MOUNT ROYAL UNIVERSITY
DEPARTMENT OF MATHEMATICS AND COMPUTING

COMP 4543 – Winter 2021
Assignment 1: Project Management Case Study

Project Description:

Build Pro Construction Inc. (BPCI) is a design-build construction company based in Calgary, Alberta. They also have a satellite office in Red Deer.

BPCI's staffing requirements are variable and they engage a large volume of contractor resources from five different preferred resourcing and recruiting companies.

BPCI's Supply Chain Department is looking to reduce the timeframe and manual effort required to select and manage their contingent workforce. Their competitors have implemented cloud-based contingent workforce management systems that manage the full contractor lifecycle including:

- Sending resource requests to the preferred vendors
- Receiving and evaluating submitted contractor profiles
- Putting in place the contract for the selected resource
- Gathering time and expense information from contractors and approval by managers
- Creation of invoices based on approved time and expense information and payment to the vendors.

The first stage of this project will be to go to market to choose the contingent workforce management application. Once the application vendor is selected through a competitive procurement process and a contract is negotiated, the second stage of the project will be implementation. Due to the size of the organization, BPCI intends to roll the system out in two stages:

- Deployment 1: Red Deer Satellite Office
- Deployment 2: Calgary Main Office

BPCI estimates that it can save $295,000 per year by implementing this new process and system. Other benefits include reduction in time to procure new resources, improved invoice accuracy, and less administrative effort for contractors, hiring managers, Supply Chain, and Finance.

Based on available market information, BPCI estimates an initial project budget of $625,000 to select and implement the application. As this is a Software-as-a-Service model, there is no upfront implementation cost from the vendor. The ongoing SaaS fees are estimated at $175,000 annually to begin when the first release is deployed – this will be an operational cost not a project cost. One major interface to BPCI's ERP is required to send monthly invoice data to the Financial Application for payment.

This is a multi-stakeholder project requiring enterprise-wide governance. The Project Steering Committee will consist of senior leaders from Supply Chain, IT, Architecture and Design, Construction, Finance, and Legal. There will also be a Working Committee with manager level representatives from these same departments.

You have been assigned as the project manager and asked to lead this project.

Key Project Activities

Some high-level planning for the project has already been done. Note that you will need to add any required project management activities and deliverables over and above this list.

Project Activities (not including PM activities which you need to add)	Milestones	Key Deliverables to be Planned
Requirements gathering and approval	• Business requirements approved	• Initial market survey • Requirements definition document
Software Evaluation and Selection	• RFP issued • RFP closed • Vendor Responses Received • Vendor Responses Evaluated • Short-listed Vendor Demos Conducted • Vendor Selected	• Request for Proposal document • Vendor Evaluation Checklists • Vendor Demo Scenarios • Vendor Recommendation
Vendor Contract Negotiations	• Signed MSA and SOW	• Master Services Agreement (MSA) • Statement of Work (SOW)
Vendor Kickoff and Blue-Printing (Design)	• Phase completion approved	• Project team kickoff • Application Blueprint (aka Design) • Deployment Strategy • Test Plan • Data Conversion Plan
Cloud Application Configuration (multiple iterations)	• Application Build Complete	• Application Configuration • Cutover Plan
Financial Interface for Invoicing	• Approved Interface Design Document • Interface ready for Integration Testing	• Detailed design document • Interface Build
Integration Testing	• Integration Testing Approved	• Integration Test Cases • Integration Testing • Test Results
User Acceptance Testing	• UAT Scenarios Approved • UAT Approved	• UAT Test Scenarios • UAT Testing • UAT Test Results
Data Conversion	• Data load spreadsheets populated	• Data cleansing • Data load spreadsheets

Deployment 1 (Red Deer)	• Training Materials Prepared • Training Completed • Go Live • Post Implementation Review Completed • Warranty Support Completed	• Training Materials • Staff/Vendor Training • Deployment of Technical Components • Security Penetration Test • Warranty Support • Post Implementation Review
Deployment 2 (Calgary)	• Training Materials Updated • Training Completed • Go Live • Warranty Support Completed	• Updated Training Materials • Staff/Vendor Training • Deployment of Technical Components • Security Penetration Test • Warranty Support • Post Implementation Review
Project Close-Out	• Project Sponsor Signoff	• Final project financials • Project Closure Report

Project Scheduling Information

- Timeline proposed below is tentative
- Many activities are overlapping or being worked in parallel, pay attention when you allocate resources
- Certain activities require specific expertise - refer to resource expertise chart
- Do not forget to add required project management activities and deliverables – these are not outlined either above or below
- Duration in "days" means business days, not calendar days

Timeline	Estimated Duration / *Milestone Date*
Project Kickoff	*February 1, 2021*
Requirements and analysis	20 days
RFP development	10 days
RFP released to Market	*March 15, 2021*
RFP responses due from Vendors	*April 2, 2021*

Evaluation of Vendor Responses
   - Initial evaluation of responses
   - Determination of short-list (2 vendors)
   - Short-listed vendor demos
   - Final evaluation of proposals and selection of winning proponent
	20 days

Contract Negotiations with Selected Vendor	40 days
Kickoff with Vendor	*May 31, 2021*
Blueprinting Requirements with Vendor	20 days
DEPLOYMENT 1 (Red Deer):	
Cloud Application Configuration	3 x 1 month (20 days) configure/unit test iterations
Detailed Design of Financial System Interface for Benefits Administration	10 days
Build of Financial System Interface (Benefits)	20 days
Data cleansing and Preparation of Data Load Templates	20 days
System Test	10 days
User Acceptance Testing	10 days
End User Training	5 days
Deployment 1 Go Live	*October 1, 2021*
Deployment 1 Post Go Live Warranty and Support	20 days
DEPLOYMENT 2 (Calgary):	
End User Training	10 days
Deployment 2 Go Live	*November 15, 2021*
Deployment 2 Post Go Live Warranty and Support	20 days
Project Completion & Signoff	*December 31, 2021*

Project Resources

You (as project manager) have been given the following resources to develop and rollout this project:

Resources	Role	Expertise
Ahmed Supply	Supply Chain Business Representative and Business Lead	• Knowledge of existing contingent workforce processes and vendors • Member of Working Committee

		• Accepts configured application for productive use
Cash Ledger	Finance Business Representative	• Knowledge of existing financial processes related to contingent workforce invoicing and payment • Member of Working Committee • Accepts Financial interface for productive use
Natasha Bizwriter	Business Analyst	• Supply Chain and Finance business processes
Wyatt Erp	ERP Systems Analyst	• ERP Finance application and interfaces
Randeep Coder	ERP Developer	• Coding for ERP application interfaces
Suri Testlead	QA Manager	• Test planning and oversight
Jojo Traynor	Training Specialist	• Trainer, training development

Other resource assumptions:

Internal Project Resources (dedicated <u>as required</u> throughout the project – not necessarily 100% from start to finish):
- Project Manager ($120,000/year)
- Department Business representatives (not charged to project)
- Business and Systems Analysts: 2 ($95K/ year per person)
- ERP Developer: 1 ($100K/year)
- QA Manager: 1 ($85K/year)
- Training Specialist (external contractor, $70/hour)

Consultants (functional expert or subject matter experts – used as required by project plan):
- Vendor Implementation Engagement Manager (N/C)
- Vendor Implementation Consultant (N/C)
- Security Testing Vendor (one-time, fixed cost of $40,000)

All resources (even those at no charge) need to be included in the project plan and scheduled against the appropriate activities.