experience when using the website, application, and ATM machines. With these changes, NLNB will have a drastic increase in customer satisfaction as well as have the ability to save money on customer and tech support. Ernst and Young will help to provide guidelines for designing the deliverables needed to be done. The scope statement, the WBS, and the WBS dictionary will help to define the scope. With the help of the project manager, EY, and NLNB executives, they will approve of any updates done to the scope. Any changes that need to be made to the scope can be done by stakeholders in the project and any change requests will require a change request document. When the change request document is authorized that info will be conveyed to all stakeholders under the project.

Another large phase of this project will be the work breakdown structure through the use of Microsoft project 2016. The intent of the WBS is to show stakeholders the development of the project in small key components. The WBS will be constantly updated weekly as well as be approved by the project leader. The WBS dictionary will be used as a reference to determine components, milestones, and deliverables of the WBS.

The scope of the project was made through a collection process. The first process of the scope was to analyze how NLNB handled individuals account information. Through the information developed form the analysis our team was able to create a required management plan, the requirement identification plan, and the RTM which will layout the features of the new platform. The features of the new platform will receive expertise from programmers and software designers. The help provided by these experts will allow our team to develop a much more appealing and efficient platform. In order for our team to follow an effective management plan, the project will be broken on a weekly basis where team members will spend about 25-30 hours a week allowing for the project manager to keep track of all work being done. Throughout much of the project's life cycle, the project manager will make sure that all deliverables are correct and on time. From there the project manager will send the deliverables to the subject matter advisor who will sign off on them.

3.2 Scope Statement

Project Title: Nittany Lion National Bank Project

Date: 02/27/2019 Prepared By: EY2

Project Summary: In short, we will be analyzing how the Nittany Lion National Bank handles the confidential data of its customers. After understanding that, we will be creating a new platform for both the bank and its customers to help give its users a better experience. This will help decrease the amount of backlash the bank has been receiving in recent years.

Project Characteristics and Requirements: In order for our team to successfully execute this project we will need to manage and plan for all three triple constraints which include scope, schedule, and cost. The Nittany Lion Bank has experienced a failure in their banking applications which has resulted in \$100 million in expenditures. With such a large failure, especially one that entails the user's personal financial data we must act swiftly, but accurately to ensure that we get these features back and running to prevent any more losses. By March 21st, 2019 our team will have prepared the plan cost and quality. Following this by April 4th, 2019 we will monitor, and control the plan. Our official risk assessment should be complete by April 18th, 2019 along with the completion of the project. In order to stay on track, and manage our time wisely we will break the project up on a weekly basis, and ensure that each project team member is spending 25-30 hours working on the project. The project manager will work closely with team members, and be sure that the project deliverables are completed accurately, and on time. We will need to make sure that we account for some changes to occur along the road in this project. We will need to take this into account in our budget as reserves, and we will need to develop a set of plans in case we run into issues that could delay our planned completion date. While we are working on solving the bank's financial application issues we must pay attention to every detail to prevent security issues and to protect the privacy of the user's data. To maintain accuracy and work efficiently we will be sure to constantly analyze our work, and optimize our time. Over the course of the next few weeks this project will be carried out in 6 different phases described in the section below.

Summary of Project Deliverables

Phase 1 - Kickoff

This phase includes the overview of the project. Included will be the executive summary, stakeholder register, and stakeholder management strategy.

Phase 2 - Initiate

This phase is to help get the project off the ground and have the ball rolling. As a continuation of Phase 1, we will also include a business case, charter, and assumptions.

Phase 3 - Plan Scope and Time

In this phase we will be planning out the entire project. What will be included in this deliverable is the scope management plan, scope statement, requirements management plan, requirements identification, requirements traceability matrix, work breakdown structure, and work breakdown structure dictionary. This phase will also include a schedule management plan, activity list, gantt chart with milestones, and an arrow on arrow network diagram.

Phase 4 - Plan Cost and Quality

This phase is to help plan the cost and quality of the project. Included in this deliverable will be a cost management plan, activity cost estimates, budget baseline, quality management plan, change request form, and change request log.

Phase 5 - Execute, Monitor, and Control

In this phase we will be executing, monitoring, and controlling the plan we have put in place. This deliverable will include a human resources plan, human resource loading, communications management plan, risk management plan, risk register, prioritized risk list, and procurement management plan.

Phase 6 - Close

In this phase we will close the project. We will include a lessons learned report, and a student - team point of view presentation.

Project Success Criteria: In order for this project to be a success, all the requirements must be fulfilled. The customer, clients and the NLNB itself should be satisfied with the new updates we've put in place. The Nittany Lion National Bank's information technology department should not be having any problems in the near future. Lastly, the bank should be reporting strong numbers, as well as, an overall satisfaction rate above 80 percent.

3.3 Requirements Management Plan

The project's requirements will be defined in the way in which the customer (user) can request customer support on the NLNB app that is designed. The overall objective of these requirements are to serve the customers in a timely and proficient manner and create a sense of reliable customer service throughout the mobile application. A benefit of using this application is that the company could save money by cutting out the costs of using customer support representatives and switching vastly to online assistance, with contact information of a few representatives of course. By studying the needs of the user along with surveying which systems are the most compatible among users, our team will devise a plan to fulfill these requirements. Using the feedback that we receive from clients and prospective customers, our team can implement changes in the current application systems (i.e. *NorthGo*) along with ensuring that all customers and employees can make transactions and receive payroll easily.

Our development team will be responsible for carrying out the overall construction of the online application as well as be required to make repairs when needed. A secure network must also be require as our goal is to ensure that every person who uses the application, and NLNB itself, will be assured that transactions are being filtered through a reliable system. Lastly, and most importantly, the application will be developed so that any user may view past transactions as well as bank statements to have complete transparency of what is happening with their bank accounts.

3.4 Requirements Identification

Requirement No.	Name	Description
1	Mobile Application Research	Do research on Nittany Lion National Bank's current day mobile application and its functionality
2	Web Application Research	Do research on Nittany Lion National Bank's current day web application and its functionality
3	ATM Research	Do research on Nittany Lion National Bank's current day ATM and its functionality
4	Mobile Application Analysis	Examine various different types of tests to the current day mobile application
5	Web Application Analysis	Examine various different types of tests to the current day web application
6	ATM Analysis	Examine various different types of tests to the current day ATM
7	Observation of User Interaction with mobile and website applications and ATMs	Examine customers using the mobile and website, applications and ATM software through its various layers of windows.

8	Observation of Employee Interaction with mobile and website applications and ATMs	Examine employees using the mobile and website, applications and ATM software through its various layers of windows.	
9	Online Survey	 Create an online survey for customers and employees: Do you use the application over wifi or the through data/hotspots? How often do you access these applications? Which browser(s) do you use? What are some of your favorite features of NLNB's website? What are some of your favorite features of NLNB's application? What are the features you wish to see on the website and/ or application? 	
10	Analysis of Survey Data	Our team will go through all the answers of all the employees and customers and make a tallie of the most common answers	
11	Development of Mobile Application	Our team will meet with expert programmers and software developers to come up with a plan to work on the mobile application	
12	Development of Website Application	Our team will meet with expert programmers and software developers to come up with a plan to work on the website	
13	Development of ATM	Our team will meet with expert programmers and software developers to come up with a plan to work on the ATM software	

14	Implementation of Mobile Application	Apply and integrate the new mobile application into NLNB's infrastructure
15	Implementation of Web Application	Apply and integrate the new website into NLNB's infrastructure
16	Meeting with Stakeholders	Inform stakeholders of the implementation of the new systems and go over any changes and future plans that needs to be done
17	Meeting with IT Department	Have our team have a meeting with the IT department to discuss any updates and changes that were made with either the website, application, or ATMs.

3.5 Requirements Traceability Matrix (RTM)

Requirement No.	Name	Category	Status	Source
1	Mobile Application Research	Research	Completed	Internal
2	Web Application Research	Research	Completed	Outsource
3	ATM Research	Research	Completed	Development Team
4	Mobile Application Analysis	Analysis	Completed	Internal
5	Web Application Analysis	Analysis	Completed	Internal
6	ATM Analysis	Analysis	Completed	Internal

7	Observation of User Interaction with mobile and website applications and ATMs	Analysis	Completed	Internal
8	Observation of Employee Interaction with mobile and website applications and ATMs	Analysis	Completed	Internal
9	Online Survey	Software	Completed	Outsource
10	Analysis of Survey Data	Analysis	Not Complete	Internal
11	Development of Mobile Application	Software	Not Complete	Internal
12	Development of Website Application	Software	Not Complete	Internal
13	Development of ATM	Hardware and Software	Not Complete	Security
14	Implementation of Mobile Application	Software	Not Complete	Internal
15	Implementation of Web Application	Software	Not Complete	Internal
16	Meeting with Stakeholders	Meeting	Not Complete	Internal
17	Meeting with IT Department	Meeting	Not Complete	Internal

3.6 Work Breakdown Structure (WBS)

See MS Project File

			Task						Resource	
		0	Mode ▼	Task Name	Duration •	Start +	Finish +	Predecessors +	Names 🔻	Add New Column
1	1		*	▲ 1.0 Initiating	22 days	Mon 1/21/19	Mon 2/18/19			
2	2		-5	₫ 1.1 Team Roster	1 day	Mon 1/21/19	Mon 1/21/19		Ayush Chhabra,	
3	3		-	1.1.1 Team Meeting	1 day	Mon 1/21/19	Mon 1/21/19		,	
- 4	4		*	■ 1.2 Stakeholder Register	2 days	Tue 1/22/19		2,3	Alexander Sayth	
9	5		-	1.2.1 Identify Stakeholders	1 day	Tue 1/22/19	Tue 1/22/19	_,	ruexander sayen	
	6		-3	1.2.2 Gather Stakeholder Contact Information	1 day	Wed 1/23/19	Wed 1/23/19	5		
7	7	٠	*	■ 1.3 Stakeholder Management Strategy	2 days	Sat 1/26/19	Mon 1/28/19	5,6,4	Jogesh Chabria,.	
9		•	~ =_s	1.3.1 Stakeholder Communication Analysis	1 day	Mon 1/28/19	Mon 1/28/19	3,0,4	Jogesh Chabria,	
- 9			=2	1.3.1.1 Identify communication methods	1 day	Tue 1/29/19	Tue 1/29/19	8		
1	10	4	*	■ 1.4 Business Case	4 days	Sun 2/10/19	Wed 2/13/19	8,9,7	Jogesh Chabria,.	
1		т	~ =3	1.4.1 Discuss Current Issues	1 day		Mon 2/11/19	0,5,7	Jugesii Cilabila,.	
1				1.4.1 Discuss Current issues 1.4.2 Discuss Reccomendations	-	Mon 2/11/19 Tue 2/12/19	Tue 2/12/19	11		
1					1 day					
				1.4.3 Discuss Requirements	1 day	Wed 2/13/19	Wed 2/13/19	12		
1			-3	1.4.4 Schedule Estimate	1 day	Thu 2/14/19	Thu 2/14/19	13		
	16		*	▲ 1.5 Project Charter	3 days	Thu 2/14/19	Mon 2/18/19	11,12,13,14,10	Alexander Sayth	
1			-3	1.5.1 Establish Objectives	1 day	Thu 2/14/19	Thu 2/14/19	1.0		
	18		-9	1.5.2 Establish Approach	1 day	Fri 2/15/19	Fri 2/15/19	16		
1	ıσ		_5	1.5.3 Establish Success Criteria	1 dav	Mnn 2/18/19	Mnn 2/18/19	17		
1	18			1.5.3 Establish Success Criteria	1 day	Mon 2/18/19	Mon 2/18/19	17		
1	9		*	■ 1.6 Project Aussmptions	3 days	Fri 2/15/19	Tue 2/19/19	16,17,18,15	Harlod Trakhmaı	
2	0		-3	1.6.2 Identify Potential Risks	1 day	Fri 2/15/19	Fri 2/15/19	10,11,10,13	nanoa makiina	
2	21		=3	1.6.3 Estimate length and establish dealine	1 day	Mon 2/18/19	Mon 2/18/19	20		
2			\$?	<new task=""></new>	Ludy	141011 2/ 10/ 15	1410112/10/15	20		
2			*	4 2.0 Planning	14 days	Mon 2/18/19	Thu 3/7/19	21,1		
2			*	■ 2.1 Scope Management Plan	2 days	Thu 2/21/19	Fri 2/22/19	21	Alexander Sayth	
			<i>⊼</i>	2.1.1 Develop Scope Statement	1 day	Thu 2/21/19	Thu 2/21/19	21	Alexanuel Sayun	
	26			2.1.2 Narrow Scope	1 day	Thu 2/21/19	Thu 2/21/19			
2			→	✓ 2.2 Scope Statement		Thu 2/21/19	Mon 2/25/19	25,26	Connectations	
2	28		<i>×</i>	·	3 days			23,20	Connor Wayne,	
	9		>	2.2.1 Identify Customer Requirements	1 day	Thu 2/21/19	Thu 2/21/19			
	10		→	2.2.2 Identify User Requirments	1 day	Thu 2/21/19	Thu 2/21/19	20.20	to one object of	
3			, ,	■ 2.3 Requirements Management Plan	3 days	Fri 2/22/19	Tue 2/26/19	28,29	Jogesh Chabria,.	
3			-9	2.3.1 Indentify Requirements	1 day	Fri 2/22/19	Fri 2/22/19			
3			->	2.3.2 Establish Application Systems	1 day	Fri 2/22/19	Fri 2/22/19			
			-5	2.3.3 Establish Rliability Plan	1 day	Fri 2/22/19	Fri 2/22/19			
3.			*	■ 2.4 Project Schedule Management Plan	2 days	Tue 2/26/19	Wed 2/27/19	31,32,33	Alexander Sayth	
3	55		-2	2.4.1 Manage Activity List	1 dav	Tue 2/26/19	Tue 2/26/19			
3	16		-5	2.4.2 Cebedula Baruiyawanta	1 day	Tue 2/26/10	Tue 2/26/10			
3			*	2.4.2 Schedule Requirements <new task=""></new>	1 day	Tue 2/26/19	Tue 2/26/19			
3			*		0.4	Th 2 (20 (40	Mon 3/11/19	23		
	9			4 3.0 Cost/Quality Management Plan	8 days	Thu 2/28/19			A Chlh	
	10		= 5	■ 3.1 Cost Management Plan Plan	2 days	Thu 2/28/19	Fri 3/1/19	35,36	Ayush Chhabra,	
4				3.1.1 Establish Budget	1 day?	Thu 2/28/19	Thu 2/28/19	40		
4			*	3.1.2 Determine activity Costs	1 day?	Fri 3/1/19	Fri 3/1/19	40		
4 4		Ŧ	*	■ 3.2 Quality Management Plan	5 days	Sat 3/2/19	Thu 3/7/19	41,39,40	Jogesh Chabria,.	
4			#T	3.2.1 Plann standards	1 day?	Thu 2/28/19	Thu 2/28/19			
4			*	3.2.2 Obeserve and Maintain Performance	1 day?	Fri 3/1/19	Fri 3/1/19	43		
			*	<new task=""></new>	1 day?	Mon 3/4/19	Mon 3/4/19	44		
	16		*	4.0 Execute, Monitor and Control	12 days	Wed 3/20/19	Thu 4/4/19	38		
4			*	△ 4.1 Project resources	2 days	Wed 3/20/19	Thu 3/21/19		Alexander Sayth	
4			*	4.1.1 Human Resources Plan	1 day?	Wed 3/20/19	Wed 3/20/19			
4			*	4.1.2 Human Resources Loading	1 day?	Thu 3/21/19	Thu 3/21/19	48		
5			*	■ 4.2 Project Communications	1 day	Fri 3/22/19	Fri 3/22/19		Connor Wayne,	
5			*?	4.2.1 Communications Management Plan						
5	12		*	■ 4.3 Project Risk	3 days	Mon 3/25/19	Wed 3/27/19		Jogesh Chabria,.	

53	*	4.3.1 Risk Management Plan	1 day?	Mon 3/25/19	Mon 3/25/19			
54	*	4.3.2 Risk Register	1 day?	Mon 3/25/19	Mon 3/25/19	53		
55	*	4.3.3 Prioritiezed Risk List	1 day?	Tue 3/26/19	Tue 3/26/19	54		
56	*	■ 4.4 Project Procurement	1 day	Tue 3/26/19	Tue 3/26/19		Ryan Bogniak	
57	10	A A 1 Procurement Management Plan						

3.7 Work Breakdown Structure Dictionary

Item #	Item Name	Item Description
2	Team Roster	Gather team contact information and have first team meeting
4	Stakeholder Register	Identify who the Stakeholders are and collect the contact information of all stakeholders
7	Stakeholder Management Strategy	Determine how communication methods will take place and attempt to schedule timely meetings and updates
10	Business Case	Gather necessary information to access what the problem or issue that the NLNB is having and make recommendations into potential solutions.
15	Project Charter	Discuss and establish the objectives and approach for implementation of the project as well as clearly define the success criteria.
19	Project Assumptions	Establish the knowns and unknowns of the projects such as estimating the cost and time including potential risks involved.
24	Scope Management Plan	Determine the broadness of the scope, how it may change and what to do if it does.
27	Scope Statement	Understand fully what issues are to provide a statement that aligns with both what the customer wants and user needs.
30	Requirements Management Plan	Determine the requirements physically necessary to complete the project and determine how they will be acquired.

34	Project Schedule	Fit steps into project timeline and update plan as changes and
	Management Plan	delays are made during the project.

4.1 Project Schedule Management Plan

The project management plan will include all requirements and actions stated above. The progress of these activities will be monitored through online collaboration software to track all changes and progress made per action. The Activity list below breaks down each action into where that action will fit into the project timeline. Each action is expected to have a one week turnaround period. The project manager will be keeping up to date on the teams progress in order to make sure each action is delivered on time and up to customer satisfaction. While it would be ideal for this project to run smoothly, and on time we must plan for incidents such as delays in getting to work, illnesses, unavailable materials, and a lack of quality for our customer's expectations. In order to successfully manage our time, and plan for these unexpected events, we must account for them in our schedule by allotting extra time. If we do not provide times in our project plan for these occurrences we run the risk of a schedule overrun, and we may have to re-estimate parts of our project. This highlights the need for strong communication skills amongst our team because if we are always in contact we can handle these issues together. This may require working extra hours, and outsourcing work to third parties so that we can focus on our core business skills, and the task at hand.

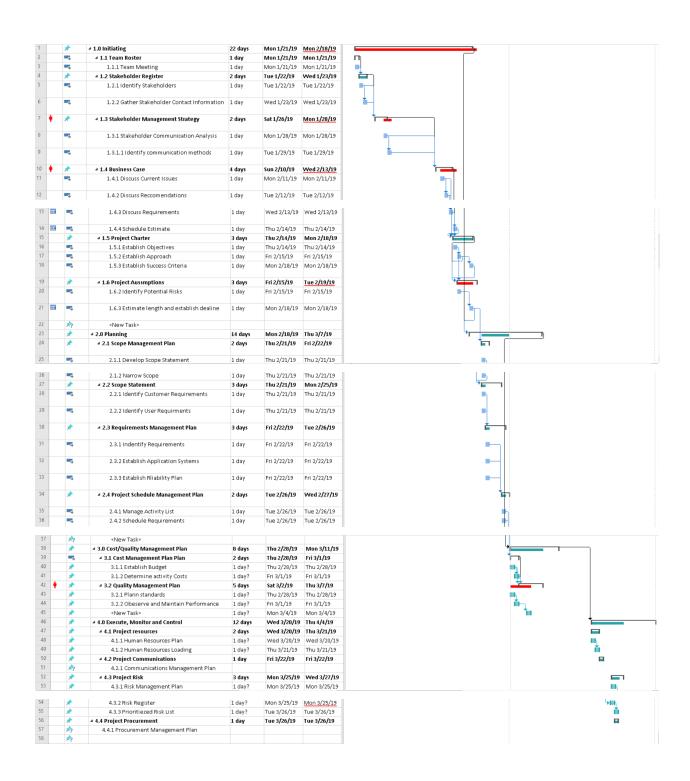
4.2 Activity List

Item#	Item Name	Item Description	Predecessors	Successors	Reso urce Requ ireme nts	Imposed Dates	Assumptions
4	Stakeholder Register	Identify who the Stakeholders are and collect the contact information of all stakeholders	Team Roster	Stakeholder Management Strategy Business Case Project Charter Project Assumptions Scope Management Plan Scope Statement Requirements	Textb ook, Com muni catio n with EY	Completed no later than March 5th 2019	We assume to collect all contact info by the imposed date

	_			Management Plan Project Schedule Management Plan			
7	Stakeholder Management Strategy	Determine how communication methods will take place and attempt to schedule timely meetings and updates	Stakeholder Register, Team Roster	Business Case Project Charter Project Assumptions Scope Management Plan Scope Statement Requirements Management Plan Project Schedule Management Plan	Textb ook, Com muni catio n with EY	Completed no later than March 7th 2019	We assume to impose all communicati on methods
10	Business Case	Gather necessary information to access what the problem or issue that the NLNB is having and make recommendations into potential solutions.	Stakeholder Register, Team Roster,Stakeho lder Management Strategy	Project Charter Project Assumptions Scope Management Plan Scope Statement Requirements Management Plan Project Schedule Management Plan	Textb ook, Com muni catio n with EY	Completed no later than March 9th 2019	WE assume we will have all the necessary information
15	Project Charter	Discuss and establish the objectives and approach for implementation of the project as well as clearly define the success criteria.	Stakeholder Register, Team Roster,Stakeho Ider Management Strategy, Business Case	Project Assumptions Scope Management Plan Scope Statement Requirements Management Plan Project Schedule Management Plan	Textb ook, Com muni catio n with EY	Completed no later than March 12th 2019	We are assuming to have the approach and implementati on strategy in
19	Project Assumptions	Establish the knowns and unknowns of the projects such as estimating the cost and time including potential risks involved.	Stakeholder Register, Team Roster,Stakeho Ider Management Strategy, Business Case, Project Assumptions	Scope Management Plan Scope Statement Requirements Management Plan Project Schedule Management Plan	Textb ook, Com muni catio n with EY	Completed no later than March 15th 2019	Assume to establish all required documentati on.

4.3 Gantt Chart with Milestones

See MS Project File



4.4 Arrow-on-Arrow (AoA) Network Diagram

See MS Project File

5 Project Cost

5.1 Project Cost Management Plan

The project Cost Management Plan has many different variables to it. To start, our management plan is intended to establish a portion of accuracy for our team's guidelines. Our team will have a contingency fund set that will be approximately 7% where all costs will be rounded up to the dollar to keep things safe. Our cost estimates will be able to show the labor costs needed to have a project team and a project manager.

The EY Team 2 will be able to provide stakeholders with more accurate information on the costs of the project that will be presented in the work breakdown structure. The brink that our team determined to be sufficient for the project would be a plus or minus of 7 percent of the original baseline cost. With this threshold our team will have the ability to make any changes throughout the project. Our team will use the process of the earned value management plan to measure the project performance. A lot of the costs associated with the project will be recorded in a spreadsheet on a bi-weekly basis that will provide the total costs and breakdown of the project.

5.2 Activity Cost Estimates

	# Units/Hrs.	Cost/Unit/Hr.	Subtotals	Level 2 Totals	% of Total
Items					
1. Project Management				\$230,014	23%
Project Manager	480	\$143	\$69,004		
Team Members	2880	\$49	\$141,020		
Contractors			\$20,000		
2. Hardware				\$96,848	9%
Physical Devices	10	3,873	\$38,739		
Servers	8	7,263	\$58,109		
3. Software				\$286,193	31%
Licensed Software	80	\$635	\$57,238		
Software Development	3	\$152,203	\$228,955		
4. Testing			60,530	60,530	6%
5. Training and Support				121,060	12%
Team Members	2880	\$33	\$96,848		
Training Cost	240	\$100	\$24,212		
6. Reserves			\$193,696	\$193,696	19%
Total Project Cost Estimate				\$988,341	100%

5.3 Project Budget Baseline

	Months				
Items	1	2	3	4	Totals
1. Project Management					
Project Manager	\$17,251	\$17,251	\$17,251	\$17,251	\$69,004
Team Members	\$35,252	\$35,252	\$35,252	\$35,252	\$141,010
Contractors					\$20,000
2. Hardware					
Physical Devices		19,369	19,369		\$38,739
Servers		29,054	29,054		\$58,109
3. Software					
Licensed Software		\$19,079	\$19,079	\$19,079	\$57,238
Software Development	\$57,238	\$57,238	\$57,238	\$57,238	\$228,955
4. Testing	\$15,132.50	\$15,132.50	\$15,132.50	\$15,132.50	\$60,530
5. Training and Support					
Team Members	\$24,212	\$24,212	\$24,212	\$24,212	\$96,848
Training Cost			\$12,106	\$12,106	\$24,212
6. Reserves	\$48,424	\$48,424	\$48,424	\$48,424	\$193,696
Total Project Cost Estimate					\$988,341

6 Project Quality

6.1 Project Quality Management Plan

To order to manage our project's quality, we must start with planning. Planning quality management means to prepare for situations and perform actions to reach our desired goal. It is important that we highlight the quality standards for our banking application project to our entire team. We will make sure to cover every deliverable including the project charter, project management plan, project documents, etc. We will gather data relevant to our project, and set meeting times to analyze the data, test, and make decisions. Quality assurance is vital to project quality management plan, and we will be sure to follow each of the processes to great detail. In order to stay on top of our work we will benchmark ideas for quality improvement. We also must manage our costs to provide competitive rates and features compared to other banking applications in the market.

Performance: We will be sure to analyze how well our application serves the customer's intended use.

Functionality: We need to measure the degree to which our system performs its intended functions.

Maintainability: We must address how easy our application is to maintain or support. **System Outputs:** These are vital because the end user must be able to visualize screens and reports for the system, and they have to be able to interpret each output.

Reliability: IT service management is a key term used when discussing reliability for IT projects. The end user must be able to rely on the product operating as expected.

6.2 Change Request Form

Project Name: Date Request Submitted: Title of Change Request: Change Order Number: Submitted by:			
Change Category: []Sco []Technology [] Other	pe	[] Schedule	[] Cost
Description of change reque	ested:		
Events that made this chan	ge necess	sary or desirat	ole:
Justification for the change continue/complete the projection	-	needed/desire	d to
Impact of the proposed char Scope: Schedule:	nge on:		
Cost: Staffing: Risk: Other:			

Suggested implementation if the change request is approved:

Required approvals:

Name/Title	Date	Approve/Reject

6.3 Change Request Log -

Request #	Submitted by	Name of submission	Description	Filed date	Status	Comment
1	Ryan Bogniak	Phase 2 Revision	Adding appendices	2/18/19	Complete	N/A
2	Ryan Bogniak	Updates to Phase 3	Adding AoA diagram	3/21/19	In progress	N/A

Bogniak Phase 4 grammar mistakes, editing Gantt Chart, and Project Schedule Managame nt Plan
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7 Project Human Resources

7.1 Project Human Resources Plan

The Human Resources Plan outlines the expectations according to how the project will be planned out and executed according to executives. This plan will describe how each individual's skills and resources will be allocated throughout project execution. The key people involved in the plan include our project team members, stakeholders, sponsors, customers, and any extra assistance that our team may utilize throughout the creation of of project management plan. By utilizing these resources this plan will determine the overall direction in which this project will be headed and determine the likelihood of success on the project. The key processes that our human resources plan will follow are indicated as shown below:

- 1. Finalizing the project requirements and dividing the roles for each task among group members.
- 2. Acquire the resources/personnel needed to meet job specifications this is where the project manager decides how many extra employees are needed to complete the task.
- 3. Consulting within the group to distinguish individual and group skills necessary for the job.
- 4. Last process includes the overall management and of key deliverables and task statuses. This process also includes using feedback to make active changes to the project to resolve and current constraints or issues during the project. This is the most important step as this determines the overall success or failure of a project.

The stakeholders that are involved in the project human resources plan include our project team: Harold Trakhman, Alex Sayther, Ryan Bogniak, Josh Iovine, Ayush Chhabra, and Jogesh Chabria. Other key skate holders include the CEO of NLNB; Connor Wayne, and our group's EY representative, Briley Marchetti. The customers involved include all people that use NLNB for their banking needs. These are some of the most important assets in this plan as their output is used to estimate the cost and resource allocation for the project. However, the overall success of a project is determined by the project skate holders and managing their resources.

7.2 Human Resource Loading

See MS Project file

8 Project Communications

8.1 Communications Management Plan

Project Name: Nittany Lion Banking Application

1. Stakeholder Communication Plan:

We must analyze the stakeholder communication needs so that we can save money and time by eliminating unnecessary information. We will be sure to stay in contact via email as well as a biweekly phone call with a representative of Ernst & Young. We also will make a monthly call to the CEO, Connor Wayne.

2. Communications summary:

Communication is vital to every project so we must be generate a solid communications management plan. We will prepare a written plan for each communication, and be sure to include stakeholder communication needs, information to be communicated, who will receive the information, suggested methods or technology, frequency of communication, procedures for resolving issues, revision procedures, and a glossary of common terminology.

Stakeholders Communications Name Delivery Method/Format	Producer	Due/Frequency
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Customer management	Weekly status report	Hard copy and meeting	Joshua Iovine, Harold Trakhman	First of month
Customer business staff	Weekly status report	Hard copy and meeting	Alexander Sayther, Ayush Chhabra	First of month
Training subcontractor	Training Plan	E-mail	Joshua Iovine	First of month
Customer technical staff	Weekly status report	Hard copy and meeting	Ryan Bogniak, Harold Trakhman	First of month
Software Subcontracto r	Software implementation plan	E-mail	Jogesh Chabria	First of month

9 Project Risk

9.1 Risk Management Plan

Project Name: Nittany Lion Banking Application

1. Methodology

In order to fulfill the needs of our project we must be sure to stay on top of our risk management. To do so successfully we must implement a flexible risk management plan that allows us to be able to plan for these risks and to mitigate them. We must be able to analyze the costs and benefits of all of our actions to ensure that we can accept, avoid, transfer, or control our risks to an acceptable level.

2. Roles and Responsibilities

The roles and responsibilities within risk management include planning, implementing, designing, controlling, and assessing. We will divide these responsibilities amongst our team to ensure that we cover each aspect. Risk assessment is crucial for this project because it provides us with the ability to judge the financial impact of each risk, as well as the impact to our overall schedule.

3. Budget and Schedule

Our budget and schedule are both vital components to our risk management plan. In order to maintain control of our budget we must assess the major line components in our budget, and the department or team member they are associated with. We will break down our project into pieces and handle those with the highest potential risk impact first. This will allow us to stay within our schedule, and lower the risk associated with each item in our budget because we are giving ourselves enough time within our schedule to tackle these tasks. Also, if we stick to our schedule this will help save money in our budget because we avoid the costs associated with schedule overruns.

4. Risk Categories

• Cost Risk - results in the cost of the project being higher than expected. This can be caused by an inaccuracy in cost estimation, and scope creep.

- Schedule Risk activities within the project are taking longer than expected. This risk can cause our schedule to slip which can result in increased costs, loss of competitive advantage, and a delay in the project benefits.
- Performance Risk the project fails to produce results that align with the expectations of the project specifications.
- Strategic Risk results in errors from our project strategy, and this can be caused by implementing a technology that simply does not work.
- **Operational Risk** results in poor implementation, and process problems with procurement, production, and distribution.
- Legal Risk associated with legal obligations like contract risks against the organization.

5. Risk Probability and Impact

The probability and impact will be assessed for each of the risks in our project. The probability assessment involves evaluating the likelihood of the risk occurring. While the impact assessment involves the estimation of the effects the risk has on a project objective.

6. Risk Documentation

Risk documentation is important because we need to have a visual representation of the potential risks associated with our project. We will be sure to highlight and assess each risk along with their level of impact. This information will be included in our risk register, and prioritized risk list below.

9.2 Risk Register

Risk	Description	Category	Root Cause	Triggers	Potential Responses	Risk Owner	Probability	Impact	Status
Insufficient Funds	If proper capital is not present the project will not be able to be completed	Project Risk	Budgeting error	Costomer is dissatisfied withbudgeting error	Avoid this by properly budgeting as well as adding a buffer	Business Analyst	Low	High	In Progress
Security Failure	If the security fails the project fail as the NLNB deals with sensitive information and could loose clients.		Many flaws in software, inadequate	Data Breaches	Deploy security patches as well as use better security solutions	Security analyst	Medium	High	Complete
Unsatisfied Customers	Customers are unhappy with provided features	Project Risk	Customer opinion not taken into account		Consumer friendly software enhancement	,	High		In Progress

9.3 Ranked Risk Register

Rank	Risk	Description	Category	Root Cause	Triggers	Potential Responses	Risk Owner	Probability	Impact	Status
		If proper capital is			Costomer is					
	ilisuilicient	not present the				Avoid this by properly				
	Funds	project will not be				budgeting as well as				
1		able to be completed	Project Risk	Budgeting error	error	adding a buffer	Business Analyst	Low	High	In Progress
		If the security fails								
		the project fail as the								
		NLNB deals with								
		sensitive information		Many flaws in		Deploy security patches				
	Security	and could loose		software,		as well as use better				
2	Failure	clients.	Security Risk	inadequate	Data Breaches	security solutions	Security analyst	Medium	High	Complete
		Customers are		Customer opinion	Non consumer					
	Uncaticfied					Consum or friendly				
	Unsatisfied	unhappy with		not taken into	,	Consumer friendly				
3	Customers	provided features	Project Risk	account	interface	software enhancement	Project Leader	High	Medium	In Progress

10 Project Procurement

10.1 Procurement Management Plan

For every situation, there will be a contract in place for reference. The contracts we will be using are cost reimbursable, so we can pay the supplier both direct and indirect annual costs. For every contract we have, we will use time and materials costs to calculate the prices. The purpose of these contracts is to help the team understand what the project needs to succeed. Lastly, we will decide whether or not we want to build any needed software in-house or get it from a third party.

12 All Client Deliverables

12.1 A Survey Instrument

Survey for the customers and employees regarding the web and mobile application.

Part I. Please select one:

- 1. When you go to choose a bank, how do you know you can trust them with your personal data?
- a. Your data is safe within the bank
- b. Anyone with basic computer skills can access your data.
- c. Refuse to have any online data.
- 2. If the bank were to get hacked, what would you do?
- b. Like to keep your data safe from any hackers
- d. Leave your data vulnerable

3. Do you believe that your bank should inform you of any attacks, or threats made to
its online data?
a. Strongly Disagree
b. Disagree
c. Neutral
d. Agree
e. Strongly Agree
4. How important is the bank's level of IT security when choosing a bank
a. Very important
b. Important
c. Neutral
d. Not too important
e. Not important
5. If Nittany Lion National Bank (NLNB) charges you an IT security fee, would you:
a. Pay the fee
b. Look for other banks
Part II. Please select as many options that apply to you:
1. What is your laptop and/or desktop platform?
a. Mac
b. Windows
c. Linux
d. Other (Please list):
e. I don't know

2. What browser do you use to access the banking website?
a. Safari
b. Mozilla Firefox
c. Google Chrome
d. Internet Explorer
e. Other (Please list):
f. I don't know
3. What are your interactions with online web banking?
a. Paying bills
b. Make transactions
c. Follow my online activity
d. Check my balance
e. Transfer money
f. I don't use online banking
g. Other (Please list):
4. What is your mobile operating system?
a. iOS
b. Android
c. Windows
d. Other (Please list):
f. I don't know

5. What are your interactions with mobile application banking?
a. Paying bills
b. Make transactions
c. Follow my online activity
d. Check my balance
e. Transfer money
f. E-deposit (Scan your check, and have the money transfer to your account)
g. I just have it on my phone because that's cool
h. I have the app, but don't use it
i. I don't have the app
j. Other (Please list):

Part III. Please select one:

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

2. When an IT issue arises with NLNB what is your reaction?

- a. It's technology, things happen
- b. It will be fixed in a couple of hours
- c. This happens all the time
- d. I'll start looking for another bank

- 3. In the event you are unable to access your personal account online, would you
- a. Check your credentials to make sure you're entering the correct items
- b. Try again after some time
- c. Call the bank for help
- 4. When you cannot access your online account on the web and on the app, what do you automatically assume?
- a. Power outage
- b. IT infrastructure outage
- c. Wrong credentials
- d. Poor internet connection/ poor service
- e. I don't assume anything, and go back to what I was doing
- 5. In the event of an IT problem, what do you think happened to your data?
- a. My data is perfectly secure
- b. It got hacked
- c. It got hacked and stolen
- d. It is backed up and safe
- 6. If you find any suspicious activity on your account, you
- a. Call NLNB and ask to speak with an employee
- b. Wait a day to see if it is resolved before calling
- c. Do nothing, the bank will figure something out
- d. Try to investigate by yourself
- e. Start looking for another bank

Appendices

Client Meetings Agendas and Reports: Appendix 1

Client Meeting 1 February 11, 2019 EY Case: Group 2

Meeting objective: To meet our EY case representative and discuss any general questions or concerns that we have had thus far in the project

Agenda:

- Getting to know group members and background information of EY Representative
- Task to be completed on the project
- Discussion about overall expectations for the project
- EY representative providing feedback for work completed

Action Item	Assigned To	Due Date
Catching up with missed requirements and how to construct an effective charter.	Ryan Bogniak Harold Trakhman Alex Sayther Josh Iovine Ayush Chhabra Jogesh Chabria	February 19, 2019

Date and time of meeting: February 11, 2019 - 6:00 PM

Client Meeting 2 March 12, 2019 EY Case: Group 2 **Meeting objective:** Talk about our previous and upcoming deliverable.

Agenda:

- Talk about the recommendations Briley is going to give us on the previous deliverable
- Ask any questions we may have on our next deliverable.

Action Item	Assigned To	Due Date
Fix up anything wrong in the deliverable that was submitted and finish the one due March 21st.	Ryan Bogniak Harold Trakhman Alex Sayther Josh Iovine Ayush Chhabra Jogesh Chabria	March 21, 2019

Date and time of meeting: March 12, 2019 - 5:15 PM

Client Meeting 3 April 3, 2019 EY Case: Group 2

Meeting objective: Talk about our previous and upcoming deliverable and about our WBS

Agenda:

- Talk about the recommendations Briley is going to give us on the previous deliverable
- Ask any questions we may have on our next deliverable
- Talk about issues with our WBS
- More professional writing without filler words

Action Item	Assigned To	Due Date
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Fix up anything wrong in the deliverable that was submitted, discuss our WBS, and discuss how to improve our writing	Ryan Bogniak Harold Trakhman Alex Sayther Josh Iovine Ayush Chhabra Jogesh Chabria	April 3, 2019
Date and time of meeting: April 3, 2019 - 5:30 PM		

Student Team Meetings Agendas and Reports: Appendix 2

Meeting Report 1: Kick off January 29, 2019 EY Case: Group 2

Outcomes of discussion topics

- Expectations from each group member (Complete)
- Expectations for the timeline of the project (Complete)
- Concerns about the project (Complete)
- Overall understanding of the tasks at hand (Complete)

Action items assigned:

- Table of contents
- Executive Summary
- Stakeholder Strategy/Management Strategy

Team Member	Attendance
Ryan Bogniak	Present
Harold Trakhman	Present
Josh lovine	Present
Alex Sayther	Present

Ayush Chhabra	Present
Jogesh Chabria	Present
Next meeting: February 15, 2019	

Meeting Report 2: Developing PLan Cost and Quality/Catching Up

March 19, 2019

EY Case: Group 2

Outcomes of discussion topics

- Discussing prior mistakes of the Arrow Network diagram
- Go over the project budget baseline
- Discuss the activity cost estimate

Action items assigned:

- We broke the workload off into smaller parts, so that everyone could pull their own weight.
- We defined and assigned the new sections that needed to be added to the Project, as well as made updates to the material completed in the prior phases of the project.

Team Member	Attendance
Ryan Bogniak	Present
Harold Trakhman	Present
Josh lovine	Present
Alex Sayther	Present
Ayush Chhabra	Present
Jogesh Chabria	Present
Next meeting: March 26, 2010	

Next meeting: March 26, 2019

Meeting Report 3: Developing the Execute, Monitor, and Control
April 8, 2019

EY Case: Group 2

Outcomes of discussion topics

- Talk about mistakes done in last deliverable
- Fix Gantt chart connections and milestones
- Discuss upcoming deliverable and how going to split up the work

Action items assigned:

- We broke the workload off into smaller parts, so that everyone could pull their own weight.
- We defined and assigned the new sections that needed to be added to the Project, as well as made updates to the material completed in the prior phases of the project.
- Made sure to familiarize ourselves with Microsoft Project

Team Member	Attendance
Ryan Bogniak	Present
Harold Trakhman	Present
Josh lovine	Present
Alex Sayther	Present
Ayush Chhabra	Present
Jogesh Chabria	Present
Next meeting: April 8, 2019	

Appendix 3: Bibliography

Schwalbe, K. (2019). *Information Technology Project Management, Revised* (9th ed.). Chegg Library.

Appendix 4: Student Team Roster

Role	Name	Email Address	Phone Number
Submission Leader	Harold Trakhman	haroldtrakhman@gmail .com	732-675-2499
Analyst	Alexander Sayther	ams7975@psu.edu	973-229-3773
Scribe	Ryan Bogniak	rjb5876@psu.edu	814-403-0423
Team Lead	Ayush Chhabra	akc5562@psu.edu	484-354-1826
Business Analyst	Joshua Iovine	jmi5127@psu.edu	609-276-5821
Facilitator	Jogesh Chabria	jogesh@psu.edu	484-758-7577

Appendix 5: Student Team Contract

Communication Plan: We plan to meet twice a week, with variable schedules, meetings will be determined week by week. This is subject to change but that will be communicated through our group chat depending on the situation. Outside of that we will be using Google Drive and Groupme to collaborate and coordinate documents and group work. We will attempt to meet in person when working as much as possible but working online suffices.

Code of Conduct: We will be straight forward in communicating with each other. We will also be open in considering everyone's ideas and opinions as well as constructive criticism. Each in-person meeting will be mandatory, absences will preferably be notified a day in advance. If only three members can meet, an attempt to reschedule will be made unless time in a constraint.

Sign-off:

Name	Signature	Date
Harold Trakhman	Harold Trakhman	7 February 2019
Alexander Sayther	Alexander Sayther	7 February 2019
Ryan Bogniak	Ryan Bogniak	7 February 2019
Ayush Chhabra	Ayush Chhabra	7 February 2019
Joshua Iovine	Joshua Iovine	7 February 2019
Jogesh Chabria	Jogesh Chabria	7 February 2019