PMPG 5503 Capstone Research Project

Audit Report: Part 2

Project Name: Capstone Research Project

Student Names: Hardik Mistry, Yogin V Diyora
Submission Date: 7th July 2018

WE ARE HUMBER

Projects Performance Possibilities: We Are Leading The Way

1. Executive Summary

I.   Objectives of this report

The objective of this report is to check how much sponsor project is in compliance with PMBOK. This report will give a basic idea about how much industrial project manager use PMBOK in real life. Another objective of this report for us is to give some recommendation from PMBOK to the project sponsor in order to improve their current practice. The purpose of this report for me and my partner is to prepare for the capstone exhibition in order to guide the first semester students.

II.   Purpose of Sponsor Project

The purpose of sponsor project was to create Swaminarayan temple in Scarborough for all Swaminarayan devotees and all Hindu people. There was too many Hindu communities in Scarborough but there was no any religious place or temple for them that is why BAPS Organization had decided to construct one temple in Scarborough for all well-wishers. The purpose of this project was to provide a place for weekly prayer every Sunday. Another purpose of this project was to imbibe moral values from kids to the older people by organizing various social activities for communities. This project has been affecting a number of people to develop their personal life by getting guidance from Hindu monks in Scarborough temple. It was a 9-month long project with a budget of 3 million CAD. It was the construction of the temple so there were no expectations to make the money from it.

III.   Audit Approach Results & Lessons Learned

The audit was conducted by face to face meetings with the project sponsor. We have done 2 meetings with the sponsor for audit report part-1 and part-2. We did 3-hour long meeting for audit report part-2. We conducted meeting for audit report part-2 earlier than planned because of sponsor availability and in order to get the sponsor feedback on time. In every meeting, we have asked the questions to sponsor to finish our both audit reports. We have recorded the response of sponsor and later on, we have formatted the response. Everything went according to the plan except the second audit report. We had to finish our second audit report in well advance to get the sponsor feedback because of his availability. The quality of the report was compromised because of time availability. However, we have learned so many things from our sponsors like the importance of communication, professionalism, and active listing from our project sponsor.

IV.   Key Findings

The key finding that I want to highlight is the project management information system. He had not used project management information system throughout project still his project was finished within time and within the budget, because he was doing a number of meetings with his team on regular basis Other key findings that I want to highlight are his expert judgment. Expert judgment of sponsor was really helpful to take the decision throughout the project. The overall compliance of my project with PMBOK is 80%. Here is calculation for overall project compliance(93+58+71+70+87+75+84+83+87+86) = 794/10 = 79.4% = 80%

V. Key Recommendations

I recommend to use the project management information system in your future project because it will be helpful for fast reporting, tracking the progress, estimate the project cost, sequence the activities, develop the schedule. Another key recommendation is that the use of change control tools to manage the change request conveniently. The last recommendation I want to give is the use of risk breakdown structure in order to categorize and ultimately mitigate all risks.

2. Sponsor Reaction

It was a unique opportunity for me to share my experience with Yogin Diyora and Hardik Mistry in their quest to learn about project management. In this process I also have benefited to learn something from PMBOK.

Yogin Diyora and Hardik Mistry both were eager and enthusiastic to learn about the different aspect of project management. Meetings were held at appropriate time and both were present on every meetings in order to provide guidance and have discussions.

I have read the both audit report part 1 and audit report part 2 with all key findings and recommendations. I have received invitation by Yogin and Hardik but I will be busy on that day so I will not be able to attend this event.

Here is my opinion on recommendations.

1. To estimate the cost I will use the PMIS and I will try to get more information about this system.
2. To define the activity I will use the PMIS.
3. I will try to use Risk Breakdown Structure in order to mitigate the risks related to my projects.
4. I am not aware about "Design for X' tool but I will try to learn and implement "Design for X" tool for manage the quality because it is really nice method for quality management.

3. Audit Results

1.1 Project Integration Management

Sponsor`s Practice

The project sponsor had created a project charter by using his past experience. He did a meeting with stakeholders to get the all necessary information and after that, he organized a meeting with his team members to develop the project charter. He had used the current project charter and his previous project management plan for the same organization as a reference to create a project management plan. The sponsor had directed and managed the project work by using a project management plan, by using his expert judgment and by doing meetings with his team, Hindu monks, and subject matter experts. He had listened actively in all meetings to manage the project knowledge. The project sponsor had monitored and controlled project work by inspection, communication, earned value analysis, variance analysis and the motivation of the team. The project sponsor had performed the change by using his sense and by doing the cost-benefit analysis. Finally, the sponsor had finished his project by taking an approval from the main Hindu monk as an acceptance of final deliverable.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Develop Project Charter	Expert judgment, Data gathering, Interpersonal and team skills, Meetings	No gaps	100%
2. Develop Project Management Plan	Expert judgment, Data gathering, Interpersonal and team skills, Meetings	No gaps	100%
3. Direct and Manage Project Work	Expert judgment, Meetings.	Project management information system	66.67%
4. Manage Project Knowledge	Expert judgment, Knowledge management, Information management, Interpersonal and team skills	No gaps	100%
5. Monitor and Control Project Work	Expert judgment, Data analysis, Decision making, Meetings.	No gaps	100%
6. Perform Integrated Change Control	Expert judgment, Data analysis, Decision making, Meetings.	Change control tools	80%
7. Close Project or Phase	Expert judgment, Data analysis, Meetings	No gaps	100%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 93%

Recommendations

We recommend using change control tools in your future project because it will give benefits to manage the change requests and resulting decision conveniently.

1.2 Project Scope Management

Sponsor`s Practice (description of what tasks your sponsor actually completed for this knowledge ear - with specific examples and details regarding who was involved, what they did, how and why they did it, etc.)

The project sponsor had done meetings with Hindu monks and experts from construction, electric, plumbing, decoration, legal and procurement logistics department in order to plan the scope. As an end result of the planning of scope, he along with his team came up with a scope management plan. Project sponsor had done brainstorming, interviews, and questionnaires with stakeholders in order to set the project, stakeholders, and quality requirements. After meeting with construction law officer from Toronto zone the sponsor with Hindu monks finalize the scope of a project.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Scope Management	Expert judgment, Data analysis, Meetings	No gaps	100%
2. Collect Requirements	Expert judgment, Data gathering, Data analysis, Data representation, Interpersonal and team skills	Context diagram and prototypes	75%
3. Define Scope	Expert judgment	Data analysis, Decision making, Interpersonal and team skills, Product analysis	20%
4. Create WBS	Expert judgment, Decomposition	No gaps	100%
5. Validate Scope	Inspection	Decision making	50%
6. Control Scope	No compliance	Data analysis	0%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 58%.

Recommendations

- We recommend applying product analysis in your future projects to explicitly explain scope to the team members so everyone in the team can be clear about the scope.
- We suggest applying variance analysis to control the scope because it will help to take the preventive or corrective action.

1.3 Project Schedule Management

Sponsor`s Practice

The project sponsor did the meetings with all key stakeholders and sellers to plan the schedule and to decide the milestones. He had considered available resources, budget, and risks while planning the schedule. After planning the schedule, he had divided WBS into the more smaller task by using his sense and by taking help from subject matter experts from electric, decoration, construction and plumbing department. He along with his team had produced the network diagram in MS project by using precedence diagramming method and dependency determination and integration method. He had estimated the duration of each activity in network diagram by using his past experience and by taking help from subject matter experts from electric, decoration, construction and plumbing department. He and his team had developed the schedule by using network diagram, critical path, schedule compression, and resource optimization in MS project. The project sponsor did the earned value analysis at predefined stages to check the project progress and he had maintained the schedule throughout the project by allocating more resources.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Schedule Management	Expert judgment, Data analysis, Meetings	No gaps	100%
2. Define activities	Expert judgment, Decomposition, Meetings	Rolling wave planning	66.67%
3. Sequence Activities	Precedence diagramming method, Dependency determination, and integration	Leads and lags, Project management information system	50%
4. Estimate Activity Durations	Expert judgment, Analogous method, Bottom-up method, Data analysis, Decision making, Meetings	Parametric method, Three-point estimating method	75%
5. Develop Schedule	Schedule network analysis, Critical path method, Resource optimization, Data analysis, Schedule compression	Lead and lags, Project management information system, Agile release planning	62.5%
6. Control Schedule	Data analysis, Critical path method, Schedule compression, Resource optimization	Lead and lags, Project management information system	66.66

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 71%

we recommend using PMIS to define and sequence the activities in your future projects because it will help all team members to know about which activity they are performing and ultimately it will help for fast reporting.

1.4 Project Cost Management

Sponsor`s Practice

The project sponsor did the meetings with Hindu monks and subject matter experts from electric, decoration, construction and plumbing department to discuss the expectable cost for each department. He had created a cost management plan by using his previous project data and by considering available resources, cost of quality, upcoming market condition, and risks. He did the meeting with Hindu monk to discuss the contingency reserve. He had estimated the cost of each activity from the lower level of the work package to higher level work package and finally he had added all activity cost to determine the entire project budget. He had performed the earned value analysis and variance analysis after each milestone to control the project cost and project progress.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Cost Management	Expert judgment, Data analysis, Meetings	No gaps	100%
2. Estimate Costs	Expert judgment, Analogous method, Bottom-up method, Data analysis, Decision making,	Parametric estimating, Three-point Estimating, Project management information system	62.5%
3. Determine Budget	Expert judgment, Data analysis, Cost aggregation, Historical information review	Funding limit reconciliation, Financing,	66.67%
4. Control Costs	Expert judgment, Data analysis	To-complete performance index, Project management information system	50%

Knowledge Area Quantitative Result

Overall Knowledge area compliance for this project is 70%

Recommendations

We recommend using the PMIS to estimate the cost in your future projects because it will help to use another cost estimating techniques and facilitate the cost estimate alternatives

1.5   Project Quality Management

Sponsor`s Practice

The sponsor did the meetings with Hindu monks in order to know about acceptance criteria for final deliverable and to explain those criteria to his team and sellers. He had created a quality management plan by taking help from subject matter experts from electric, decoration, construction and plumbing department. The sponsor had used quality management plan to manage the quality. He had prepared a list of tasks which needed to be high quality in order to incorporate high-quality standard in final deliverable. He did the inspection and audit of listed tasks by himself to check the quality standards. For problematic tasks, he did the meetings with subject matter experts to perform the root cause analysis and to find and implement the best solution

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Quality Management	Expert judgment, Data gathering, Decision Making, Test and inspection planning, Meetings	Data analysis, Data representation	71.42%
2. Manage Quality	Data gathering, Data analysis, Data representation, Decision making, Audits, Problem-solving, Quality improvement methods	Design for X	87.5%
3. Control Quality	Data gathering, Data analysis, Inspection, Testing, Data representation, Meetings	No gaps	100%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 87%.

Recommendations

we recommend using the design for X in your future projects to control and improves the product final characteristics.

1.6   Project Resource Management

Sponsor`s Practice ta

The project sponsor had allocated manager for electric, decoration, construction and plumbing department and after that, the sponsor had allocated respective tasks to respective managers. He had made the resource estimation by using the scope baseline. He started the estimation from the lower level of work packages. The sponsor had acquired the resources from different countries in order to do the stone carving and stone finishing. After achieving some milestones he had given recognition to his team and throughout project he had motivated his team in order to get the best performance. With the weekly status report, he had managed the resources. To control the resources, he had used the project schedule. After each milestone, he had released the resources according to the next schedule.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Resource Management	Expert Judgment, Data Representation, Organizational theory, meetings	No gaps	100%
2. Estimate Activity Resources	Expert judgment, Bottom-up estimating, Analogous estimating, Parametric estimating, Data analysis, Meetings	Parametric estimation, Project management information system	71.42%
3. Acquire Resources	Decision making, Interpersonal and team skills, Pre-assignment	Virtual teams	75%
4. Develop Team	Colocation, Communication technology, Interpersonal and team skills, Recognition, and rewards, Individual and team assessments, Meetings	Virtual teams, Training	75%
5. Manage Team	Interpersonal and team skills	Project management information system	50%
6. Control Resources	Data analysis, Problem-solving, Interpersonal and team skills	Project management information system	75%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 75%.

Recommendations

We recommend using a project management information system in your future projects to manage teams and resources in order to improve the resource management.

1.7   Project Communications Management

Sponsor`s Practice (description of what tasks your sponsor actually completed for this knowledge ear - with specific examples and details regarding who was involved, what they did, how and why they did it, etc.)

The project sponsor has done the stakeholder engagement matrix before starting the project after that he did one meeting with all key stakeholder to discuss and decide the frequency and mode of communication. He decided to do face to face meeting twice a week to discuss the status and coming deadlines of activities. With all key stakeholders, he decided to do a phone, Email, and message communication at a time of urgency. The sponsor communicated daily weather report to his team via WhatsApp messages. He organized open meetings with all his staff to discuss the status of an assigned task. He and his team communicated daily weather report via WhatsApp messages. He used stakeholder engagement matrix in order to reciprocate information.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Communication Management	Expert judgment, Communication requirement analysis, Communication technology, Communication methods, Data representation, Interpersonal and team skills, Meetings	Communication models	87.5%
2. Monitor Communications	Communication technology, Communication methods, Communication skills, Interpersonal and team skills, Project reporting, Meetings	Project management information system	85.7%
3. Control Communications	Expert judgment, Data analysis of Stakeholder engagement assessment matrix, Interpersonal and team skills (Observation/conversation), Meetings	Project management information system	80%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 84%.

Recommendations

We recommend using a project management information system for future projects in order to improve communication in the team and better team collaboration.

1.8 Project Risk Management

Sponsor`s Practice

The project sponsor did the meetings with subject matter experts from electric, decoration, construction and plumbing department in the presence of a facilitator to plan the risk management. The project sponsor had asked all subject matter experts to identify risk associated with their department and the sponsor himself all made a list of risks that were known to him because of his past experience. The project sponsor did meetings with subject matter experts to perform the SWOT analysis, to create a risk register, and to perform the probability and impact matrix. The sponsor did the simulation with help of subject matter experts to check the combined effects of all risk on a project objective. The sponsor had made the strategies to deal with identified risks in well advance while to deal with unidentified risks he had made a fallback plan. The sponsor and his team had focused on the strategies to deal with identified risks and he had done the emergency meetings with his team to find out the solution for unidentified risks. Throughout the project, The project sponsor did the audit and review of risks by using a risk register.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Risks Management	Expert judgment, Meetings, Data analysis	No gaps	100%
2. Identify Risks	Expert judgment, Data gathering, Data analysis, Interpersonal and team skills, Meetings	Prompt lists	83.33%
3. Perform Qualitative Risk Analysis	Expert judgment, Data gathering, Data analysis, Interpersonal and team skills, Meetings	Risk categorization, Data representation,	71.42%
4. Perform Quantitative Risk Analysis	Expert judgment, Data gathering, Interpersonal and team skills, Data analysis	Representation of uncertainty	80%
5. Plan Risk Responses	Expert judgment, Data gathering, Interpersonal and team skills, Strategy for threats, Strategy for overall project risk, Data analysis, Decision making	Strategies for opportunities, Contingent response strategies	77.78%
6. Implement Risk Responses	Expert judgment, Interpersonal and team skills	Project management information system	66.67%
7. Monitor Risks	Data analysis, Audits, Meetings	No gaps	100%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this project is 83%.

Recommendations

We recommend using the risk breakdown structure for your future projects because it will be helpful for risk categorization and ultimately it will give benefits to mitigate the risks.

1.9   Project Procurement Management

Sponsor`s Practice

The sponsor did the meeting with subject matter experts from electric, decoration, construction and plumbing department to plan the procurement. After meeting with Hindu monk, the sponsor along with his team had made a list of items that need to buy, lease and borrow. The project sponsor had made a list of sellers that were known to him because of his past project. The project sponsor with his team and Hindu monks did meetings with all sellers to discuss the acceptance criteria. The project sponsor took assistance from Hindu monks to evaluate the proposal and finally he along with Hindu monks did the separate meeting with each screened seller for negotiation, to discuss the price and timelines, to award the contract and to make a legal agreement. At every stage of the project, the sponsor and his team had performed the performance review to check the time, cost and quality of inspected work against legal agreements.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Plan Procurement Management	Expert judgment, Data gathering, Data analysis, Source selection analysis, Meetings	No gaps	100%
2. Conduct Procurement	Expert judgment, Bidder conferences, Data analysis, Interpersonal and team skills.	Advertising	80%
3. Control Procurement	Expert judgment, Data analysis, Inspection, Audits	Claims administration	80%

Knowledge Area Quantitative Result

Overall knowledge area compliance for this knowledge area is 87%.

Recommendations

We recommend using the advertising technique in your future projects to conduct the procurement because it will increase the competition among sellers to get the contract and ultimately it will increase the probability to get good sellers.

1.10 Project Stakeholder Management

Sponsor`s Practice (description of what tasks your sponsor actually completed for this knowledge ear - with specific examples and details regarding who was involved, what they did, how and why they did it, etc.)

The sponsor had identified stakeholder within the organization he was working for, this organization runs under Hindu monks and volunteers who want to freely participate in it. Major stakeholders were identified within an organization like the project team, project manager, and project sponsor, although they appreciated help from volunteers who want to contribute to making this project successful.

Findings

Process	Areas of Compliance (ALL evaluation criteria met)	Gaps (evaluation criteria unmet)	Quantitative Result
1. Identify Stakeholders	Expert judgment, Data gathering, Data analysis, Data representation, meeting	No Gaps	100%
2. Plan Stakeholder management	Expert judgment, Data gathering, Decision making, Data representation, meeting	Data analysis	83.33%
3. Manage Stakeholder management	Expert judgment, Communication skills, Conflict management, Interpersonal and team skills, Meetings	Ground Rules	80%
4. Monitor	Data analysis, Data representation,	Decision making	83.33%

Stakeholder management	Communication skills, Interpersonal and team skills, meetings		

Knowledge Area Quantitative Result

Overall knowledge area compliance for this knowledge area is 86%.

Recommendations

Our recommendation is to use different strategies and techniques for resolving conflicts between the stakeholders and make strong ground rules.

4. Appendix A

Audit Questions and Responses

(audit questions and sponsor responses be in a table format, per knowledge area)

Knowledge Area	Process (# and name)	Powerful Question	Sponsor's Response
Project Integration Management	4.1 Develop Project Charter	How did you develop the project charter for your project?	The project sponsor had created a project charter by using his past experience. He did meetings with all key stakeholders to get the information related to the projects in the presence of a facilitator. He along with his team did the research on organizational needs and expectation before developing a project charter. He had included project objective, project boundaries, project risks, schedule, budget, acceptance criteria and authority of the sponsor.
	4.2 Develop Project Management Plan	How did you develop a project management plan for your project?	The sponsor had used the project charter to develop the project management plan. He had developed the project management plan by doing the meeting with his team. The project sponsor had used his previous project management plan of the same organization to develop the project management plan.
	4.3 Direct and Manage Project Work	How did you direct and manage project work in order to achieve project objective?	The sponsor had used a project management plan to direct and manage the project work. Throughout the project, he directed and managed the project work by using his expert judgment and by doing meetings with his team, Hindu monks and subject matter experts from various department.
	4.4 Manage Project Knowledge	How did you manage the project knowledge?	Every meeting with subject matter experts, he had listened actively to improve his knowledge regarding the project. The sponsor had created lessons learned register from this project for future improvement.
	4.5 Monitor and Control Project Work	How did you track, review, and report the progress of your project? How did you improve the project performance?	The project sponsor had inspected every phase of the project by himself. On top of it, he and his team had communicated daily status report via WhatsApp messages. He did meetings with his team twice a week to know about project progress, to discuss the upcoming tasks, to find out the solutions to the problem. The sponsor did the earned value and variance analysis at predefined phases to check the project performance and to take the decision according to it in order to improve the project performance. The motivation of the team was really helpful for him to improve the

			project progress.
	4.6 Perform Integrated Change Control	How did you review, approve and manage changes to the deliverables of your project?	There was only one change in the scope of construction of assembly hall. He did the meeting with his team to check the benefit of those change. He had informed the positive and negative side of those change to Hindu monks.
	4.7 Close Project or Phase	How did you close the project?	The project sponsor had used the project charter and project management plan to check the acceptance criteria for final deliverable. He had used the planned data and actual data to find out the differences. The end of the project was according to the planned so he got the signature from the main Hindu monk as an acceptance of final deliverable.
Project Scope Management	4.1 Plan Scope Management	How did you plan and document the scope?	The project sponsor did meetings with Hindu monks and experts from construction, electrics, plumbing, decoration, legal, and logistics department in order to plan the scope. He used his expert judgment during planning for validation and controlling scope as he had participated in similar kind of project for the same organization. The project sponsor mentioned how project and product will be defined in the scope management plan.
	4.2 Collect Requirements	How did you gather the requirements that are essential to finish your project?	The project sponsor gathered the requirements by brainstorming, interviews, and questionnaires with key stakeholders and experts from the construction, electrics, plumbing, decoration, legal, and logistics department. The project sponsor had developed the requirement document which includes the project, stakeholders, and quality requirements.
	4.3 Define Scope	How did you clarify the scope of your project?	The project sponsor and Hindu monks from Toronto did a special meeting with construction law officers from the Toronto zone before defining the scope. After brainstorming with Hindu monks he came with final scope acceptance criteria for deliverables. He used his expert judgment while defining the scope as he had done some kind of project for the same organization. He explained in and out of scope details to his team so everyone in the team can get an idea about scope. The project sponsor mentioned the description of scope, acceptance criteria, in and out of scope details in scope statement.
	4.4 Create WBS	How did you divide whole project work into the smaller	To divide the project into smaller parts project sponsor had created the WBS according to scope statement. He took help from construction engineers, electrical

		part?	engineers, plumbers, stone carvers, and Hindu monks to create WBS. He included cost and schedule in WBS for each activity by using his expertise.
	4.5 Validate Scope	How did you check all deliverables is according to the defined scope	Whenever any milestone or deliverable achieved that time sponsor used to check whether it is according to scope statement or not and after that he used to take signature or approval from Hindu monks. Sponsor also used to do the inspection of all deliverable to make sure whether the deliverable is according to the stakeholder's expectation or not.
	4.6 Control Scope	How did you maintain and follow the scope throughout the project?	Throughout the project there was only one scope changed in the construction of the assembly hall. At the time of scope change in the construction of assembly hall he had a meeting with subject matter experts from construction, electric and decoration department to discuss the implementation of change and after execution of change, he took signature from the main monk as an acceptance of scope change in the assembly hall.
Project Schedule Management	6.1 Plan Schedule Management	How did you plan the schedule for the entire project?	The project sponsor had used the project charter and project management plan to plan the schedule. The project sponsor did meetings with all key stakeholders and sellers in order to plan the schedule and to decide the milestones. The sponsor had used his previous project as a reference to plan the schedule. The project sponsor had considered available resources, budget, and risk associated with his project while planning the schedule. At the end of the planning schedule, he had produced a schedule management plan.
	6.2 Define Activities	How did you identify and document the activities?	The project sponsor had used the schedule management plan and scope baseline to identify the activities. He had divided WBS into smaller parts by using his sense and on top of it, he did meetings with subject matter experts from electric, decoration, construction and plumbing department to identify the activities. In the end, the sponsor had prepared the activity and milestone list.
	6.3 Sequence Activities	How did you sequence the activities that you identified?	The project sponsor took help from his team to sequence the activity. He had ordered the activities by using activity and milestone list. He had used precedence diagramming method, dependency determination and integration, and leads and lags

			method to sequence the activities. At the end of sequencing, The project sponsor had produced a network diagram by using MS project.
	6.4 Estimate Activity Durations	How did you calculate the duration of activities?	The project sponsor did the meetings with subject matter experts from electronic, decoration, construction and plumbing department to determine the time required to finish each activity. He had used his past experience to estimate duration because he was involved in the same kind of project in the past. The sponsor had considered available resources and risk associated with each activity while estimating the duration for each activity. The project sponsor had started estimating the duration from the lower level of the work package and finished at higher level work package.
	6.5 Develop Schedule	How did you make the schedule for your project?	The project sponsor had used schedule management plan, scope baseline, activity list and milestone list to develop the schedule. He and his team had considered various possible situations while developing the schedule. The sponsor had used network diagram, critical path, resource optimization, leads and lags and schedule compression to develop the schedule. He had developed the schedule in MS project by taking help from his team.
	6.6Control Schedule	What was your effort to control the schedule?	The project sponsor did the meetings with his team to discuss the status of the project. He did the earned value analysis at predefined stages to determine the project progress. The project sponsor had allocated more resources at some phases of the project to stay on schedule.
Project Cost Management	7.1 Plan Cost Management	How did you plan the cost of the project?	The project sponsor did the meetings with Hindu monks and subject matter experts from electric, decoration, construction and plumbing departments to discuss the expectable cost for each department. He had considered available resources, cost of quality, upcoming market condition and risk associated with his project while planning the cost for his project. The project sponsor had used his previous project data in order to do a comparison with this project and to plan the cost for this project. At the end of the planning, he

			had created a cost management plan.
	7.2 Estimate Costs	How did you estimate the cost of each activity and the entire project?	The sponsor had used scope management plan, scope baseline, project schedule, and risk management plan to estimate the cost for each activity. He and his team did meetings to discuss the available resources, cost of quality and upcoming market conditions while estimating the cost for each activity. The project sponsor did the meeting with Hindu monks to discuss the contingency reserve. He was involved in the same type of project in past that is why he had previous project details to estimate the cost for this project. He had started estimation from the lower level of work package and finished estimation at higher level work package.
	7.3 Determine Budget	How did you come up with the estimated final budget for the entire project? Which factors did you consider while estimating the final budget for the entire project?	To determine the project budget, he had used all the data he and his team got while estimating the costs for each activity. He had calculated total budget by adding total cost for all activities and contingency reserves. The project sponsor had considered the risk, cost of quality, available resources, project schedule and contingency reserves while estimating the final budget of the project.
	7.4 Control costs	How did you check the project progress is under budget, over budget, and on the budget? How did you control the factors which have an influence on overall project cost?	Whenever any milestone achieved at that time he used to do the earned value analysis and variance analysis to check the project progress. At one phase his project was over budget that time he did meetings with Hindu monks to discuss the contingency reserves. Before starting the project, the project sponsor and his team had prepared a list of factors which might affect the project budget. This factor were risks, quality, resources, Market conditions, and project schedule. The project sponsor had allocated his team members to control this factor. The project sponsor had strictly told his team members to communicate the status of this factors with a daily status report to get an idea about those factors and to control it.
Project	8.1 Plan Quality	What was your	Before starting the project, the sponsor did the

Quality Management	Management	plan to satisfy stakeholders in terms of quality?	meetings with Hindu monks from Toronto to discuss the acceptance criteria for final deliverable. He had explained the quality requirement to the sellers and his team. He had decided to perform the inspection of some tasks while execution. He had created quality management plan by taking help of subject matter experts from electric, decoration, construction and plumbing department.
	8.2 Manage Quality	How did you incorporate the quality standards in your project?	The project sponsor had used quality management plan to incorporate quality standard to final deliverable. He had prepared a list of tasks that need to finish with high-quality standards in order to incorporate high-quality standard to final deliverable. He did the audit of all listed task by himself. He had found quality problems in the decoration of kid's prayer hall that time he performed the root cause analysis to find out the problem and after that, he had implemented the new solutions for decoration in kid's assembly hall.
	8.3 Control Quality	How did you monitor the quality throughout the project? How did you handle the customer complaints about poor quality?	He had inspected all the tasks by himself to check the quality of it. There was a problem in quality while executing decoration in kid's prayer hall that time he did meetings with subject matter expert from decoration department to find out the solution for it and after that, he had implemented the solution to control the quality in decoration. It was the construction of Swaminarayan temple and it was for Swaminarayan devotees and all well-wisher people that is why they had not received any complaints of poor quality for this project.
Project Resource Management	9.1 Plan Resource Management	What was your plan to estimate, acquire, manage and use team and physical resources?	The sponsor had allocated manager to electric, decoration, construction and plumbing department and after that, he had allocated respective tasks to respective managers. With weekly data reports, he managed the team and its performance along with the resources.
	9.2 Estimate Activity Resources	How did you make the estimation of a team and physical resources?	The sponsor had made the estimation by using the scope baseline. He had started the estimation of physical resources from the lower level of the work package to the higher level of the work package.
	9.3 Acquire Resources	How did you acquire and assign resources	The sponsor had imported resources from Italy, Egypt, India for stone carving and stone finishing. Other

		which are essential to finish project work?	resources were selected from Canada and the USA by their quality standards to finish the project.
	9.4 Develop Team	What was your effort to make a positive environment in your project team?	The sponsor had organized events after certain milestones achieved to give recognition to the team who worked really hard and finished the work before the deadline. Also, they were rewarded with an extra bonus.
	9.5 Manage Team	How did you track the individual performance and provide the feedback? How did you counsel your team members during the conflict?	The sponsor had allocated all these tasks to division managers to handle all their respective divisions. With weekly data reports, he managed the team and its performance along with the resources. During the conflict, the sponsor focused on the issue and resolve it with the optimum solution and tried to avoid targeting the person in the conflicts.
	9.6 Control Resources	How did you assign and release the resources right time, right place and right amount throughout the project?	The sponsor had allocated all these tasks to division managers to handle resources for requirements of their project. The project sponsor had used the project schedule to control the resources. After each milestone, he had released the resources according to the next schedule.
Project Communication Management	10.1 Plan Communications Management	How did you plan the communication for your project?	He did stakeholder engagement matrix in order to find out the level of interest of all key stakeholders. After that, he arranged one mandatory meeting with all key stakeholders to discuss and decide the frequency and mode of communication. The sponsor and his team decided to do meeting twice a week to discuss the status and coming deadlines of activities. At a time of an urgency, the sponsor decided to do communication via messages, Email, and phone call.
	10.2 Manage Communications	What was your approach to maintaining effective communication between the lower level and higher level staff members?	Throughout the project, he did an open meeting with his all staff to discuss the progress of the project. At a time of discussion, he took feedback from everyone and responded to feedback actively and seriously to everyone. Every week he was doing the email chat with all his staff to know about the status of assign task. Every day he with his team communicated daily weather report through WhatsApp messages.
	10.3 Monitor Communication	How did you make sure that the right	The project sponsor had classified the all stakeholders by using the stakeholder's engagement assessment

	s	information was reciprocated throughout the project?	matrix. The sponsor had distributed the information according to the stakeholder engagement matrix.
Project Risk Management	11.1 Plan Risk Management	How did you plan to manage the risks that are associated with your project?	The project sponsor had used a project charter to plan the risk management. He did meetings with subject matter experts from electric, decoration, construction, and plumbing department in the presence of a facilitator to plan the management of risks. He was aware of how to plan the management of risks because of his past experience. He along with his team had created the risk management plan at the end of planning.
	11.2 Identify Risks	How did you find about risks that will interfere with your project?	The project sponsor had asked subject matter experts from every department to submit risk associated with their own departments. The sponsor himself had made a list of risks that he already know because of his past experience. He did meetings with all subject matter experts to analyze the strengths, weaknesses, opportunities' and threats of identified risk. At the end of identification of risks, the project sponsor had created risks register by taking help from subject matter experts.
	11.3 Perform Qualitative Risk Analysis	How did you prioritize risks that are associated with your project?	The project sponsor had used a risk management plan and risk register to prioritize the risks. He did probability and impact assessment for risks that he already knows because of his past experience. He took the help of subject matter experts from electric, decoration, construction, and plumbing department to perform the probability and impact assessment for the risk that he was dealing with the first time.
	11.4 Perform Quantitative Risk Analysis	How did you perform the numerical analysis of risks that will affect your project?	The project sponsor had used the data from past project to do the numerical analysis of the risks. The project sponsor did the simulation by taking help of subject matter experts from electric, decoration, construction, and plumbing department to perform the analysis and find out combined effect of all risk on a project objective.
	11.5 Plan Risk Responses	What was your preparation to	Before starting phase of execution, he did a meeting with subject matter experts from electric,

		address identified and unidentified risks?	decoration, construction, and plumbing department to discuss the strategy to response the identified risks. He had made a fallback plan with his team to response the unidentified risks.
	11.6 Implement Risk Responses	How did you tackle or minimize the effect of risks?	To tackle or minimize the effects of risks, he and his team completely followed the strategy that they had made in well advance for identified risks. He did an emergency meeting with his team to discuss the required actions that needed to be taken to deal with unidentified risks. The sponsor had used his skill to respond the some of the pre-identified risks.
	11.7 Monitor Risks	How did you check the status of risk responses that you have implemented?	The sponsor did the meetings with his team twice a week to discuss the overall project status. In this meeting, the project sponsor did the audit of identified risks and reviewed the risk by using risk register
Project Procurement Management	12.1 Plan Procurement Management	How did you plan the procurement for your project?	The project sponsor did a meeting with all key stakeholders to plan the procurement. After meetings with Hindu monks, the sponsor along with his team came up with the list of items that need to buy, list of items that need to be lease and list of items that can be borrowed from other temples. He had used his past experience and personal relationships with all sellers to decide and fix the sources for items that needed to buy and lease. He had created a procurement management plan at the end of planning procurement.
	12.2 Conduct Procurements	How did you conduct the procurement for your project? Which requirements did you mention in the contract(s) and legal agreement(s)?	The project sponsor had used the procurement management plan to conduct the procurement. The project sponsor and Hindu monks made a list of sellers that they know already because of his past projects and personal relations. He along with his team and Hindu monks did meetings with sellers in order to clarify the requirements and acceptance criteria. Hindu monks assisted him to evaluate the proposals. After evaluation, he with his team and Hindu monks did a separate meeting with each selected seller in order to set the price and award the contract. The project sponsor conducted every meeting by using his past experience in order to do the negotiation. After discussion with Hindu monks, the project sponsor awarded different types of contract to different sellers At the end of every

			meeting the sponsor along with his team and Hindu monks came up with the legal agreement with all sellers. The project sponsor mentioned the quality requirements, time, price, acceptance criteria, penalty, Incentive and general terms and conditions in legal agreements.
	12.3 Control Procurements	How did you check the service(s) and product(s) provided by the seller(s) in compliance with contract(s) and legal agreement(s)?	The project sponsor and his team did inspections at every stage of the project to check whether services and products are in compliance with legal agreements or not. After every inspection he did performance reviews to check the time, cost, quality of inspected works against legal agreements and earned value analysis to check the project progress.
Project Stakeholder Management	13.1 Identify Stakeholders	What was your approach to identifying high-interest stakeholders?	The project sponsor was working under the organization and all major stakeholders were identified within the organization. Although they also encourage people to volunteer and contribute to the project.
	13.2 Plan stakeholder Engagement	How did you communicate with all stakeholders and take appropriate decisions which profits all stakeholders?	To communicate with all stakeholders he uses different methods of communication to manage the efficient relationship with stakeholders. The sponsor used emails, war rooms, and scheduled meetings on weekly basis with all stakeholders for effective stakeholder engagement.
	13.3 Manage Stakeholder Engagement	What was your approach to handle all stakeholders and deliver the information they want?	The project sponsor major stakeholders available within the organization with different expertise and skills so to handle them he provided appropriate information and manage them in groups.
	13.4 Monitor Stakeholder Engagement	What was your approach to maintaining a relationship with project stakeholders?	The project sponsor has monitored overall project stakeholder relationships with his management skills and interpersonal skills.

5. Appendix B

Original Notes & Meeting Minutes

(agendas, minutes and any other records from each sponsor meeting)

Meeting Minutes - Information	
Date & Time:	24th June 2018 9:00 am to 12:00 pm
Location:	Swaminarayan Temple, Toronto
Chair / Scribe:	Chair: Yogin Diyora/ Scribe: Hardik Mistry

Agenda Items
1. To ask the questions and get the response for Project integration management, Project schedule management, Project cost management, Project risk management, Project resources management, Project quality management and Project procurement management.   2. To discuss the feedback format.   3. To give some idea about the capstone research exhibition.

Meeting Participants
Attendees: Narendra G Sachdev, Yogin V Diyora, Hardik Mistry

Decisions	
1.	Sponsor will give feedback before due dates.
2.	Project related queries to be discussed via emails or phone call.
3.	Next meeting will be on 18th July 2018 in capstone exhibition.

Actions			
#	Task	Lead	Target Date
1.	Formatting of sponsor response.	Yogin Diyora	26/06/2018
2.	Finish the audit report for project Integration management, Project cost management, Project schedule management and Project quality management.	Hardik Mistry	27/06/2018
3.	Finish the audit report for Project procurement management, Project risk management and Project resources management.	Yogin Diyora	27/06/2018
4.	Get the sponsor reaction for both audit reports.	Yogin Diyora and Hardik Mistry	30/06/2018
5	Submit the second audit report to PMO	Hardik Mistry	07/07/2018

Next Meeting Date: 18th July, 2018

6. Appendix C

Quantitative Approach

(brief, logical and complete summary of THREE formulas for quantitative analysis – include your approved approach to assess each process, knowledge area, and overall project).

a. Formula & Rationale for Process Compliance

To find out the process compliance, We will use 4 scale grade method. We will apply a grade to all the process of the knowledge area and at the end, we will get final compliance for processes.

Grade scale	Percentage alignment with Grade Scale
0	0 - 24
1	25 - 49
2	49 - 74
3	75 - 100

$$\frac{Number\ of\ tools\ and\ techniques\ that\ our\ project\ sponsor\ has\ used\ in\ his\ project\ for\ particular\ process}{Number\ of\ tools\ and\ techniques\ that\ are\ mentioned\ in\ PMBOK\ 6th\ edition\ for\ particular\ process} * 100$$

b. Formula & Rationale for Knowledge Area Compliance

The formula to find out the percentage knowledge area compliance is below

$$\frac{Sum\ of\ percentage\ compliance\ of\ all\ the\ processes\ in\ that\ knowledge\ area}{Number\ of\ process\ that\ is\ mention\ in\ PMBOK\ 6th\ edition\ for\ this\ particular\ knowledge\ area} * 100$$

c. Formula & Rationale for Overall Project Compliance

To find out the overall project compliance, we will use the average of all 10 knowledge area percentage compliance and then we will convert into the grade

$$\frac{Sum\ of\ percentage\ compliance\ of\ all\ knowledge\ area}{10}$$

If there is no procurement in sponsor project than formula will be following.

$$\frac{Sum\ of\ percentage\ compliance\ of\ all\ knowledge\ area}{9}$$

7. References

(reference your source material using APA format).

Project Management Institute. (2017). *A guide to the project management body of knowledge (PMBOK guide)* - 6th edition (6th Ed.). Newtown Square, Pa: Project Management Institute.
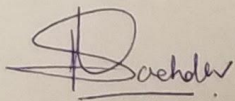
MY FEEDBACK

It was a unique opportunity for me to share my experience with Yogin Diyora and Hardik Mistry in their quest to learn about project management. In this process I also have benefited to learn something different from PMBOK.

Yogin Diyora and Hardik Mistry both were eager and enthusiastic to learn about the different aspect of project management. Meetings were held at appropriate time and both were present on every meetings in order to provide guidance and have discussions.

I have read the both audit report part 1 and audit report part 2 with all key findings and recommendations. I have received invitation by Yogin and Hardik but I will be busy on that day so I will not be able to attend this event.

Here is my opinion on recommendations.

1- To estimate the cost I will use the PMIS and I will try to get more information about this system
2- To define the activity I will use the PMIS
3- I will try to use the Risk Breakdown Structure in order to mitigate the risks related to my projects
4- I am not aware about "Design for X" tool but I will try to learn and implement "Design for X" tool for manage the quality because it is really nice method for quality management.

Narendra G. Sachdev

June 30th 2018