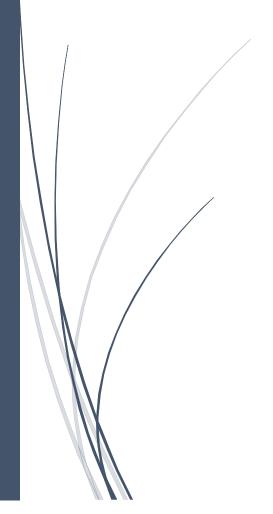
1/30/2023

# The POM+ Project

Group assignment of CSCI 31052 Project Management (2020/2021)



## Contents

Part 1	l	. 5
1.	Develop the WBS outline using the software available. :	. 5
2.	Based on this schedule, submit a memo that answers the following questions:	. 6
	A. When is the project estimated to be completed?	. 6
]	B. What is the critical path?	. 7
(	C. Which activity has the most total slack?	. 7
]	D. How sensitive is this network?	. 7
3.	Include the following supportive documents:	. 8
	A. Gantt chart	. 8
]	B. Network diagram highlighting the critical path	. 9
(	C. Schedule table reporting ES, LS, EF, LF, and slack for each activity.	. 9
Part 2	2	LO
exe	member the old saying, "A project plan is not a schedule until resources are committed." The ercise illustrates this sometime subtle, but important point. Using your files from Part 1, inproduces and their costs if you have not already done so. All information is found in Tables A2 dd A2.2. Prepare a memo that addresses the following questions:	ut .1
1.	Which if any of the resources are over allocated?	LO
2. lev	Assume that the project is time constrained and try to resolve any over allocation problems leveling within slack. What happens?	
3.	What is the impact of leveling within slack on the sensitivity of the network?	L2
4.	Assume the project is resource constrained and resolve any over allocation problems by leveling tside of slack. What happens?	$\sim$
5.	Include a Gantt chart with the schedule table after leveling outside of slack.	L4
Part 3	3	۱6
	anagement has accepted the July 19th completion schedule created at the end of Part 2. Prepare ef memo that addresses the following questions:	
1.	How much will the project cost?	۱6
2.	What is the most expensive activity?	۱6
3. the	What does the cash flow statement tell you about how costs are distributed over the life span exproject?	
4.	Include a monthly cash flow for the project	L7
Part 4	1	L8
pro the	sume that today is March 31, 2012, and Table A2.3 contains the tracking information for the point up till now. Enter this information into your saved baseline file and prepare a status report for first three months of the POM+ project. Your status report should also address the following estions:	or ng
1.	How is the project progressing in terms of cost and schedule?	١8
2.	What activities have gone well? What activities have not gone well?	18

	What do the PCIB and PCIC indicate in terms of how much of the project has been ac	
to d	date?	18
4.	What is the forecasted cost at completion (EACf)?	18
5.	What is the predicted VACf?	18
6.	Report and interpret the TCPI for the project at this point in time.	18
7.	What is the estimated date of completion?	19
8.	How well is the project doing in terms of its priorities?	19
9.	Include an Earned Value table and a Tracking Gantt Chart	19

Figure 1	5
Figure 2	6
Figure 3	6
Figure 4	7
Figure 5	7
Figure 6	8
Figure 7	8
Figure 8	9
Figure 9	9
Figure 10	10
Figure 11	11
Figure 12	11
Figure 13	11
Figure 14	12
Figure 15	12
Figure 16	13
Figure 17	13
Figure 18	13
Figure 19	14
Figure 20	14
Figure 21	15
Figure 22	15
Figure 23	16
Figure 24	16
Figure 25	17
Figure 26	17

### 1. Develop the WBS outline using the software available. :

Use this file and the information provided below to create a project schedule.

- ➤ The following holidays are observed: January 1, Martin Luther King Day (third Monday in January), Memorial Day (last Monday in May), July 4th, Labor Day (first Monday in September), Thanksgiving Day (4th Thursday in November), December 25 and 26.
- ➤ If a holiday falls on a Saturday then Friday will be given as an extra day off, and if it falls on a Sunday then Monday will be given off.
- ➤ The project team works eight-hour days, Monday through Friday.
- ➤ The project will begin on January 3, 2012.

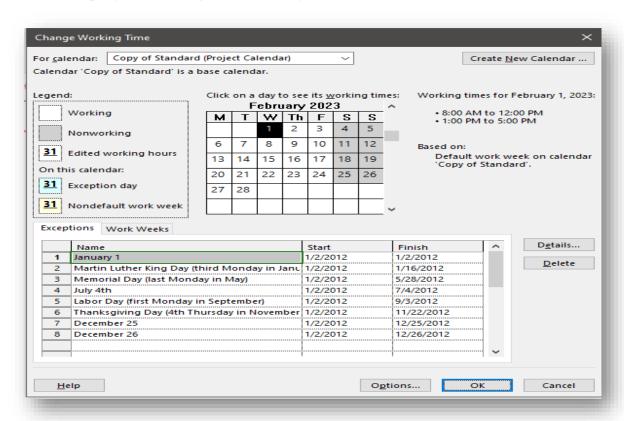


Figure 1

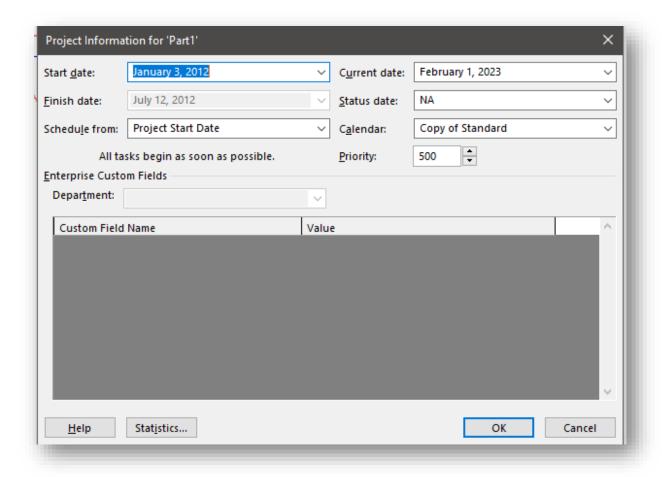


Figure 2

- 2. Based on this schedule, submit a memo that answers the following questions:
- A. When is the project estimated to be completed? Project is estimated to be completed by 07/13/2016 within 135 working days.



Figure 3

### B. What is the critical path?

According to the network diagram, there are two critical paths:

- 1. Need survey => Set product specs => Shelf life report => Select fruit suppliers => Production Trials => Quality Trials => Quality Metrics => Quality Training => Prepare product Launch
- 2. Need survey => Set product specs => Equipment Rehab => Production Trials => Quality Trials => Quality Metrics => Quality Training => Prepare product Launch

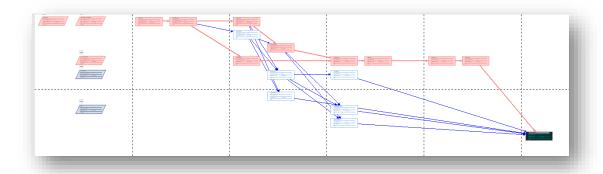


Figure 4

## C. Which activity has the most total slack? The Select distributors activity has the most total slack.

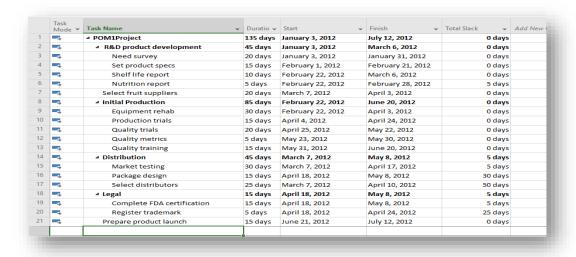


Figure 5

#### D. How sensitive is this network?

The project has more than one critical path.

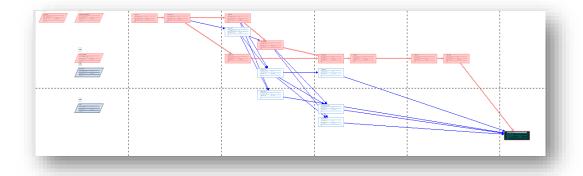


Figure 6

## 3. Include the following supportive documents:

### A. Gantt chart.

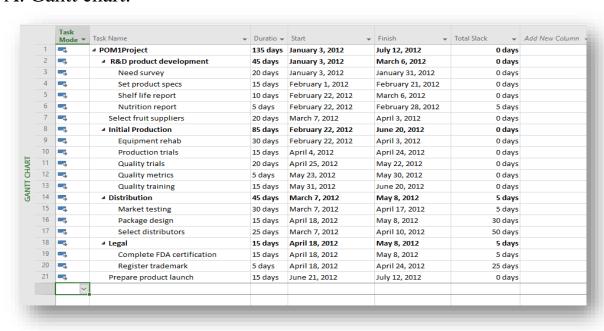
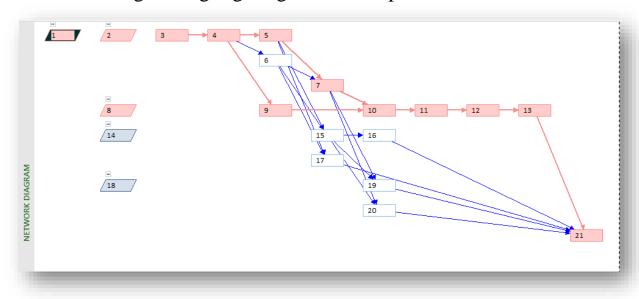


Figure 7

## B. Network diagram highlighting the critical path.



C. Schedule table reporting ES, LS, EF, LF, and slack for each activity.

8	1	1	■ POM1Project	135 days	January 3, 2012	January 3, 2012	January 3, 2012	July 12, 2012	July 12, 2012	July 12, 2012	
2	1.1	2	■ R&D product development	45 days	January 3, 2012	January 3, 2012	January 3, 2012	March 6, 2012	March 6, 2012	March 6, 2012	
3	1.1.1	3	Need survey	20 days	January 3, 2012	January 3, 2012	January 3, 2012	January 31, 2012	January 31, 2012	January 31, 2012	
1	1.1.2	4	Set product specs	15 days	February 1, 2012	February 1, 2012	February 1, 2012	February 21, 2012	February 21, 2012	February 21, 2012 3	j
5	1.1.3	5	Shelf life report	10 days	February 22, 2012	February 22, 2012	February 22, 2012	March 6, 2012	March 6, 2012	March 6, 2012 4	
5	1.1.4	6	Nutrition report	5 days	February 22, 2012	February 22, 2012	February 29, 2012	February 28, 2012	February 28, 2012	March 6, 2012 4	,
7	1.2	7	Select fruit suppliers	20 days	March 7, 2012	March 7, 2012	March 7, 2012	April 3, 2012	April 3, 2012	April 3, 2012 5	,6
3	1.3	8		85 days	February 22, 2012	February 22, 2012	February 22, 2012	June 20, 2012	June 20, 2012	June 20, 2012	
)	1.3.1	9	Equipment rehab	30 days	February 22, 2012	February 22, 2012	February 22, 2012	April 3, 2012	April 3, 2012	April 3, 2012 4	,
0	1.3.2	10	Production trials	15 days	April 4, 2012	April 4, 2012	April 4, 2012	April 24, 2012	April 24, 2012	April 24, 2012 7	,9
1	1.3.3	11	Quality trials	20 days	April 25, 2012	April 25, 2012	April 25, 2012	May 22, 2012	May 22, 2012	May 22, 2012 1	.0
2	1.3.4	12	Quality metrics	5 days	May 23, 2012	May 23, 2012	May 23, 2012	May 30, 2012	May 30, 2012	May 30, 2012 1	1
3	1.3.5	13	Quality training	15 days	May 31, 2012	May 31, 2012	May 31, 2012	June 20, 2012	June 20, 2012	June 20, 2012 1	2
4	1.4	14	■ Distribution	45 days	March 7, 2012	March 7, 2012	March 14, 2012	May 8, 2012	May 8, 2012	June 20, 2012	
5	1.4.1	15	Market testing	30 days	March 7, 2012	March 7, 2012	March 14, 2012	April 17, 2012	April 17, 2012	April 24, 2012 5	,6
6	1.4.2	16	Package design	15 days	April 18, 2012	April 18, 2012	May 31, 2012	May 8, 2012	May 8, 2012	June 20, 2012 1	.5
7	1.4.3	17	Select distributors	25 days	March 7, 2012	March 7, 2012	May 16, 2012	April 10, 2012	April 10, 2012	June 20, 2012 5	,6
В	1.5	18	△ Legal	15 days	April 18, 2012	April 18, 2012	April 25, 2012	May 8, 2012	May 8, 2012	May 30, 2012	
9	1.5.1	19	Complete FDA certification	15 days	April 18, 2012	April 18, 2012	April 25, 2012	May 8, 2012	May 8, 2012	May 15, 2012 7	,15
0	1.5.2	20	Register trademark	5 days	April 18, 2012	April 18, 2012	May 23, 2012	April 24, 2012	April 24, 2012	May 30, 2012 7	,15
1	1.6	21	Prepare product launch	15 days	June 21, 2012	June 21, 2012	June 21, 2012	July 12, 2012	July 12, 2012	July 12, 2012 1	3,16,17,19FS+25 da

Figure 9

#### Part1.mpp

Remember the old saying, "A project plan is not a schedule until resources are committed." This exercise illustrates this sometime subtle, but important point. Using your files from Part 1, input resources and their costs if you have not already done so. All information is found in Tables A2.1 and A2.2. Prepare a memo that addresses the following questions:

1. Which if any of the resources are over allocated?

Marketing Staff, R&D and Legal Staff are over allocated without levering.



Figure 10

2. Assume that the project is time constrained and try to resolve any over allocation problems by leveling within slack. What happens?

The Marketing staff and Legal staff over allocation problem is solved, however, R&D cannot be solved.

There weren't enough resources available for non-critical tasks to meet the demand.

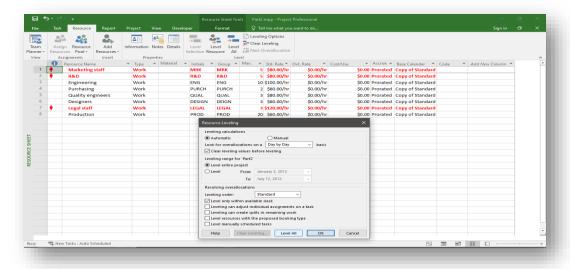


Figure 11

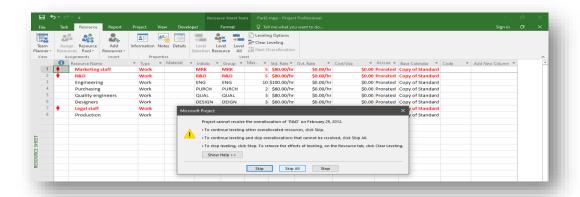


Figure 12



Figure 13

# 3. What is the impact of leveling within slack on the sensitivity of the network?

The sensitivity of the network increases. Slacks reduce and thus lose flexibility. The likelihood of activities delaying the project increases as delays create more critical paths.

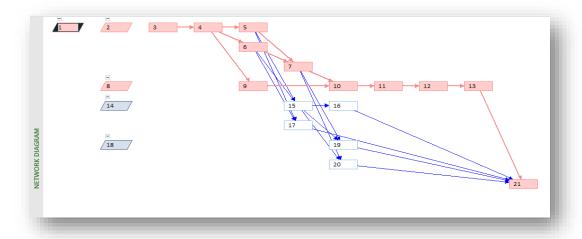


Figure 14

4. Assume the project is resource constrained and resolve any over allocation problems by leveling outside of slack. What happens?

The end date of the project has changed. The working days have increased to 140 days. The critical also changed.

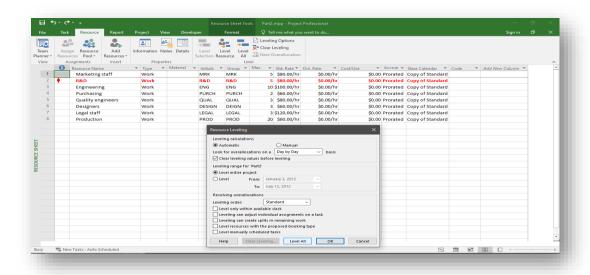


Figure 15



Figure 16

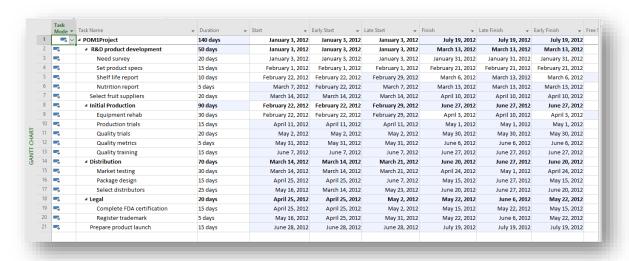


Figure 17

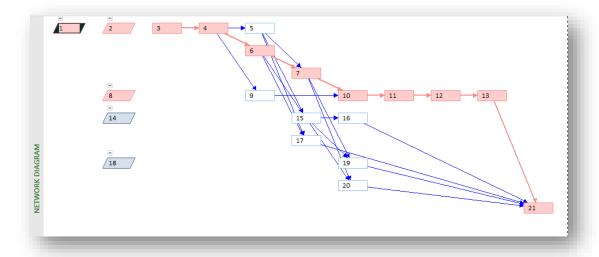


Figure 18

# 5. Include a Gantt chart with the schedule table after leveling outside of slack.

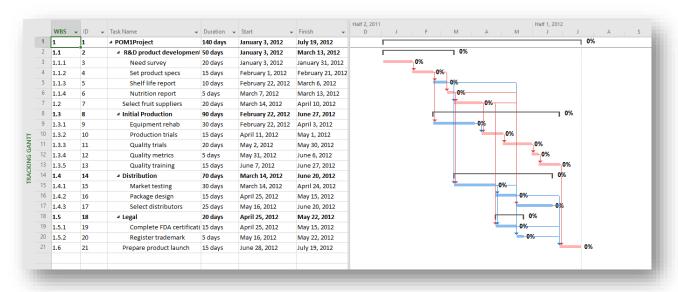


Figure 19

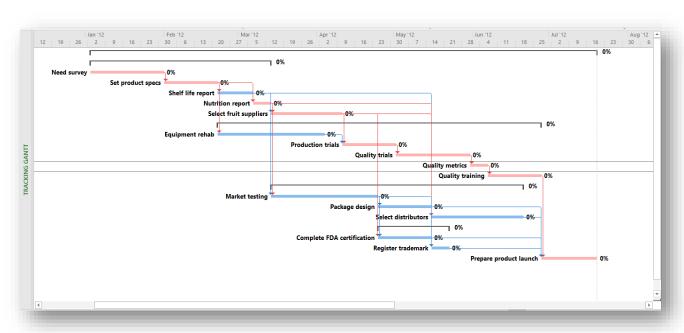


Figure 20

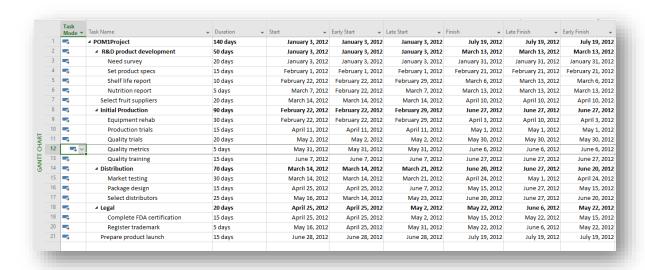


Figure 21

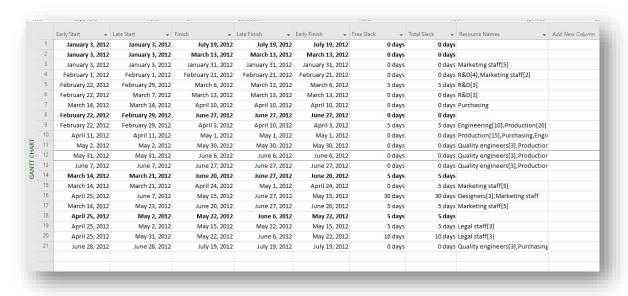


Figure 22

#### Part2.mpp

Management has accepted the July 19th completion schedule created at the end of Part 2. Prepare a brief memo that addresses the following questions:

### 1. How much will the project cost?

The total project cost is \$1,692,000.00.



Figure 23

2. What is the most expensive activity?

The most expensive activity is Equipment rehab \$528,000.00.

	WB! →	Task Name	Fixed Cost •	Fixed Cost Accrual ▼	Total Cost →	Baseline 🕶	Variance +	Actual →	Remaining +	Add New Column
1	1	<b>▲ POM1Project</b>	\$0.00	Prorated	\$1,692,000.00	\$0.00	\$1,692,000.00	\$0.00	\$1,692,000.00	
2	1.1	<ul> <li>R&amp;D product development</li> </ul>	\$0.00	Prorated	\$150,400.00	\$0.00	\$150,400.00	\$0.00	\$150,400.00	
3	1.1.1	Need survey	\$0.00	Prorated	\$64,000.00	\$0.00	\$64,000.00	\$0.00	\$64,000.00	
4	1.1.2	Set product specs	\$0.00	Prorated	\$57,600.00	\$0.00	\$57,600.00	\$0.00	\$57,600.00	
5	1.1.3	Shelf life report	\$0.00	Prorated	\$19,200.00	\$0.00	\$19,200.00	\$0.00	\$19,200.00	
6	1.1.4	Nutrition report	\$0.00	Prorated	\$9,600.00	\$0.00	\$9,600.00	\$0.00	\$9,600.00	
7	1.2	Select fruit suppliers	\$0.00	Prorated	\$9,600.00	\$0.00	\$9,600.00	\$0.00	\$9,600.00	
8	1.3	■ Initial Production	\$0.00	Prorated	\$998,400.00	\$0.00	\$998,400.00	\$0.00	\$998,400.00	
9	1.3.1	Equipment rehab	\$0.00	Prorated	\$528,000.00	\$0.00	\$528,000.00	\$0.00	\$528,000.00	
10	1.3.2	Production trials	\$0.00	Prorated	\$235,200.00	\$0.00	\$235,200.00	\$0.00	\$235,200.00	
11	1.3.3	Quality trials	\$0.00	Prorated	\$86,400.00	\$0.00	\$86,400.00	\$0.00	\$86,400.00	
12	1.3.4	Quality metrics	\$0.00	Prorated	\$12,000.00	\$0.00	\$12,000.00	\$0.00	\$12,000.00	
13	1.3.5	Quality training	\$0.00	Prorated	\$136,800.00	\$0.00	\$136,800.00	\$0.00	\$136,800.00	
14	1.4		\$0.00	Prorated	\$207,200.00	\$0.00	\$207,200.00	\$0.00	\$207,200.00	
15	1.4.1	Market testing	\$0.00	Prorated	\$96,000.00	\$0.00	\$96,000.00	\$0.00	\$96,000.00	
16	1.4.2	Package design	\$0.00	Prorated	\$31,200.00	\$0.00	\$31,200.00	\$0.00	\$31,200.00	
17	1.4.3	Select distributors	\$0.00	Prorated	\$80,000.00	\$0.00	\$80,000.00	\$0.00	\$80,000.00	
18	1.5	△ Legal	\$0.00	Prorated	\$57,600.00	\$0.00	\$57,600.00	\$0.00	\$57,600.00	
19	1.5.1	Complete FDA certification	\$0.00	Prorated	\$43,200.00	\$0.00	\$43,200.00	\$0.00	\$43,200.00	
20	1.5.2	Register trademark	\$0.00	Prorated	\$14,400.00	\$0.00	\$14,400.00	\$0.00	\$14,400.00	
21	1.6	Prepare product launch	\$0.00	Prorated	\$268,800.00	\$0.00	\$268,800.00	\$0.00	\$268,800.00	

Figure 24

3. What does the cash flow statement tell you about how costs are distributed over the life span of the project?

Cash flow statement shows monthly activity cots for you project.

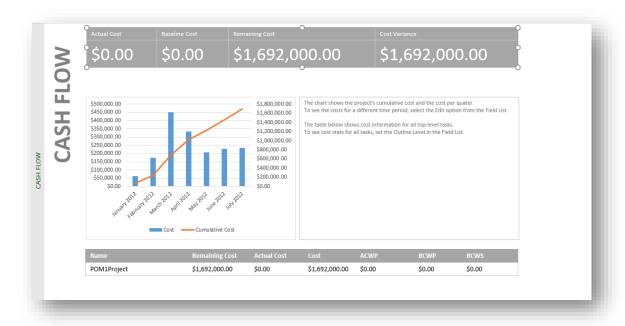


Figure 25

## 4. Include a monthly cash flow for the project.

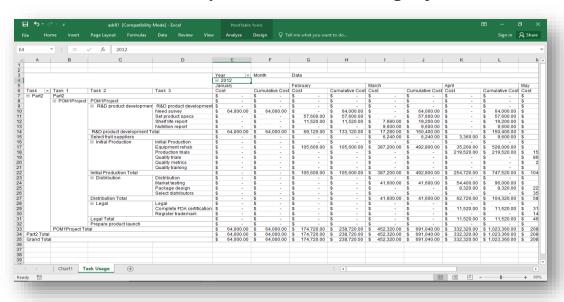


Figure 26

Part3.mpp

part3.xltx

Assume that today is March 31, 2012, and Table A2.3 contains the tracking information for the project up till now. Enter this information into your saved baseline file and prepare a status report for the first three months of the POM+ project. Your status report should also address the following questions:

1. How is the project progressing in terms of cost and schedule?

Because we had to allocate more money to certain projects because their duration was growing at certain points, our overall cost ended up being higher than it should have been. We are currently 1 week behind schedule and the project's new duration is 145 days, even though we are 29% of the way done.

2. What activities have gone well? What activities have not gone well?

Only the needs assessment went well, and each project started late after that. Budget-wise, we came in under budget for our nutritional report and on budget for our shelf life report. Set product specifications, shelf life reports, nutrition reports, and equipment rehabilitation all got off to late starts. In terms of costs, the established product and needs study exceeded our budget.

3. What do the PCIB and PCIC indicate in terms of how much of the project has been accomplished to date?

After calculating both the PCIB and the PCIC we see that the project is only 29% completed

- 4. What is the forecasted cost at completion (EACf)? The forecasted EAC is \$1,943,171.73
- 5. What is the predicted VACf? The predicted VAC is \$251,171.73
  - 6. Report and interpret the TCPI for the project at this point in time.

It is telling us we need to be 107% efficient then we can get back to our budget.

- 7. What is the estimated date of completion? July 26, 2012
  - 8. How well is the project doing in terms of its priorities?

Since cost was our top priority, I will say that, so far, we have gone over budget and are currently behind schedule when compared to the initial baseline.

9. Include an Earned Value table and a Tracking Gantt Chart.

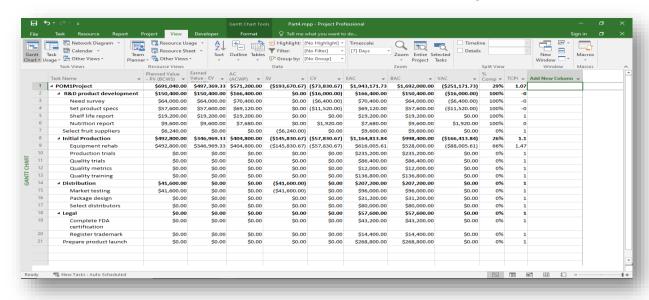


Figure 27

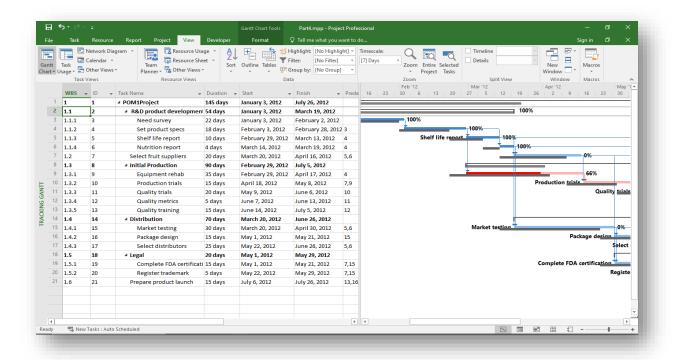


Figure 28

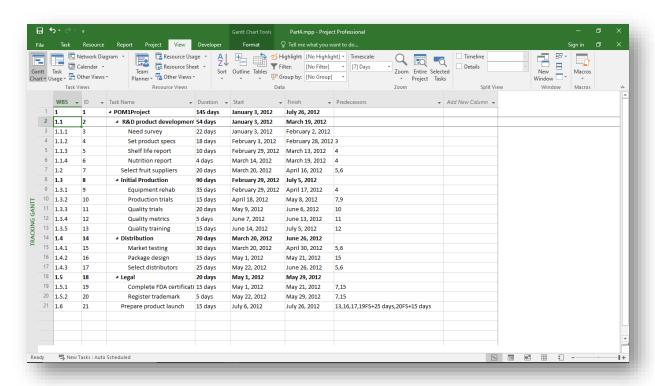


Figure 29

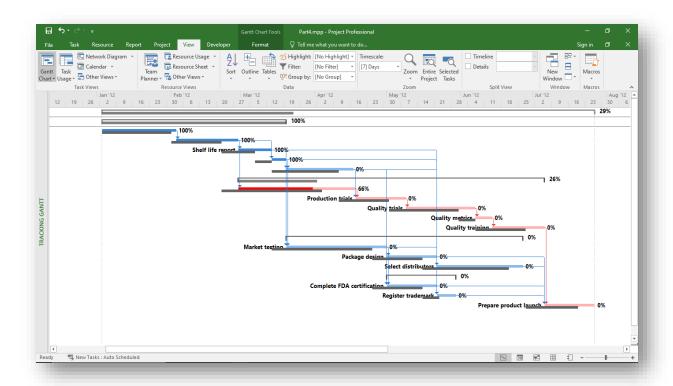


Figure 30

#### Part4.mpp