

Minutes of the Meeting 1 of Group I-2

Project Management 412

on 12/04/2021 @13h00-13h30 at Chalkboard

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Rorisang (RL)
- Apologies: Philip (PK)

2. Minutes of the previous meeting

N/A

3. Agenda

The following agenda was approved before the meeting:

- Talk through the Gantt chart as prepared by EV.
- Decide on hires and other bidding decisions.
- Discuss assignment 2 format.
- Discuss strategy and approach for assignment 2.
- Brainstorm fictitious product idea to use for assignment 2.

4. Discussion according to agenda

- A. Organized the same strategy for the marketing phase as was done in the demo run.
- B. Discussed replacing the project manager with a marketing manager or engineer. Decided on testing the effectiveness of an engineer in this role by assigning him/her in parallel for the first phase.
- C. Discussed hiring and assigning two junior product designers to speed up execution, since design tasks are budgeted for \$50 / hour.
- D. Discussed switching the project manager role from the engineer to a marketing manager (after phase 1 when engineer must be assigned to other tasks), since this strategy was effective in the demo.
- E. Discussed bidding strategy regarding bidding additional 50 cents to win a bid over a team who might bid the same amount.
- F. Reviewed budget analysis (as prepared by EV) for bidding decisions.
- G. Discussion about having enough space in budget to hire at 30%-40% above the standard rate.
- H. Discussed organizing a collaboration document (eg. google doc) for the 'rough work'.
- I. Discussed the compiling of the final document on LaTeX (EV volunteered to take on this task).
- J. Decided on approach for assignment 2 to be everyone working collaboratively on every task (on the google doc). There was a

discussion about setting short-term deadlines to ensure even contribution by each team member.


- k. Each group member will brainstorm and contribute ideas for the fictitious product on the google doc.
- L. EV will do baseline and share the repository with mpp file (on GitHub) through the MS teams channel, so that every team member has access to the Gantt chart and its continuous updates.
- M. Final bidding decisions were made and submitted at the meeting for bid 1 (due 12/04/2021 @ 20h00). Bidding decisions were as follows:




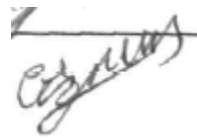
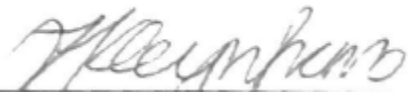
Name	Category	Quality level	Standard rate	Offered rate	Intended assignment for phase 1
Tom Becher	Engineer	Mid-level	\$55	\$67.50	Project management
Kurt Zollinger	Junior Marketing Specialist	High-level	\$59	\$62.50	Market assessment / commercialization
Jane Gavette	Junior Marketing Specialist	Mid-level	\$52	\$60.50	Market assessment / commercialization
Yukio Ashida	Marketing manager	Mid-level	\$91	\$97.50	Market assessment / commercialization
Fulberto Eberstark	Marketing manager	Low-level	\$78	\$91.50	Contingency
Kelly Doe	Project manager	Low-level	\$100	\$100.00	Project management / contingency

5. Next meeting

The next meeting is planned for 12/04/2021 @20h15 on MS Teams, to evaluate whether the first round of bidding was successful or not. If not successful, the meeting will be used to discuss and make bids for round 2.

6. Signatures

A Valkenburg	
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R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 2 of Group I-2

Project Management 412

on 12/04/2021 @20h15-20h30 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Rorisang (RL)
- Apologies: Philip (PK)

2. Minutes of the previous meeting

Refer to Meeting 1 above.

3. Agenda

The following agenda was approved before the meeting:

- Review results of bidding round 1.
- Discuss decisions for bidding round 2.

4. Discussion according to agenda





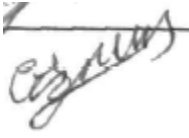

- A. Discussed bidding for a second engineer, to secure for when engineering tasks begin, as we anticipate needing at least two engineers to reduce the workload and time spent.
- B. Discussed whether to bid for another project manager, given that we did not get the previous bid for Kelly Doe (project manager).
- C. Final bidding decisions were made and submitted at the meeting for bid 2 (due 13/04/2021 @ 20h00). Bidding decisions were as follows:

Name	Category	Quality level	Standard rate	Offered rate	Intended assignment for phase 1
Darryl Sandefur	Engineer	Low-level	\$46	\$55.5	
Darryl Mendieta	Project manager	High-level	\$140	\$140	Project management
Shinchi Ishikawa	Project manager	High-level	\$143	\$130	Project management

5. Next meeting

The next meeting is planned for 13/04/2021 @20h15 on MS Teams, to evaluate whether the second round of bidding was successful or not. If not successful, the meeting will be used to discuss and make bids for round 3.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 3 of Group I-2

Project Management 412

on 13/04/2021 @20h15-20h30 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 2 above.

3. Agenda

The following agenda was approved before the meeting:

- Review results of bidding round 2.
- Discuss decisions for bidding round 3.





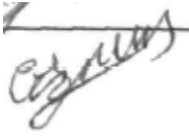

4. Discussion according to agenda

- A. Discussed further actions regarding the project management tasks, given that all bids for a project manager thus far were unsuccessful.
- B. Decided not to bid for another project manager because the only remaining was too high in price per hour.
- C. Decided to fire one Junior Marketing Specialist (Jane Gavette) and one Marketing Manager (Fulberto Eberstark), since they were originally intended as contingencies. These two people were over-bid for, and were thus chosen to be fired.
- D. Final bidding and firing decisions were made and executed at the meeting (due 14/04/2021 @ 20h00).
- E. The fictitious product was discussed and decided upon. To incorporate all engineering disciplines of the group members, the decision was made for the product to be a pressure vessel for industrial processes (with sensors).
- F. The whole team was tasked with contributing to the google doc for assignment 2, over the next few days.

5. Next meeting

The next meeting is planned for 16/04/2021 @09h00 on MS Teams, to check on the progress for assignment 2.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 4 of Group I-2

Project Management 412

on 16/04/2021 @09h00-09h30 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 3 above.

3. Agenda

The following agenda was approved before the meeting:

- Review results of run 1 and the bids made:

Name	Category	Quality level	Standard rate	Offered rate	Intended assignment for phase 1
Kelly Sauseda	Junior Product Designer	Mid-level	\$49	\$55.25	Product design
Raimund Vogel	Junior Product Designer	Low-level	\$42	\$50.25	Contingency
Douglas Rutten	Junior Product Designer	Low-level	\$44	\$52.25	Contingency
Lance Portier	Junior Product Designer	Mid-level	\$53	\$60.25	Product design

- Review progress for assignment 2.
- Plan a date and time for a special risk planning and response meeting.

4. Discussion according to agenda

- A. Decided to fire 2 out of the 4 junior product managers that were successfully hired. The 2 lowest costs were chosen to be fired.
- B. Reviewed the results of phase 1. The team had 100% on cost and time, but 0% on functionality and stakeholders. This was due to the decision to not hire a project manager (to save cost) and instead assign 2 engineers to the project management task for phase 1. The team decided to stick to this decision, with predictions that it will improve later.

- C. Discussed keeping the 2 junior product designers for phase 2 (as their tasks are on the critical path), but spoke about firing one of them before the next phase because there is a lot of slack and so we might not require 2 people on the task.
- D. Walked through the assignment 2 doc together, discussing each section (what still needs to be added, what can be improved) and ensuring each group member was on track with the sections they were charged with doing.
- E. The main task the team is concerned with is the project risk analysis section, and so it was decided that the whole group will work on this.
- F. The team will all read over the content for risk management in preparation for the special risk planning and response meeting.

5. Next meeting

The next meeting is planned for 17/04/2021 @10h00 on MS Teams, to have the special risk planning and response meeting.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 5 (Risk Planning and Response meeting) of Group I-2

Project Management 412

on 17/04/2021 @10h00-12h00 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 4 above.

3. Agenda

The following agenda was approved before the meeting:

- Develop an appropriate technique to identify risks.
- Collaboratively identify risks. Includes each person identifying risks associated with their discipline of engineering.
- Develop a risk assessment technique (and a level of risk for each identified risk).
- Develop a prioritized risk register including detailed discussion on the priority risks.
- Compile risk management plan.

4. Discussion according to agenda





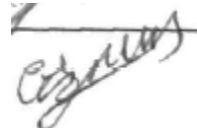

- a. Designed a technique for quantifying risks using a matrix comprising the probability (score out of 5) and impact (score out of 5).
- b. Collaboratively identified risks to the project as a whole (both internal and external) by describing the risk, area impacted, impact score, probability score, consequences, mitigation and response for each.
- c. AV identified the following risks associated with his chemical engineering discipline:
 - i. Flammable substances igniting
 - ii. Substances spilling into the environment
- d. EV identified the following risks associated with his electrical engineering discipline:
 - i. The product's sensors failing
 - ii. Power loss to the product

- e. RL and LE identified the following risks associated with their mechatronic disciplines:
 - i. The pressure limit control system failing
 - ii. Valve control having an error/failing
- f. BK identified the following risk associated with her mechanical engineering discipline:
 - i. Tank deformation or failure
- g. PK identified the following risk associated with his civil engineering discipline:
 - i. Structural failure
 - ii. Tank support structure failing due to fatigue

5. Next meeting

The next meeting is planned for 19/04/2021 @13h00 on MS teams, to make next period decisions.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 6 of Group I-2

Project Management 412

on 19/04/2021 @13h00-13h30 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 5 above.

3. Agenda

The following agenda was approved before the meeting:

- Review assignment 2.
- Discuss period decisions.



4. Discussion according to agenda

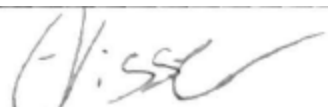
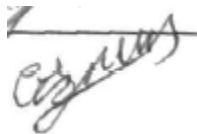

- a. Reviewed the final document draft for assignment 2, each team member having read through the document carefully and identifying any small errors. These errors are to be fixed before handing in the assignment.
- b. Discussed assigning the hired marketing manager to the project management tasks.
- c. We will assign the two hired engineers to the engineering tasks.

5. Next meeting

The next meeting is planned for 10/05/2021 @09h00 on MS teams, to review progress.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	

E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 7 of Group I-2

Project Management 412

on 10/05/2021 @09h00-09h30 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 6 above.

3. Agenda

The following agenda was approved before the meeting:

- Discuss resource hires and assignments for the next few periods (5, 6, 7).

4. Discussion according to agenda




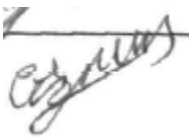
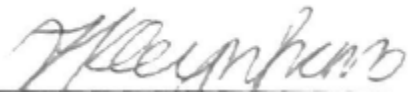
- a. Discussed hiring an operations specialist for the upcoming periods. If no operations specialist is available, one of the currently hired engineers will be assigned to their tasks.
- b. Will assign all current resources to their relevant tasks for the next three periods (5, 6, 7). I.e., The two engineers will be evenly assigned across the engineering tasks (but they will not both be assigned to the same task). In period 6 and 7, the quality engineer will be assigned to their relevant task. In period 7, one of the engineers will be assigned to the supplier quality task.
- c. The marketing manager will be assigned to the project management tasks for period 5, 6 and 7.
- d. Will assign the two junior marketing specialists to the procurement tasks in period 6, but if they are seen to not be suited to those tasks, they will be fired before the start of period 7.

5. Next meeting

The next meeting is planned for 17/05/2021 @17h00 on MS teams, to make next few period decisions.

6. Signatures

A Valkenburg	
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R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 8 of Group I-2

Project Management 412

on 17/05/2021 @17h00-18h00 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 7 above.

3. Agenda

The following agenda was approved before the meeting:

- Discuss resource hires and allocations for next few periods (8, 9, 10)



4. Discussion according to agenda

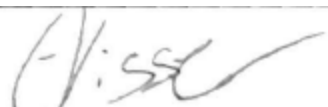
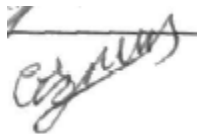

- a. Will assign the marketing manager to the project management tasks for periods 8, 9 and 10. The same resource will be assigned to the commercialization tasks.
- b. The engineers will be evenly allocated to the engineering tasks, with the quality engineer being assigned to the relevant quality engineering tasks and the supplier quality tasks.
- c. If the quality engineer is not effective in their tasks, the engineers and marketing manager will take over the engineering quality tasks.

5. Next meeting

The next meeting is planned for 28/05/2021 @13h00 on MS teams, to have a project post-mortem meeting.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	

E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 9 (Project Post-Mortem meeting) of Group I-2

Project Management 412

on 28/05/2021 @13h00-14h00 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting X above.

3. Agenda

The following agenda was approved before the meeting:

- Were initial project objectives met?
- Changes in objectives and reason for that.
- The project team, and its relationship with the vendors and contractors, and the interaction with the organisation.
- Performance and involvement of stakeholders.
- Expenditures, sources of cost and project profitability.
- Identification of good performed and performance areas within the project.
- Identification of poor performed and performance areas within the project.
- Lessons learned and recommendations for future projects.

4. Discussion according to agenda

- a. Were initial project objectives met? Yes, mostly. The project was completed in February 2022, which was before the scheduled termination date of the project (March 2022). But, we did go over budget. But, we did deliver all the deliverables and milestones.
- b. Changes in objectives and reason for that. We did not change our objectives, as we met all our milestones. The only thing that changed was adjusting our budget. We had to adjust our resource strategy due to not acquiring an operations manager, which inhibited our ability to complete certain tasks efficiently.
- c. The project team, and its relationship with the vendors and contractors, and the interaction with the organisation. Did not have interactions with vendors as it was not a real life project.
- d. Performance and involvement of stakeholders. Our resources did not perform as efficiently as planned for, especially the quality engineer (did not perform as we would have hoped). The team

cohesion and longevity declined over the course of the project, which is speculated to be due to fatigue.





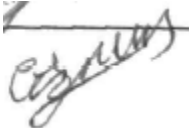

- e. Expenditures, sources of cost and project profitability. We did go over budget. The source of the cost was partially due to overbidding on some resources, for example we overbid by about \$10 on one of the engineers that we subsequently hired for the duration of the project. We also had to adjust our strategy and therefore budget because we did not acquire an operation specialist, this meant we instead assigned quality engineers to the tasks of an operations specialist but the quality engineers were 50% more expensive than an operations specialist would have been. Furthermore, we had the designers for two periods longer than we was necessary before firing them, which resulted in costs due to unallocated resources. When we had to make the adjustments to the budget for the aforementioned reasons, it resulted in the project becoming no longer profitable.
- f. Identification of good performed and performance areas within the project. We saved a lot of money by not hiring a project manager, but instead assigning a marketing manager to the associated tasks. Furthermore, the marketing manager performed more or less the same as a project manager would have. For the first two or three periods we assigned two marketing people (either junior marketing specialists or marketing managers) to every relevant task, which saved a lot of time and kept the project on schedule for the first two periods. Securing the engineering resources early on in the project resulted in successful assigning of resources to the engineering tasks.
- g. Identification of poor performed and performance areas within the project. For the first two periods, we assigned engineers to the project management tasks, and they were only about 70% effective, which possibly resulted in the decreased overall functionality that we observed. For the last few periods, the quality engineer was less effective than we expected, they were only 95% effective for one task and 70-75% effective for the remaining tasks to which they were assigned. This is also expected to have contributed to decreasing the overall project functionality rating. We did not secure the operations specialist early enough, resulting in us not obtaining an operations specialist. This led to problems with increased cost and time as well as decreased functionality.

- h. Lessons learned and recommendations for future projects. Bid for resources earlier, especially if the resource pool is limited, to secure them for critical tasks. Allocate multiple resources to critical tasks to improve efficiency and therefore shorten their duration. Cycle in fresh resources to improve team stamina (and possibly team longevity). Possibly maintain the same project manager throughout the project to potentially improve team cohesion and longevity. We learned that due to overbidding on our resources, there was an increasing gap between the actual cost and earned value, this also caused our CPI to trend downwards as the project went on.

5. Next meeting

The next meeting is planned for 30/05/2021 @11h00 on MS teams, to review progress.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	
E Visser	
L Erasmus	
P Kleynhans	

Minutes of the Meeting 10 of Group I-2

Project Management 412

on 30/05/2021 @11h00-h00 on MS Teams

1. Attendance

- Present: Andre (AV), Bianca (BK), Emile (EV), Leon (LE), Philip (PK), Rorisang (RL)
- Apologies: N/A

2. Minutes of the previous meeting

Refer to Meeting 9 above.

3. Agenda

The following agenda was approved before the meeting:

- Review progress for assignment 3.
- Collaborate on the real life group review.




4. Discussion according to agenda

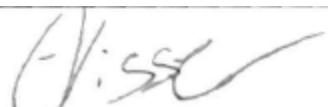
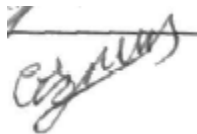
- a. The team collaborated on the lessons learned in the real life group project. Each team member contributed lessons that they felt they had learned while working in a team for the duration of the project.
- b. The team ran through the assignment 3 draft document, taking note of the sections that still needed to be completed.
- c. After completing the real life group review as a team, the only sections remaining to be completed are the executive summary, conclusion, and a few points in the risk management analysis section.

5. Next meeting

No more meetings planned.

6. Signatures

A Valkenburg	
R Lekholoane	
B Kendall	

E Visser	
L Erasmus	
P Kleynhans	