**QSO 345 Project Scenario One: Technical Redesign**

**Module One: Project Topic**

You are the project manager responsible for one of the projects in the overarching CIMS project program portfolio, and you will be managing the technical redesign due to the new federal requirements. Chief Gravill, your project sponsor, needs the technical software designs to be reviewed and the new federal requirements incorporated. Then the development, testing, validation, pilot, and deployment plans need a complete reworking. In addition to updates for the internal platform, updates are needed for all websites to comply with inclusion and disability standards. This project must be completed first before the vendor selection team can create the new requests for proposal (RFPs) and start vetting the new software vendors. Your development team has been given high-level sizing of six months and $300,000. The rest of the project team and operational costs are estimated to be $150,000. Chief Gravill says the project cannot take more than six months and has approved $200,000 more in the budget if the project can be done within four months.

**Module Two: Project Charter and Stakeholder Management**

Chief Gravill brings you into an introductory meeting to introduce you to the various people you will work with, and to talk through what the technical redesign must cover. As you sit at the table, the chief introduces you to all the parties he has pulled into the meeting.

Jared White is the assistant chief and comes from the Durham Regional Police Services; Sergeant Samatha Zemora is from the York Regional Office; Mary Jones is the Director Operations for the Niagara Regional Office, and Gary Duluth is the office manager for the Hamilton Office.

Kay Tuttle stands up and explains that she is the new assistant director and has taken over from the Federal Regulators Office to oversee the implementation of the new requirements. Manoj Saraff is the technology manager for the development team you will work with, and he introduces you to Scott Wall and Ashok Patel, who are his lead developers and future members of your project team. You are told that Tami Langford will be one of your key contacts because she is the product manager for the new platform.

After introductions, Tami talks through the critical milestones that need to be accomplished over the next months. For the project to get back on track, the project team needs to assess all the new software requirements quickly within the next month. Once all requirements have been defined, the team has two weeks to fully assess the impacts, risks, and likely costs that will impact all the affected stakeholders. By month four, the project team should have a new technical specifications and requirements document to be included in the vendor RFPs. Tami and the chief discuss how this project has only been approved for $450,000, and Samatha says, “I hope it is much less than that; there are other projects that need to get funded.” Finally, Tami explains that by the last month, the project team should be ready to meet with the RFP project team so they can meet with the possible vendors that will be used to implement the new requirements.

Kay said she is okay with Tammy’s timeline, but she warned that she would have to escalate to her superiors if the PRIDE offices were not able to show compliance with the new requirements by the first part of next year. Everyone in the room nodded in agreement, knowing that, if the project was not tracking on time, Kay could shut the whole project down and cause the project team to be let go with one phone call. The chief said, “We know, Kay. Thanks for the reminder. We will get this done long before the deadline, right?” He looks to you for confirmation.

After the meeting, the chief and Kent Masters, who worked on the first project, debrief you on all the stakeholders and provide the final details you need to get going. Kent says that, even though he will not be working on this project with you, he wants you to know about several constraints and dependencies on the project, including:

* The requirements must be reviewed and approved by the technical team and Kay before they can be used in the technical specs.
* All regional offices must sign off on the preliminary specs.
* Costs for implementation in the regional offices cannot be more than $50,000 or take longer than one month.
* The RFP team will need to be debriefed on all the requirements specs needed for the RFP.

As Kent is walking out, he leans over and says, “I have a few notes I kept on the last project about all the people you met that may give you a little more background. I’ll send them to you.” His email is reproduced below, including his original typos and mistakes:

Email

From: Masters, Kent

Subject: Notes on project participants

Congrats on your new role!

Here are some of the notes I took early on about everyone, let me know if this helps.

Chief – The boss and the one who signed us up for this project and pretty much calls the shots on the PRIDE group and is the one behind the idea for the project.

Comes to every meeting and early and is very interested in the success of the project. He likes to get weekly updates in a status meeting and emails if there are any major roadblocks.

Wants this whole project to get done asap and wants to make sure the project does not go over budget.

Kay – Regulator and can shut us down if the project doesn’t go well

She requires a monthly status update meeting just for her but doesn’t really want nor does she respond to any other communication.

All she cares about is that the new software meets all the federal requirements by August of next year.

Jared – Durham Office

He is always late to meetings and does not come to the most meetings.

He hates the new federal requirements and is only involved because he has been told to.

He doesn’t respond to email because he not a technical guy but will return your phone calls if you have questions.

Rarely ever offers any feedback and just wants the project to be over.

Samatha (Sam) - York office

Loves to help out on the project and jumps in whenever asked. She will do whatever it takes for this project to be successful but fights to make sure to keep the cost down since she is using her work to progress her career and show she keeps public spending low.

Attends every meeting and she likes to be cc’d on all project communication and has been a significant help in removing project roadblocks.

Sam is favorite among the government leadership and the Chief. She knows many of the leadership personally and can be a huge asset if she is on board with what you are trying to do. Watch out because if she doesn’t like you, you will never get anything approved.

Gary – Hamilton office

The Chief and Gary go way back and have been friends since childhood.

Gary has questions from time to time and loves to just IM you rather than email or phone. He does not attend meetings but says he reads the notes.

The Chief goes to Gary for advice so even though he doesn’t attend meetings you have to make sure he isn’t misinformed with what is going on.

Wants this project to be over quickly because he feels like he has more important things to work on.

Mary – Niagara Office

Use to be a consultant for a big firm, she is really smart and has a lot to say when she attends meetings.

Most of the project team is intimidated by Mary and don’t listen to what she has to say because she thinks she is smarter than everyone.

Mary comes to about half the meetings and always asks for the most up to date project documentation before she will answer questions.

Mary used to work for Niche Technology and doesn’t really care how long the project takes she just wants us to use Niche.

Tami – like the second boss to the chief

Tami has been the Product Manager for this new platform from the beginning. She is an excellent resource.

Comes to every meeting meets with the stakeholders regularly to understand their needs and make sure that the new platform meets all their needs.

She is fastest on email will but will also take IMs or phone calls.

She doesn’t have the final say on projects but she does influence their direction and if the project is considered successful or not.

Manoj – Technology Manager

Manoj is excellent to work with and works directly with this dev team to make sure that all technical work is done on time.

He has a lot of opinions about how the software should be developed and is very concerned that the vendors will not be able to deliver on time, to specs, and within budget.

Manoj will be the technical validation for all the technical documents, and he has to sign off on the designs before they can be considered “done.”

He comes to the meetings he can and said he would get more engaged once the project progresses to the technical work.

Due to his schedule its best to set up meetings with him to talk through the project or what you need from him.

I’ll look through my stuff and send you anything else I can find; please let me know if you have any questions!

Kent Masters, CAPM

Technical Project Manager

**Module Three: Scope Management**

Kent stops by your office and asks how the project is progressing. You tell him that the charter has been approved and you are are starting the scope management plan. Kent says, “Oh, I think I have something that could help you with your work breakdown structure.” He tells you that when the new federal requirements came in, they had started a requirements document. After a review of the email and reviewing with the project team, you find that the requirements document comprehensively covers what needs to be incorporated into the new vendor RFP.

Email

From: Masters, Kent

Subject: Start of requirements document

See the requirements document we created.

|  |  |
| --- | --- |
| Objective | Requirements |
| Update internal software to meet Federal requirements | * Update software within RMS to meet Federal requirements to share geographic and statistical information * Implement a joint computer aided dispatch system for police and fire agencies. * Create and implement data integrity standards for all PRIDE offices |
| Update Constituents Regional Police Websites to comply with Federal accessibility requirements | * Ensure website accessibility guidelines are incorporated into constituents website style guides. * Develop and implement an inclusion lens, integrating AODA requirements, to provide guidelines and standards of practice across various areas of service. * Achieve compliance with the Web Content Accessibility Guidelines (WCAG) to ensure that websites and web content are accessible to people with disabilities. |
| Update internal and websites to comply with Federal Security Standards | * Implement encryption technology to meet the requirements of the RCMP security policy * Create a data backup and disaster recovery plans * Replace all software interfaces to comply with Federal data encryption standards |
| Specs and Requirements Reviews | * All technical specs have to be reviewed and approved by Federal regulators before RFPs can be created * Technical designs need to be reviewed and approved by internal technical teams |
| New vendor search and RFP teams ready to vendor search | * The vendor search and RFP teams need to be fully debriefed on all the new specs and technical requirements to create the RFPs * All technical specs and requirements need to be fully documented to hand off to the new Project Team |

Good luck and let me know if you have any questions.

Kent Masters, CAPM

Technical Project Manager

**Module Four: Time Management**

You arrive early on Monday morning knowing there is still a lot to be done, and as soon as you walk in the door your phone rings. You pick it up, and it is the chief. You give him an update on where you are on the project, and he asks you how long you estimate your project will take to complete.

You explain that you have not completed the time management plan for the project yet but should have it soon. He tells you he needs the estimates by the end of the week. You explain it should not be a problem because you have already broken down all the work and have your WBS ready to start your activity durations and task sequencing, as well as the information needed to create your network diagram. You explain that the network diagram will enable you to identify the critical path of the project, which will provide the best estimate of the timeline.

The chief says, “Okay, I don’t know what all that means, just let me know when this project will be done by the end of the week, okay?” You explain you will make sure it happens, and you pull out all your work on the scope management plan to get going on your time management plan.

“Oh, one more thing,” the chief says. He tells you that you will need to build in one or two weeks for the RFP debrief once all the technical teams have the new designs complete. Lastly, he reminds you that the regulator takes at least four weeks to complete reviews once all the legal reviews are done. You thank the chief again and hang up.

Right after you hang up, Manoj, the technology manager, stops by your office and hands you his team's estimates on how long it will take to complete each of the objectives to use in your time management plan.

Time sizing estimates:

* Internal software to meet Federal requirements designs contract work: 150 hrs
* Federal accessibility requirements design contract work: 100 hrs
* Accessibility SME work: 40 hrs
* New security requirements contract work: 100 hrs
* Security SME work: 50 hrs
* Procurement of new software: 8 to 16 weeks
* Procurement of new laptops: 4 to 8 weeks
* Enterprise modeling software installation and training: 2 to 3 weeks
* Internal tech team reviews and sign off for each objective complete: one to two weeks
* Internal tech lead debrief with the RFP team: 40 hours

He says that is all his team could come up with for their components, and any other items you may have from the work breakdown you will have to estimate yourself.

You thank him for his help and after he leaves you jump in and start your estimates on all the project activities.

**Module Five: Cost and Procurement Management**

After a long day of meetings, the chief stops by your office and asks how the cost estimates and budget breakdowns are going. You tell him you are just waiting on some estimates from Manoj. He seems pleased and reminds you that the RFP teams are internal teams that will not require any costs. You thank him for that feedback, and as he leaves, you notice you just received the email from Manoj you were waiting for with the high-level estimates on costs that will be related to the project.

Email

From: Patel, Manoj

Subject: Costs and equipment estimates

It's been great working with you so far on the project. Working with my team, I did some preliminary sizings for your cost and procurement management plan.

For the technology contractors needed to update internal software to meet Federal requirements usually, cost us between $140 to $200 hr for at least 100 to 150 hrs. For the federal accessibility requirements, it will take about 100 hrs with the same contractor rates, but we will also need a subject matter expert (SME) for about 40 hrs to review the designs at about $200 an hr. The new federal security requirements will likely take about 100 hours at the $140 to $200 hr plus we will need a security SME for about 50 hrs at $250 hr. The equipment that we need will include an enterprise software license for the enterprise modeling, new developer laptops, and some new internal cloud needed so the team can quickly collaborate on the designs at the various regional offices; equipment, software, and training should run us 200k. In speaking with Tami, she said we are not required to pay for the regulator time to the reviews, but we do have to pay a $5,000 filing fee.

Since my team has only incremental resources, we will need a technical lead from my team to work with each of these resources for all the project time I have listed above plus about 160 hours of final reviews and sign-offs. The lead from my team would be considered operational costs but keep in mind all but the 160 hours will be during the same time frame as the contract resources.

Hopefully, this gives you the information you needed to do your cost and procurement estimates. Please let me know if you have any questions.

Thanks!

Manoj Patel

Technology Manager

**Module Six: HR and Communication Management**

You are several weeks into your project planning and it is time to plan out all the resources needed for your project and all the needed communications. To do this quickly, you pull your same internal stakeholders together in the conference room. You have all of your subsidiary plans to this point ready for discussion. You do not spend much time in the meeting on the project team, roles, and responsibilities because you tell the group you have that information from your previous plan work and meetings.

Manoj and the chief remind you they already sent you the information on the various types of human resources that were needed for the project. You talk through the time management plan you have created and explain that you were planning to bring in the resources to align when they would be needed as identified in your time management plan. All the stakeholders agree, but Manoj asks that you build in a couple of weeks with any contractors so they can be set up with equipment, access, and training before they are expected to work. You agree and explain to the group that you will come up with an acquisition plan and resource calendar that will clarify that.

He stated that it would be best if all those resources were trained with as many people as possible, since any additional training classes that have to be done after the first one class will cost an additional $2,500 per person.

Gary and Sam ask how you will be tracking team performance and how often the project team performance will be evaluated. Sam cracks a joke about a developer on the last project who stayed on too long and caused the project to get behind. You assure them that you will be detailing how you will be measuring their performance and how often that will happen in your HR plan so that they can review it.

Speaking of performance, you share with the group the discussion you had last week with Manoj and his technology leads about how important it is to make sure you plan how rewards and recognition for great performance would work. The chief offers to do a big party for everyone if the team completes on time and the regulators do not reject the plans. You thank him and explain you will also come up with some smaller incremental reward and recognition options and will include them in your plan.

You move on to communication requirements, and through the discussion you make a quick list of the types of group meetings that will be needed:

* A kickoff meeting to pull the team together at the beginning, with everyone in the conference room
* A weekly meeting with the project team, but with some people calling in, with current agenda and updated time management plan
* Technical design meetings, held as needed with the technical team, that will use collaboration software to talk through all the open backlog of work
* Monthly project status meetings with everyone who can attend in person and others on a conference call (Tami tells you that she would like to lead those meetings, since all the stakeholders should be at that meeting and they will need an updated PowerPoint for each meeting.)
* Biweekly emailed status reports for the chief and regional reps highlighting which things are on track or off track, and if off track, what the negative variables are
* A weekly update with Tami and the technical team to track status and coordinate efforts with some other projects she is working on
* A monthly regulator update meeting on conference call that will be led by the chief or Tami and need a PowerPoint deck to go through
* A one-time RFP debriefing meeting at the end, with a full presentation to walk through everything the RFP needs to know

You thank everyone for their time and wrap up the meeting, taking all your notes back to your office to start on your HR and communication plan.

**Module Seven: Quality and Risk Management**

It is late in the afternoon, but you are feeling good because your project plan is almost done: There is just one more step, covering the quality and risk in the project, and you will be done. To help you with the quality section, you set up a meeting with Manoj and Tami to talk through any unusual or unique quality requirements that would be related to the project.

Talking through the quality requirements, you jot down some notes so that you can use them in your plan:

* This project will have process and product quality requirements.
* The product quality will be related to the procurement equipment and install, and the process quality will be related to the work done on the project.
* All new equipment needs to be purchased and meet all the equipment specs that will be provided by Manoj’s team. Any equipment purchased that has any issues in the first month or is delivered not meeting specs will be returned. The internal cloud must have a 99% uptime based on monthly availability stats. If the cloud is not meeting availability requirements, the vendor must be brought onsite for troubleshooting and resolution. Enterprise software must load and be fully functioning on all the new laptops purchased using the new enterprise software license. Manoj’s team will be responsible for doing visual and burn-in audits to ensure all equipment and software meets the product quality standards.
* All new designs must be completed in the new enterprise software and validated for completeness, and they must include data dictionaries and completed metadata, as well as “Confidential: Internal Use Only” labeling. Manoj and Tami will be responsible for all design audits as each is completed, and the RFP team will do a complete review audit before the designs are accepted.
* Project teams will need a high level of accuracy of designs and must have all requirements completed within two weeks of deadlines. If the project team’s documents are missing any components found in the audit, they will need to be returned and corrected. If documentation does not meet accuracy standards, you and Tami will lead a process improvement analysis using the quality tools you have determined and put in the plan. If the project teams are falling behind on timelines, you and Manoj will need to determine if management reserves need to be use to bring in more contractors to get project items back on track.
* After all designs are created, new designs must pass the regulatory review in all requirements. If the requirements do not pass, Manoj can authorize to bring in one or two more resources to help correct issues and get the project back on track.

You will be responsible for defining the specific metrics and the audit process that will be used for each quality validation. Additionally, you will suggest the quality tools that will be used in the quality approach.

After some discussion about the possible risks of the project, the stakeholders agree to have you take the first pass and suggest what the risk identification approach will be, what the most likely risks are, what the risk scoring and ranking will be, how the team should respond to risk, and what the trigger is for the response strategy. You explain that you will formalize everything in the risk management plan and submit it to everyone for review.

You take your notes back to your office and review all the requirements, timelines, costs, and people involved in the project to start pulling together your quality and risk management plans.