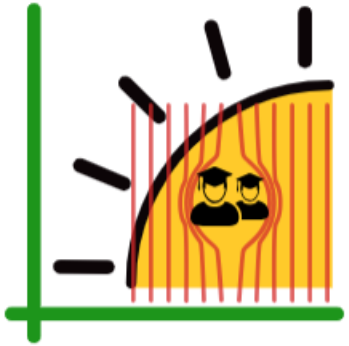
The Bright World©



THE BRIGHT WORLD

PROMISING FUTURES BEYOND THE BARS

Prepared By:

Alekhya Rambatla
Aparna Vaidyanathan
Geethika Banda
Harsha Kadiyala
Jahnavi Srinivasan
University of Colorado Denver
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Prof. Bob Kois

University of Colorado Denver
CU IN THE CITY

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1. Executive Summary

The University of Colorado Denver (UCD) was commissioned by the Department of corrections, Federal Government and Department of Justice to implement an educational system for the inmates and construct sustaining classrooms and establish strong collaboration with top universities in the USA. Education can be a gateway to social and economic mobility. As per the research 41 percent of incarcerated individuals do not holds a high school degree. Only 24% of the inmates in the prison have received postsecondary or college education. Education programs in correctional facilities are supported for the purpose of breaking the so-called cycle of "catch and release," yet the existing data supports calls for reform.

With 2.2 million adults imprisoned (2013), the United States has the largest prison population in the world. US has five percent of the world's population, yet it accounts for 25 percent of the world's prisoners. According to The Hamilton Project, a part of the Brookings Institute, the current cost of incarceration to taxpayers is $80 billion, an increase from $17 billion twenty years earlier. This does not include the less obvious but far greater costs to the economy in lost productivity and the cost to governments at all levels in lost revenues – not to the mention social pains associated with fractured families and the suffering of crime victims

This project we will be providing a window of opportunity and a second chance to the prisoners where they can learn and able to become model citizens after serving the time in prison. As part of this project two class rooms will be built with infrastructure such as chairs. Study tables, computer kiosks, projectors, screen, high-speed internet. There will also be a software that will be developed and same will be installed on the computer kiosks. There will also be a power backup to support the remote, onsite classes. Training curriculum will be developed by the collaborated university.

The overall budget for this project is estimated as $120,000 out of which half of the funds will be used towards developing the classrooms, hardware, infrastructure as the classrooms have to be remodeled to create an atmosphere and encourage the prisoners to join the literacy & educational program. Significant amount of money will be allocated towards the software development which then will be installed on the kiosks.

Quality is utmost important in terms of the education that is being provided to inmates and quality of products installed including but not limited to projectors, reliable internet connection, power backup etc., External auditing will take place on periodic basis to make sure the set standards are met.

2. Project Integration Management

2.1. Project Charter

Department of corrections and Justice department authorizes to conduct analysis on prison education and put together a project plan for constructing classrooms, preparing the course material with the help of University of Colorado Denver, installing computer kiosks for the inmates to use.

Image 1: Inmates interacting with professor in the classroom

Brian Walker will be the project manager (PM). He is authorized to plan, execute, monitor, control the design, build and implement the project. PM should conduct team meetings and attend steering committee meetings to provide an update and bring any impediments that may occur in the project execution. Especially with the project sponsor and head of corrects departments, PM should provide periodic updates in project progress and conduct bi-weekly face-to-face meetings to escalate any risks and issues.

PM will overlook project resourcing, training that needed for the project. He will also control the team turnover and may increase the team size with the prior approval from the PMO and steering committee. PMO will closely monitor the tasks progress and budget distribution.

2.2. Preliminary Project Scope Statement

The product to be delivered as part of this program is two classrooms with student chairs, tables, projectors, course material, variety of courses and computer kiosks in each classroom. Once the project is live, the handover will happen to department of corrections and they will be responsible for maintaining the program and safeguard any of the infrastructure. Detailed scope statement can be found under scope management section.

2.3. Project Management Plan

The Project Management Plan contained in this notebook conforms to the Project Management Body of Knowledge Guide (PMBOK) as published and copyrighted by the Project Management Institute. During the Planning Phase of the project, each of the ten Knowledge Areas of the Project Management Plan will be reviewed by the responsible Core Team member with any other affected team members and stakeholders.

Project kick-off will be on Nov 1st, 2018 and the official project execution will start soon after getting necessary approval from project sponsor and different stakeholder. Approval of project charter will trigger the next step on the project plan. Stakeholder meeting will be held, and project workshop schedules will be communicated. High-level resource plan, risks, procurement, project funding will be discussed. Milestones, deliverables, of the project will be communicated to the team and to all the stakeholders. Finally, project will be officially closed after delivering the agreed product and an after-action report will be delivered as part of closure.

2.4. Project Execution

Project Manager will have authority to take decisions on resourcing, changing the deliverable deadlines as long it is within the budget. PM will act as a liaison between different cross functional teams if needed and maintain & manages the dependencies. PM also will oversee the time and budget spend versus the actual milestone deliverables. Captures the risks and issues as and when they occur and escalate them to appropriate stakeholders. Project manager will identity all the risks and manage them before they become issues. PM will host the meetings with key stakeholders for periodic updates related to project tasks. Project manager will also coordinate with change management team to effectively communicate the changes related to products and processes.

Each team member will be assigned to tasks and have a lead to makes sure the individual tasks are on track as per the deadlines defined.

2.5. Project Monitor and Control

In any type of project, it is wise to expect changes in the requirements or unexpected risks. It is the project manager's role to efficiently address these appropriately and control the project delivery and produce a quality product. This process of monitoring and controlling project work is extremely important as it can happen that we are able to complete the project on-time, however, have not been able to meet the desired quality levels. Managing the scope and make sure there are not new requirements are getting injected.

Project manager keeps track of all the milestones, critical path tasks, Gantt charts for resource allocation and task allocation. This project is majorly on Time & Metrical type. Project manager will calculate earned value, performance index and prepare the presentations for the key stakeholders with S-curve. Since this project is a non-profit project, budget is limited and constrained. It's really important not to overshoot the budget with will put the project in danger. Project manager will make sure the 'watermelon' reporting will not be followed and actual project status will be communicated to all the project members.

Quality of this project is crucial and external auditors will be invited to verify the quality and makes sure all the checklists are filled and education quality will be maintained.

2.6. Change Management

As this project a new initiative and change management plays vital role in the success. The project is not complete or successful unless there is a strong change management is in place. Adoptability comes with great change management plan and as part of this a robust training and motivational material will be created and encourage the inmates to use the opportunity. The project manager will make sure the communication will go to the change management leads and captures the needed information on training plans.

2.7. Project Closure

The project closeout will start once after delivering all the agreed key products and tasks. Attaining the sing-off and production check-outs will be captured. Below are few of the key items that will be captured or completed as part of project closure.

- **Project Documents:** Documentation is critical any project or for any change in the product. All the design, construction blueprints, software build documents, sign-off documents will be made available to the project sponsor and project team.
- **Final Quality Check-lists:** All the related quality checks will be conducted including but not limited to user's production check-out results, operations team production checks, reviewing the requirement traceability matrix and make sure all the requirements are delivered and marked complete.
- **Post Go-Live Support:** After the go-live project will be support for 30 days in case of any production defects and later project sponsor will identify a vendor or an in-house team for on-going support.
- **Recognizing the Team and Celebration:** Identify the best performers and recognize them to improve the team spirit.
- **After Action Review:** As part of this, lessons learned document will be produced and it contained 'what went good and what went wrong', areas of improvement etc.,
- **Closing the open contracts:** Closing the fixed term contracts with vendors and pay any outstanding balances in this stage.

With all the above deliverables the project will be officially closed.

3. Project Scope Management

Project Scope Management includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. Managing the project scope is primarily concerned with defining and controlling what is included in the project. The project scope management is organized by the following project management processes:

- Collection of Requirements- Plan Scope
- Scope Definition
- Creation of WBS
- Scope Verification
- Scope Control

3.1. Project Overview

The Bright World project is an innovative non-profit program sponsored by US Federal Government in collaboration with Department of Justice and University of Colorado Denver. With this program, a variety of courses will be made available with inmates serving in the prison for non-violent crimes. This project will sponsor selected prisoners and prepare the course structure depending up on the need. As part this project two new classrooms with world-class facilities will be built along with self-service kiosks to help students explore the subject. As per the studies that 70% of incarcerated people will commit the

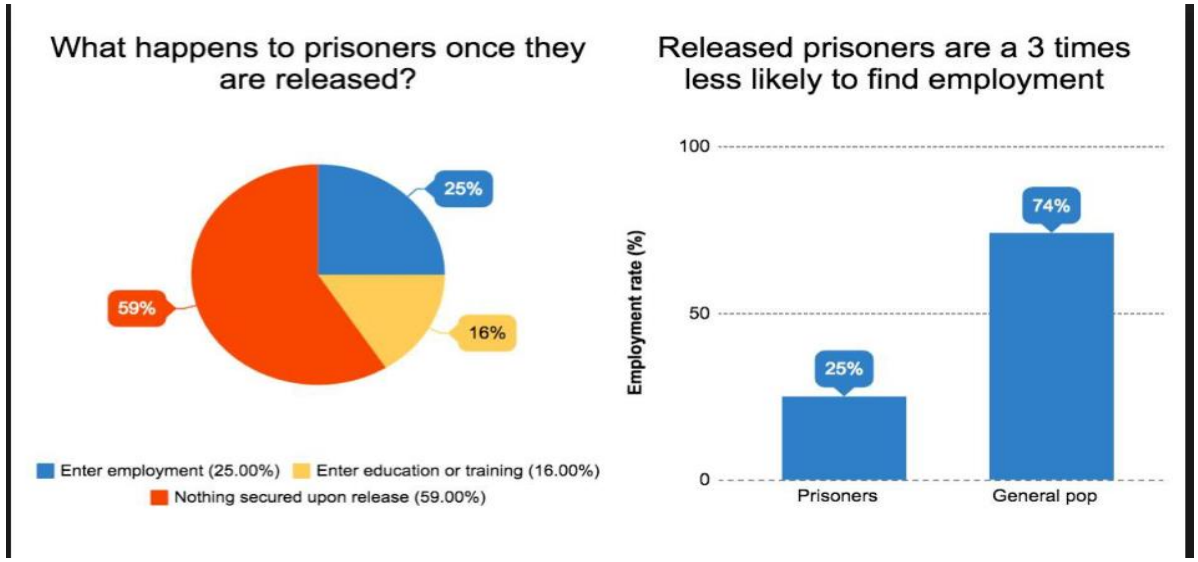


Image 3: Source A Medium corporation

crime and half of them again end-up in prison. This project will help the inmates self-sustain when they rejoin the society. This project will focus on simple yet powerful education methods so that every student will be equipped with right tools to survive in the society. After implementing this project there will be several universities offering specially designed certificate courses, graduation courses to uplift the hidden knowledge in the prisoners. This project's tagline is 'Promising futures beyond the bars'.

3.2. Scope Statement

As part of this project a robust prison education system will be created in collaboration with UC Denver. Couple of two new classrooms will be built with needed infrastructure. Course curriculum will be developed. Computer kiosks will be made available to the inmates. Below is the detailed scope and out of scope items.

Below are the items that are in scope:

- In this phase only two state penitentiaries in CO are in scope.
- Select and build two 400 ASF (assignable square feet) rooms with projector, 40 chairs per room for each prison. (Total 160 chairs, 4 rooms, 20 computers, 4 projectors)
- Providing Broadband internet connectivity and procuring one projector per class room.
- Coordinate with universities to develop curriculum
- Install computers and the software needed for students to communicate with professor and complete any assignments.
- Procure any special software needed as course demands.
- Distribute course completion certifications.
- Install required security software so that prisoners will not have wide access than needed to complete the course.
- Offer any help needed by inmates through emails or live chat on need basis.

Below are out of scope:

- Prisons excluding the selected establishment in the state of CO.

- Safeguarding the classroom, computers or any assets from physical abuse and its prison's guard's responsibility to secure the assets and infrastructure.
- Monitoring and taking action on students' conduct is out of scope
- Maintenance of the product or classrooms are not part of this project. The assumption is that department of corrections will contract the maintenance to some other vendors.

3.3. Project Objectives

The objective of this project is to design and build two classrooms with 20 kiosks in one state penitentiary where students can get the information related to the course. Provide internet and projectors so that a professor can take remote classes. Provide education to inmates and award completion certifications.

3.4. Project Vision and Mission

The mission of the project is to equip the prisoners with education and change the criminal mindset when they rejoin the society. No prisoner should be again going back to penitentiary for committing a crime just because they don't have any source of income and any skills to sustain in the society. Eventually we want to reduce recidivism and possibly take it to zero. We promise the inmates future with education.

3.5. Project Budget

The total project is estimated at $120,000 which includes expert judgement and 50% of expert guestimate. This does not cover operational costs after the project go-live and post production support is complete.

4. Project Stakeholder Management

4.1. Plan Stakeholder Engagement

A process to identify the impact of a stakeholder on the project is calculated and the same is mentioned below. The table below addresses who are the stakeholders and their role in the project. Influence and Interest on the project, how are they important and what we would like them to do. Key stakeholders are the people who are responsible for funding our project. Also in the section the authority of each stakeholder in making executive decisions is also mentioned. Stakeholders expectations of the project like the completion of tasks and activities on time, using the funds they provide logically and appropriately is also addressed. Expectations which are on the stakeholders like providing funds consistently and believing in the project or provide suggestions from their previous experiences and negotiate deals with traders and avail resources when needed. It is very important to know the interests and involvement levels of each stakeholder and what are their responsibilities so that everyone will have a clear-cut idea of everyone's role and can approach specific people for specific resources. The stakeholders might have fluctuating and changing needs as the project is on the implementation process. The plan will help us collate all their needs and will help everyone understand the changing needs.

Involvement of stakeholder is a crucial part of our project. We need resources and experience of our stakeholders so that we can delegate all kinds of things to them. Each stakeholder has some unique skill and interest which will help our project when it gets stuck due to lack of resources or knowledge. Risk is an important factor which our company might have to deal with when implementing the project. We can look up to our stakeholders so that they will help us reduce the intensity of risk and make it unnoticeable.

4.2. Execute Monitor and Control Stakeholders

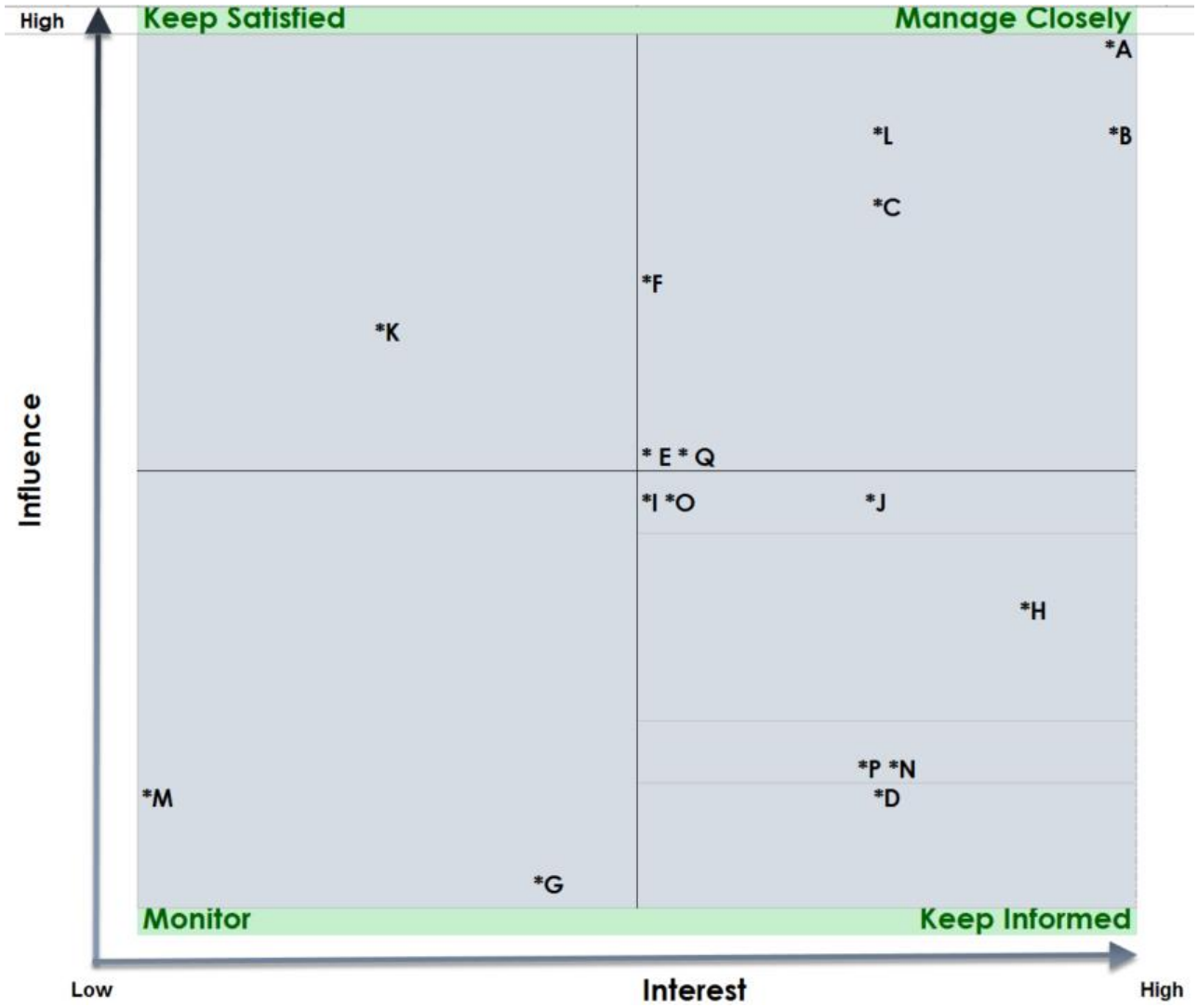
As mentioned in the image below, the stakeholder analysis represents the influence of the stakeholder on the project outcome. The grid suggests that stakeholders with high influence and high interest should be managed closely and actively involved throughout the project. Stakeholders with low influence and low importance need to be monitored always. Stakeholders with low influence and high importance must be actively involved and kept informed at all stages of the project. The analysis gives a specific role assigned to each of the stakeholders. This allows a smooth transition of the project and allows the project manager to allot the resources and appropriate support with time.

Name of Stakeholder	Designation	Type of Stakeholder	Type of Communication	Expectations	Interests[1-10]	Influence[1-10]
A)Allen Jeff	H.O.D of Corrections (Sponsor)	Internal	Weekly video conference, bi weekly email updates & occasional team meetings	Advise the board on legal issues and help the organization reach it's goal	10	10
B)Brian Overton	Dean, UC Denver	External	Weekly video conference	Take decisions on future endeavors	9	7
C)Dungan Travis	Justice Dept. Head	Internal	Email & Telephone	Authority to investigate, litigate, or provide legal advice, as well as allegations of misconduct by DOJ law enforcement personnel	8	8
D)Ron Ramirez	Construction Manager	External	Email & Phone call for updates	Construct well equipped classrooms within budget	8	2
E)Amanda	Operations Manager	Internal	Weekly in-person, Email & Telephone	Managing quality assurance programmers, Setting and reviewing budgets and managing cost	8	5

Name of Stakeholder	Designation	Type of Stakeholder	Type of Communication	Expectations	Interests[1-10]	Influence[1-10]
F)Malena	PMO Lead	Internal	Email & Telephone	Approve changes, commit resources and budgets, coach and mentor inmates with required knowledge	6	7
G)Inmates	Inmate	Internal	Roadshow	Have a safe and bright future by acquiring knowledge	2	2
H)Young Cliff	Program Architect	Internal	Email & Telephone	Design and develop software systems and applications, set technical standards, such as platforms and coding standards.	10	4
I)Rebecca	Build Lead	Internal	Email & Telephone	Discover training needs and provide coaching, set goals, Oversee day-to-day operation	6	5
J) Kubie William	Prison Warden	Internal	Milestone updates-in person meeting	manage and oversee the activities of correctional facility staff to ensure safety and security of the facility, as well as the proper treatment of inmates.	7	7

Name of Stakeholder	Designation	Type of Stakeholder	Type of Communication	Expectations	Interests[1-10]	Influence[1-10]
K)Buddy	Prison Security Head	Internal	In person meeting	Escort inmates to their classrooms, Monitor inmate behavior and ensure their safety and security	4	6
L) Ernest	IT Director	Internal	Email & Telephone	Managing Kiosks and approving other IT related permissions	7	8
M)Jessica	Training Coordinator	External	Email & Telephone	Managing schedules of Professor's and getting timely updates from Professor's	3	2
N)Teaching Faculty	Professors	External	Monthly phone meetings. Key milestones delivery updates. Final product delivery timelines detail through email summaries.	keep abreast of current events and current research in teaching and learning as inmates pertain to the course, challenge inmates class to learn as much as possible	7	4

Name of Stakeholder	Designation	Type of Stakeholder	Type of Communication	Expectations	Interests[1-10]	Influence[1-10]
O) Rohan	Quality Lead	Internal	Milestone updates using email communications; in-person meetings.	Handing over of fully developed application to test team. Information on any scope and last minute changes to design so that the test scenarios can be updated. Making sure quality goods like bricks were used which has no cracks	6	5
P)Procurement	Procurement manager	Internal	Online & Email	Evaluating suppliers, conducting interviews with vendors, negotiating supplier agreements and managing supplier and vendor contracts	7	4
Q)Change Management	Change Manager	Internal	In person meeting & Online	Prepare Change Summary Sheet ,Authorize and approve minor/low change, Coordinate and conduct meetings with Change advisory board **(CAB)** to discuss higher risk changes	8	5


High
Keep Satisfied
Manage Closely
*A
*L
*B
*C
*F
*K
* E * Q
*I *O
*J
*H
*P *N
*M
*D
*G
Monitor
Keep Informed
Influence
Low
Interest
High

5. Procurement Management

The purpose of this section is to identify, purchase and closure of contracts for the items (i.e. products, services) that need to be acquired outside the management team. Below are the phases involved in this knowledge area.

5.1. Procurement Plan

(a) Plan Purchases and Acquisitions

The plan for procurement includes the identification of products or services and identification of strategy for sellers. Below items need to be purchased from external vendors:

- Construction raw materials for 4 rooms
- Projectors - 4
- Computer and peripherals - 20
- Chairs and desks - 40
- Internet – for classes and project execution
- Hardware integration – for classes and project execution
- Security software
- Misc. - Special software, certification partners
- Development computers, software
- Web servers
- UX libraries for icons

Item #	Items	Contract Type	Order date	Delivery date
1	Network	Time & materials	11/01/18	11/08/18
2	Development/QA Servers	Fixed price	11/01/18	11/08/18
3	Computer peripherals - keyboard, monitor, mouse, mousepads	Fixed price	11/03/18	11/08/18

Item #	Items	Contract Type	Order date	Delivery date
4	Furniture for Office space, chairs and desks	Fixed price	11/01/18	11/08/18
5	UX - Custom icons for the application	Fixed price	12/06/18	01/10/19
6	Construction raw materials for 4 rooms	Fixed price	11/01/18	11/08/18
7	Projectors - 4	Time & materials	11/08/18	11/08/18
8	Hardware integration	Time & materials	02/21/19	03/21/19
9	IT Misc. - Special software, certification partners	Time & materials	Need basis	Need basis

(b) Plan Contracts

The use of subcontractors will be common use for this project. The Procurement Manager will oversee coordinating between the project manager and the vendors. The project manager must be given a list of all vendors and suppliers for approval prior to the start of build/construction.

5.2. Execute Procurement Plan

(a) Request Seller Responses

Multiple local contractors and suppliers can provide products / services for the executing the project. Each vendor has been assessed by their proposed price, quality, past review, and availability. The overall winner between the categories will be selected by the Procurement Manager for the project after calculating the weighted sum under each major category of the project/service.

Criteria for vendor selection:

1. Availability (30%)
2. Quality of the Product/Service (25%)
3. Pricing (25%)

4. Past performance/recent review (20%)

Vendor Selection for Network						
Criteria	**Weight (in %)**	**Scores (5 - Excellent, 4 - Good, 3 - Average, 2- Below average, 1-Bad)**				
		CenturyLink	**Spectrum**	**XFinity**	**Viasat**	**MicroTech**
Availability	30	3	5	3	2	4
Quality of the Product	25	4	4	2	3	4
Pricing	25	2	4	2	3	4
Past performance	20	3	5	1	2	5
		3	4.5	2.1	2.5	4.2

Vendor Selection for Servers, Computer hardware and supplements			
Criteria	**Weight (in %)**	Scores (5 - Excellent, 4 - Good, 3 - Average, 2- Below average, 1-Bad)	
		Studio West	Office Depot
Availability	30	2	4
Quality of the Product	25	4	4
Pricing	25	2	4
Past performance	20	3	5
		2.7	4.2

Vendor Selection for Construction materials						
Criteria	**Weight (in %)**	**Scores (5 - Excellent, 4 - Good, 3 - Average, 2- Below average, 1-Bad)**				
		Summit Materials Inc	Wylaco	Rio Grande Co	James Lobello	Gumer Concrete LLC
Availability	30	3	4	3	2	4

Quality of the Product	25	4	4	2	3	3
Pricing	25	2	5	2	3	4
Past performance	20	3	5	1	2	5
		3	4.45	2.1	2.5	3.95

Vendor Selection for Construction Labor supply						
Criteria	**Weight (in %)**	**Scores (5 - Excellent, 4 - Good, 3 - Average, 2- Below average, 1-Bad)**				
		Tradesman Int.	Altitude Movers Denver	MA Mortenson Co	HOK	Wylaco
Availability	30	2	4	3	3	4
Quality of the Product	25	5	3	4	5	5
Pricing	25	4	5	4	5	5
Past performance	20	5	4	4	5	5
		3.85	4	3.7	4.4	4.7

(b) Select Sellers

After evaluating the information on the previous section regarding vendor options, the Procurement manager will be pursuing contracts with:

1. Office Depot
2. Wylaco
3. Spectrum
4. Other misc. vendors – Microsoft LLC. for Professional Certifications

5.3. Monitor and Control

The contracts must be delivered to the subcontractor by the Procurement manager and approved by the PM prior to mobilization. Insurances and bonds must be received by the oversight team prior to the subcontractor being allowed on the project site. Each subcontractor will receive a tentative schedule by the Procurement manager and must be available to deliver the products or services by the agreed date or at the exception approved by the Procurement manager who drives the schedule and adherence to the schedule without delays.

All deliverables will be thoroughly audited to ensure that they meet the standards set for this project and cross-checked with the RFPs. Any shortcomings will be identified, analyzed, and sent to the supplier for replacement. Claims will be addressed with the general contractor and approved by the oversight team prior to payment being released.

5.4. Procurement Closure

Procurement closure is covered as part of project closure and considerable closure of warranties.

6. Communication Management

6.1. Plan Stakeholder Engagement

A communication management plan is required for having effective communication throughout the lifecycle of the project. It is a platform for the stakeholders to express their concerns and suggest ideas to project managers. Through this platform, the project manager considers their needs and perform productively.

The different modes of communication include in person meetings, video or audio calls, electronic mails and trainings. The meeting can be held on a daily basis, weekly, bi-weekly or monthly basis.

The major part of Communication Management Plan is reporting performance. It involves collection information and status of ongoing work, creating reports based on it and sharing it with stakeholders involved.

Types of performance reports:

- **Status report:** The performance of the ongoing work is reported.
- **Progress report:** The total work done is reported.
- **Trend Report:** The trend of the performance like upward or downward is identified.
- **Forecasting Report:** Using past data, the future status of project is determined.
- **Variance Report:** To check how the actuals is varying from the baseline.

It is the role of the project manager to identify stakeholders and establish a proper communication plan. The project manager should also create guidelines for the meetings and set communication standards.

The main purpose of communication management plan is to define how information and feedback from different stakeholders will be shared with others. Project's success depends on clear communication between stakeholders.

6.2. Communication Plan

Below is the communication plan that will be followed to make sure all the stakeholders are kept on the same page.

Communications Plan																									
Information Required (the message)	**Information Provider (the sources)**	**Frequency**	**Expected effect**	**Method of Communication (the media)**	**Project Steering Committee**	**Project Sponsor**	**Project Core Team**	**Design Team**	**Test Team**	**Business Team**	**System Users**	**IT Director**	**Dean, UC Denver**	**Justice Dept. Head**	**Construction Manager**	**PMO Lead**	**Operations Manager**	**Inmate**	**Build Lead**	**Prison Wardon**	**Prison Security Head**	**IT Director**	**Training Coordinator**	**Professors**	**Procurement manager**	**Change Manager**
Project Start*	Sponsor / PM	Once, just after making approvals	Establish project organization and timelines, common understanding and alignment of expectations	Occasional video conference, bi weekly email updates & occasional team meetings	√	√	√	□	□	□	□	□	√	□	□	□	□	□	□	□	□	□	□	□	□
Project Status Updates*	PM	Monthly	Awareness of project status, risks and issues involved in providin	Project Status Report in Share Point location, export to XL sheets and	√	√	√	□	□	□	□	√	□	□	□	□	□	□	□	□	□	□	□	□	□	□

Communications Plan																										
Information Required (the message)	**Information Provider (the sources)**	**Frequency**	**Expected effect**	**Method of Communication (the media)**	**Project Steering Committee**	**Project Sponsor**	**Project Core Team**	**Design Team**	**Test Team**	**Business Team**	**System Users**	**IT Director**	**Dean, UC Denver**	**Justice Dept. Head**	**Construction Manager**	**PMO Lead**	**Operations Manager**	**Inmate**	**Build Lead**	**Prison Wardon**	**Prison Security Head**	**IT Director**	**Training Coordinator**	**Professors**	**Procurement manager**	**Change Manager**
			g education to inmates	notify by email																						
Project Core Team Updates	PM	Weekly	Common understanding of project status, completed and upcoming activities, risks and issues	Discussion of project progress, risks, issues, mitigations, face to face and/or Skype for Business online meeting	□	□	√	□	□	□	□	□	□	□	□	√	□	□	□	□	□	√	□	□	√	□

Communications Plan																									
Information Required (the message)	Information Provider (the sources)	Frequency	Expected effect	Method of Communication (the media)	Project Steering Committee	Project Sponsor	Project Core Team	Design Team	Test Team	Business Team	System Users	IT Director	Dean, UC Denver	Justice Dept. Head	Construction Manager	PMO Lead	Operations Manager	Inmate	Build Lead	Prison Wardon	Prison Security Head	IT Director	Training Coordinator	Professors	Procurement manager	Change Manager
Technical Team Meetings	Build Lead Manager	Bi-weekly	Discuss issues, and risks of inmates within technical team.	Stand up meetings, face to face and/or skype for business meeting	□	□	□	□	□	□	□	□	□	□	□	□	□	□	√	□	□	□	□	□	□	√
Design Team Meetings	Design Lead	Bi-weekly	Discuss about issues, and risks involved within prison and inmates.	Stand up meetings, face to face and/or skype for business meeting	□	□	□	√	□	□	□	□	□	□	□	√	□	□	□	□	□	□	□	□	□	√
Test Team Meetings	Test Manager	Bi-weekly	Discuss about issues and risks of current work	Routine meetings, face to face and/or online meeting	□	□	□	□	√	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

Communications Plan																									
Information Required (the message)	Information Provider (the sources)	Frequency	Expected effect	Method of Communication (the media)	Project Steering Committee	Project Sponsor	Project Core Team	Design Team	Test Team	Business Team	System Users	IT Director	Dean, UC Denver	Justice Dept. Head	Construction Manager	PMO Lead	Operations Manager	Inmate	Build Lead	Prison Wardon	Prison Security Head	IT Director	Training Coordinator	Professors	Procurement manager	Change Manager
			within the group.																							
Business Team Meetings	Business, Project Manager /(BSA's)	Bi-weekly	Brainstorm about ideas, discuss issues, and risks of current work packages within business team.	Routine meetings, face to face and/or online meeting	□	□	□	□	□	√	□	□	□	□	□	□	□	□	√	□	□	□	□	□	□	□
Project Steering Committee Updates	PM	monthly/ milestones based	Common understanding, approval of scope, time	Discussion of project progress, risks, issues, mitigations and	√	□	□	□	□	□	□	√	□	□	□	□	□	□	□	□	□	□	□	□	□	□

Communications Plan																									
Information Required (the message)	**Information Provider (the sources)**	**Frequency**	**Expected effect**	**Method of Communication (the media)**	**Project Steering Committee**	**Project Sponsor**	**Project Core Team**	**Design Team**	**Test Team**	**Business Team**	**System Users**	**IT Director**	**Dean, UC Denver**	**Justice Dept. Head**	**Construction Manager**	**PMO Lead**	**Operations Manager**	**Inmate**	**Build Lead**	**Prison Wardon**	**Prison Security Head**	**IT Director**	**Training Coordinator**	**Professors**	**Procurement manager**	**Change Manager**
			and budget alignments	potential scope, time or budget alignments																						
Promotion(Marketing)	PM / Directors	If required	Project marketing, information and awareness for interested stakeholders regarding Promising future for inmates	Email, App promotion, Company Newspapers	√	√	√	□	□	□	√	√	□	□	□	√	□	□	□	□	□	√	□	□	□	□

Communications Plan																									
Information Required (the message)	**Information Provider (the sources)**	**Frequency**	**Expected effect**	**Method of Communication (the media)**	**Project Steering Committee**	**Project Sponsor**	**Project Core Team**	**Design Team**	**Test Team**	**Business Team**	**System Users**	**IT Director**	**Dean, UC Denver**	**Justice Dept. Head**	**Construction Manager**	**PMO Lead**	**Operations Manager**	**Inmate**	**Build Lead**	**Prison Wardon**	**Prison Security Head**	**IT Director**	**Training Coordinator**	**Professors**	**Procurement manager**	**Change Manager**
Go-Live*	Sponsor / PM / Leads	Once, short before Go-Live	Awareness and project marketing	Communication of Project Go-Live, by email and other news channels	√	√	√	□	□	□	√	√	□	□	□	√	□	□	√	□	□	√	□	□	□	□
Project Close	PM	Once, to formally close the Project	Lessons Learned, termination of project organization	Project Close-Out Meeting, face to face and/or online meeting	√	√	√	□	□	□	□	□	□	□	□	□	□	□	□	□	□	√	□	□	□	□
Training Documents	Change Manager	Every 6 months	Training Documents related to the Product	Roadshow and News letters	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√

6.3. Communication Execution

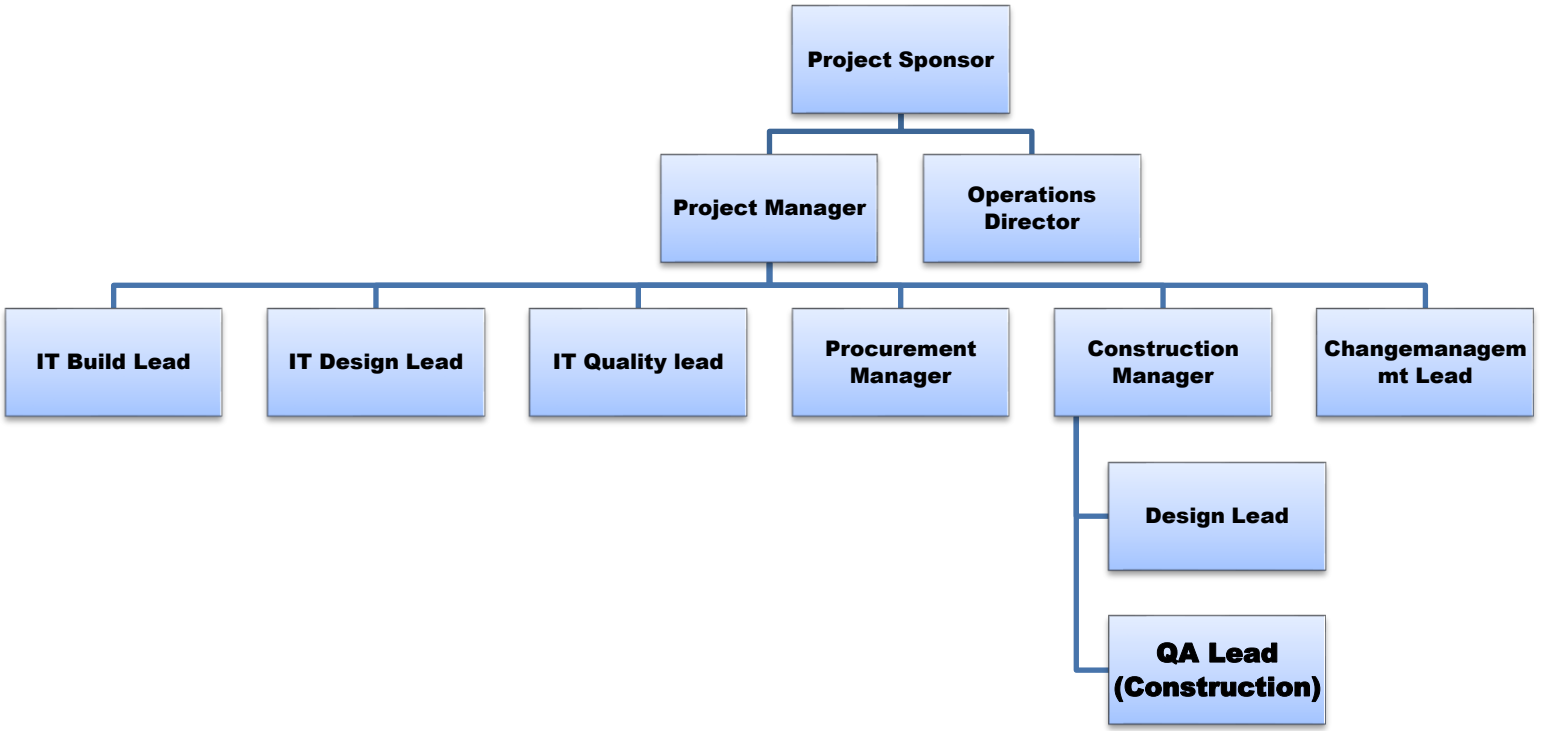
In this project, the communication between internal and external stakeholders is described below. The Dean and Smart Classroom vendors meet monthly face to face to discuss about training inmates and activities involved.

The On-site team, project manager and Infrastructure manager meet whenever required depending upon the urgency of the issue. The IT team and Project Manager meet IT Vendors once in a week via phone calls to discuss the working condition of kiosks, classrooms and the education material provided.

The IT team, testing team, Project Manager and IT Vendor meet weekly via phone calls to discuss the results of the inmates and if it requires further actions.

The Project Manager, directors, professors and Training Vendor meet bi-weekly via phone calls to discuss about trainings to be conducted. The Change management team, procurement team and Project Manager meet once in a month or communicate via e-mails to discuss about documentation and other legal issues.

Communication Structure:



7. Quality Management

7.1. Quality Plan

Quality Management is critical in fabricating the mold and the model itself. Poor fabrication quality will result in poor load test results, which translates into material failure. If the model fails during testing and doesn't meet the specified requirements, the project is a failure and the deliverables will not be met.

It's managing the key tasks and satisfying the project objectives. Efficiency is the key factor that must be consider during the project development life cycle. Preserving the quality of project will make it more efficient and that will be useful for the betterment of employees and the organization. Project manager is the person who is responsible to ensure that all the tasks are up to date and the project is completed in the allotted time. Quality management in a project can be broadly classified into four categories:

- **Quality Project Planning**

  (Essential Documentation of resources, designing and planning)

- **Assuring Quality**

  (Testing and development phase of project)

- **Quality Control**

  (Delivery of project)

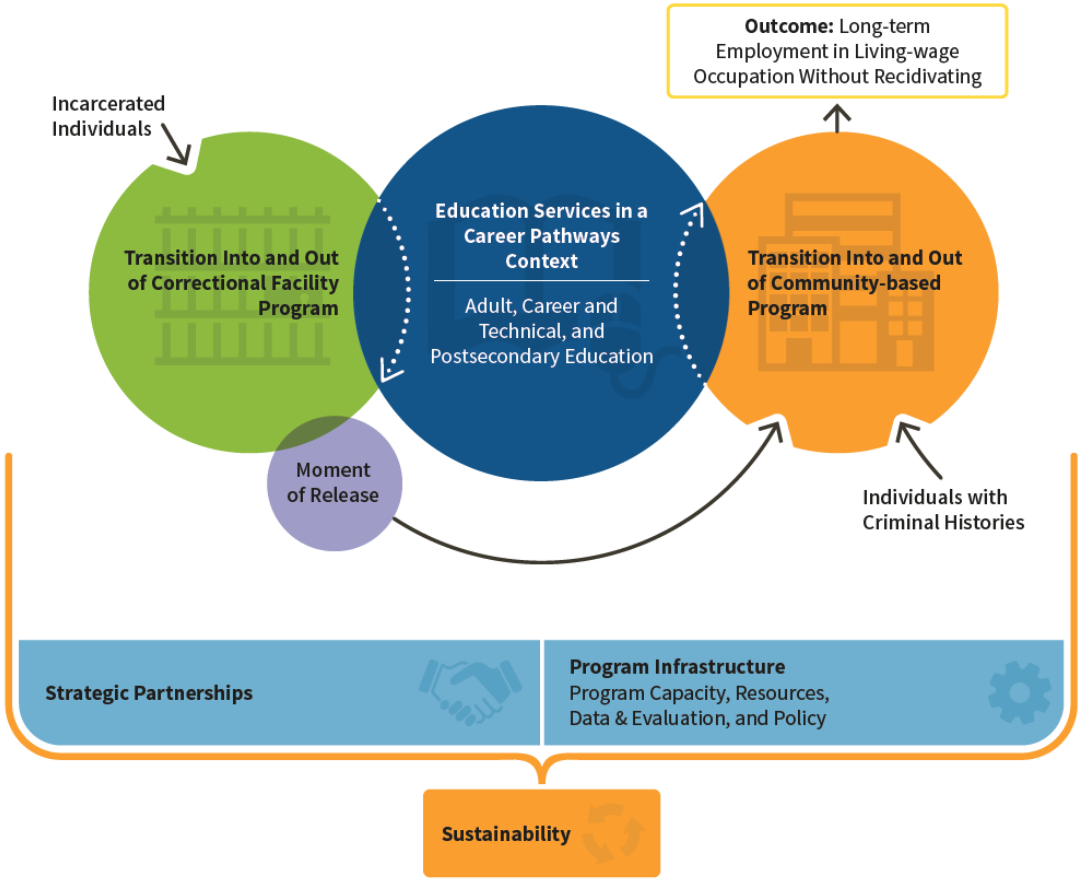
- **Continuous Management strategy**

  (Initial development, checking and delivery)

Most individuals released from prison face limited employment opportunities and do not successfully reintegrate into society. Although we come up with cost-effective approach to preparing incarcerated adults for release, education services offered often are disconnected from community-based education programs and other support. This lack of communication and coordination can make it difficult for adults to complete their coursework and earn a credential as

they transition in and out of the criminal justice system. The inability to find stable work is often cited as a key determinant of failed re-entry (or “recidivism”).

Therefore, the below framework presents an approach for reentry education providers to develop an education continuum that strengthens their services and bridges the gap between facility- and community-based programs as quality of the product plays an important role in the in-mates career so that he could really get that elevator pitch from it and would have a better after prison life.



7.2. Quality Checklists

Checking the quality of the deliverables is necessary for every project. In project management, checking the quality is the responsibility of the Control Quality process of monitoring and recording the quality of the product. Under this element is the quality checklists.

As the name implies, quality checklists refer to structured tools used in order to verify the set of required steps that has already been performed. The checklist can be simple or complex depending on the requirements and practices of the project.

A thorough checklist has been made in order to define and monitor project quality. It pertains to all member of the team and all subsystems. Since it applies to the project as a whole, this checklist is more general and can be used to check each subsystem individually. There is some extra room after the checklist so that items can be added later as needed if the project changes at all.

Quality Checklists		
Project Management Checklists	**Complete**	**Initial**
Project Integration Management		
Project Charter, Preliminary Scope Statement,	x	BG
Project Management Plan, Direct/Manage Project Execution,	x	BG
Monitor/Control Project Work, Integrated Change Control,	x	BG
Close Project		BG
Project Scope Management		
Scope Planning, Scope Definition WBS,	x	BG
Scope Verification, Scope Control	x	BG
Project Time Management		
Activity Definition, Activity Sequencing, Activity Resource Estimating,	x	BG
Activiy Duration Estimating, Schedule Development,	x	BG
Schedule Control	x	BG
Project Cost Management		
Cost Estimating, Cost Budgeting, Cost Control	x	BG

Project Quality Management			
Quality Planning, Quality Assurance, Quality, Control			BG
Project Human Resource Management			
Human Resource Planning, Acquire Project Team,	x		BG
Develop Project Team, Manage Project Team	x		BG
Project Communications Management			
Communications Planning, Information Distribution,	x		BG
Performance Reporting, Manage Stakeholders	x		BG
Project Risk Management			
Risk Management Planning, Risk Identification,	x		BG
Qualitative Risk Analysis, Quantitative Risk Analysis,	x		BG
Risk Response Planning, Risk Monitoring and Control	x		BG
Project Procurement Management			
Plan Purchases and Acquisitions, Plan Contracting,	x		BG
Request Seller Response, Select Sellers, Contract Administration	x		BG
Contract Closure			BG

7.3. Quality Control Charts

The control chart is a graph used to study how a process changes over time. Data are plotted in time order. A control chart always has a central line for the average, an upper line for the upper control limit and a lower line for the lower control limit. These lines are determined from historical data.

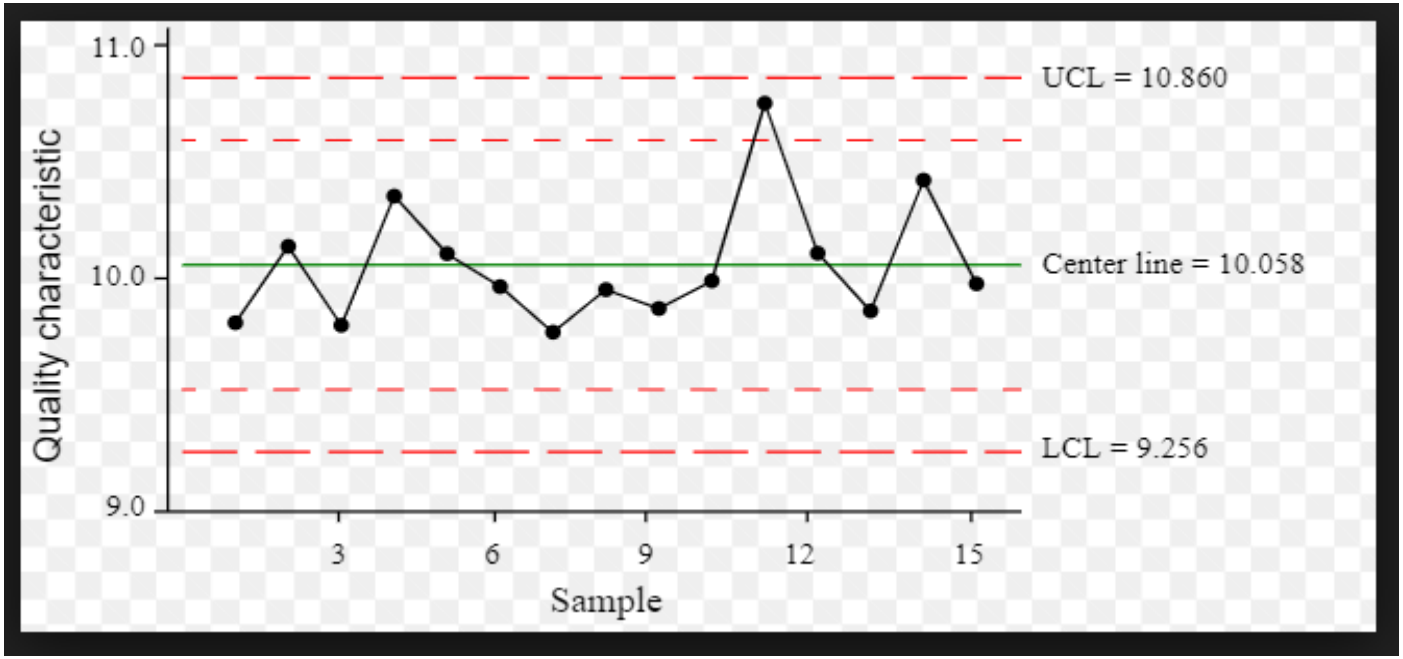
A run chart shows the history and pattern of variation in technical performance to the cost and schedule performance which should be considered to maintain the quality.

Technical performance. How many errors or defects have been identified, how many can be controlled or can be left uncorrected?

Cost and schedule performance. How many activities per period were completed with significant variances?

Following the center mitigation line would help us maintain the quality of the product.

Control charts are used to routinely monitor quality. In general, the chart contains a center line that represents the mean value for the in-control process. Two other horizontal lines, called the upper control limit (UCL) and the lower control limit (LCL), are also shown on the chart.



8. Risk Management

8.1. Risk Plan

There are several factors that exacerbate the education challenges of many prisons. The prison learning environment must balance the competing need for security with that of rehabilitation through the provision of education, training and mandated behavioral programs (e.g. drug and alcohol programs).

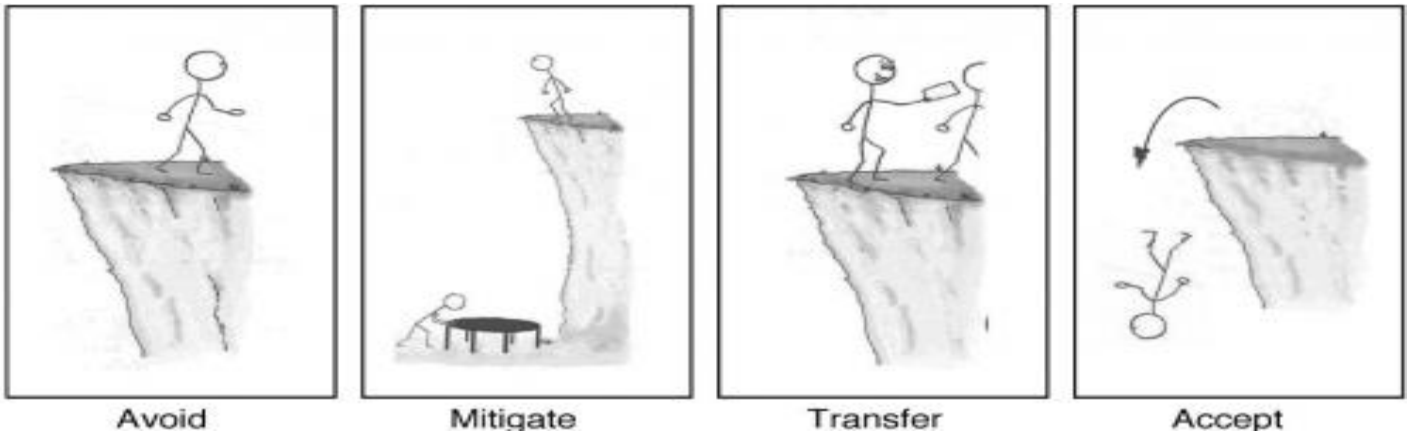
Research shows that dosage is a significant factor influencing program effectiveness, and that continuous participation for a specified period is essential for success. The tough-on-crime policies of many governments contributes to overcrowding of facilities, making prisoner accommodation and movement difficult. Based on system-wide needs, prisoners may be transferred to another facility with little advance notice, and the new prison may or may not offer comparable educational programming.

Therefore, any unforeseen risks need to be reported to the PM immediately in the process described in the Risk Management Plan. Though there are many approaches to foresee risk associated in a project, the risk management plan is for identifying risk that can occur at any point in a project. The risk management plan is used to identify the risk, its impact, weighted average, responsible stakeholders and mitigation measures. The risk management plan is updated periodically.

Handling a risk:

The risk can be handled in four ways:

- **Avoid**: The easiest and best way to prevent a risk is avoiding it. If the risk is prevented from occurring, then the project will not be affected.
- **Mitigate**: This is done when the risk can't be avoided. Mitigation will lessen the impact of risk.
- **Transfer**: The risk is transferred to other parties. Purchasing insurance is a risk transfer method.
- **Accept**: When you can't use the above methods, then you must accept the risk. When you accept the risk, you are sure that the risk will occur and looked at the alternatives. It's better to plan earlier for the risks and keep updating it often.



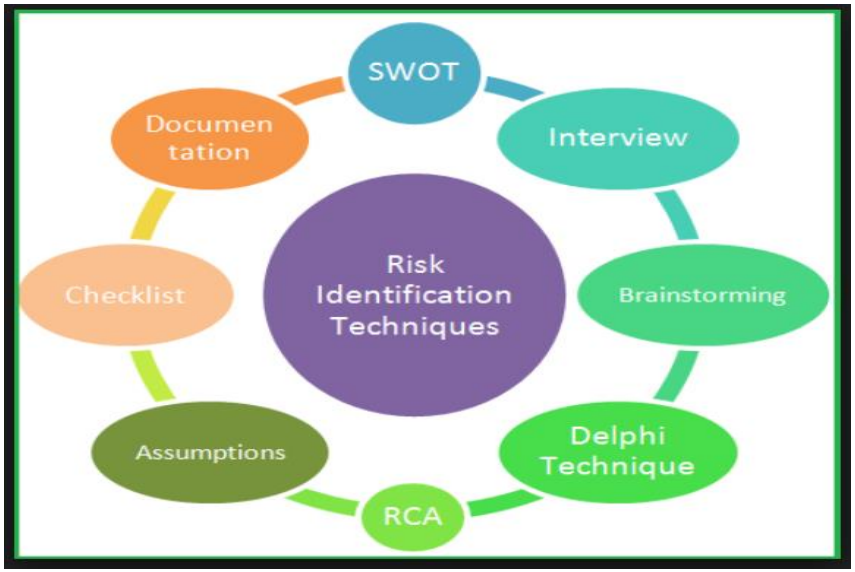
Risk Identification:

The Project Management Institute (PMI) is an organization focused on educating and certifying project managers. A part of that is managing risk effectively. The ability to identify and understand risk on a project increases the likelihood for a successful project. Trillium's approach to risk is represented by the graphic on the left below. This perspective was created based on our extensive project delivery experience coupled with a deep understanding of the value of the PMI risk management model.

Ways to identify risks in a project:

- **Information Gathering:** Brainstorming, Interviewing, Documentation reviews, Delphi Technique and SWOT Analysis.
- **Other Identification Techniques**: Check list, Assumption Analysis and Diagramming Techniques.

The risk can also be identified by the sources of category which can be used for exploring potential risk which are included in the matrix.



8.2. Risk Management Matrix

The risk management matrix has the following items:

- **Risk associated with activities:** The risk associated with all the activities involved in the project are identified by brainstorming.
- **Probability:** The probability of the occurrence of the risk is identified.
- **Impact:** The impact of the risk to the project is identified. It is usually measured on a scale.
- **Weighted Average:** The weighted average is used for evaluating the probability of a risk occurring.
- **Mitigation:** Steps to eliminate or reduce the risk.
- **Color Code:** The color code is used to determine the severity of the risk. Red is extreme risk and green is minimum risk.

Also, the persons responsible to look after if that risk occurs are identified. Identifying the people responsible in advance will reduce the impact of a risk. The reserve amount is also calculated in the risk matrix.

The table shows that the risks identified in this project would all result in high, medium and low impacts to the project. While some risks, like weather conditions and medical emergencies, can have high impact on the project, they have an extremely low chance of occurring and can be proactively managed to reduce the risk of occurrence. The high likelihood risks, such as contract or construction delays, only have a moderate impact on the project budget and schedule and are considered typical in any construction process. Time for these delays can be built into the schedule as long as the project team is not conducting the project on the verge of the rainy season.

Risk Management								
Project Title		**Risk Levels**						
The Bright World		**Red : High Risk , Yellow : Moderate Risk, Green : Low Risk**						
Risk Plan								
The Risk Management plan identifies risks and how they will be addressed.								
Activity	**Risk**	**Probability**	**Criticality**	**WA(P*C)**	**Team(s)**	**Mitigation Plan**	**Priority**	**Reserve**
Technical Issues	Website downtime	10	10	100	IT Services	Take necessary scale up measures to avoid system downtimes	Yellow	$1,500
	Network issues	10	10	100	IT Services	Regular checks on network connectivities	Yellow	$2,000
	Power Breakdown	5	5	25	IT Services	Manage on Backup power Generators	Green	$500
	System Crash	4	4	16	IT Services	Regular System administration and performance	Red	$500
Cost	More and New Requirements	5	5	25	Core Management	Implement the necessary requirements if possible	Red	$500
	Market Inflation	8	8	64	Core Management	Need to leverage service pricing based on market demand	Yellow	$1,500
	Poor quality product	4	4	16	Core Management	Work on quality improvement measures	Yellow	$500

Schedule	Unavailability of professors	7	7	49	Senior Delivery Management	Training coordinators can manage the class	Green	$1,500
	Less variety of courses	6	6	36	Senior Delivery Management	Research and development can be done to impove the deliverables	Green	$1,000
Contractual	Limited program availability	6	6	36	Implementation Management	Make the contractors sign legal agreement	Yellow	$1,000
	Delay in supplies from vendors	4	4	16	Implementation Management	Follow up with the vedors regularly	Yellow	$500
Weather	Natural Calamities	2	2	4	Business	Regulate the necessary measures	Red	$500
Political	Change in the project sponsorship	3	3	9	Core Management	Have a contingency plans to deal with the situation	Yellow	$500
	Changes in the federal government administration	2	2	4	Core Management	Follow u with the new official to keep the funds flowing	Yellow	$500

Environmental	Prisoners Transfers	1	1	1	Implementation Management	Maintain the prisoner tenure before enrolling him in the course duration	Yellow	$500
People	Prisoners Unavailability	3	3	6	On-site Management	Reschedule the classes	Green	$500
	Project teams members turnover	9	9	81	On-site Management	Hire new staff	Green	$800
	Conflicts with onsite-staff	2	2	4	On-site Management	Call in the administrative help	Green	$500
	Unpredictable nature of prison life	3	3	6	On-site Management	Call in the administrative help	Green	$300
Infrastructural	Computers Damage	7	7	49	On-site Management	Maintain necessary computer locks	Red	$1,200
	Classroom Infrastructure Damage	6	6	36	On-site Management	Have fixed benches and chairs to avoid damage	Red	$1,000

8.3. Risk Mitigation:

In the case of learning communities, the most effective educational programming contains intensive small-group interaction and offers a learning community as an alternative to the often anti-social communities within prisons

The cost to the prison estate is substantial and effective ways of mitigating risk through reducing prisoner misconduct is an imperative. Researchers suggest that at least one effective way to counter this anti-social acting out could be to fill prisoners' days with constructive activity, including education.

If prisoner engagement with education can be shown to reduce the security risk of prisons, an alternative measure of the success of these programs could be to measure changes in prisoner misconduct, both prisoner-to-prisoner and prisoner-to-prison officer.

The risk can be mitigated in the following ways:

- **Risk Avoidance:** Develop an alternate strategy that has a better chance of success.
- **Risk Sharing:** It involves partnering with another organization.
- **Risk Reduction:** It is an investment made to reduce the risk. Some companies have a fixed currency rate to overcome the risks associated with fluctuations in rate.
- **Risk Transfer:** The risk is transferred to other parties. Purchasing insurance is a risk transfer method.

9. Time Management

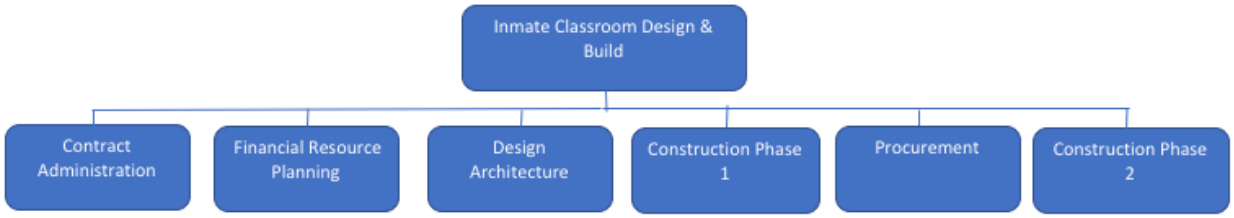
The Bright World project has critical milestones to be achieved within a duration of 6 months. With a realistic and reasonable time management plan, all tasks associated with each of the milestones can be accomplished within the specified timeframe. Below is a plan with time estimates for executing the individual tasks to achieve its corresponding milestone.

9.1. Milestone Tasks

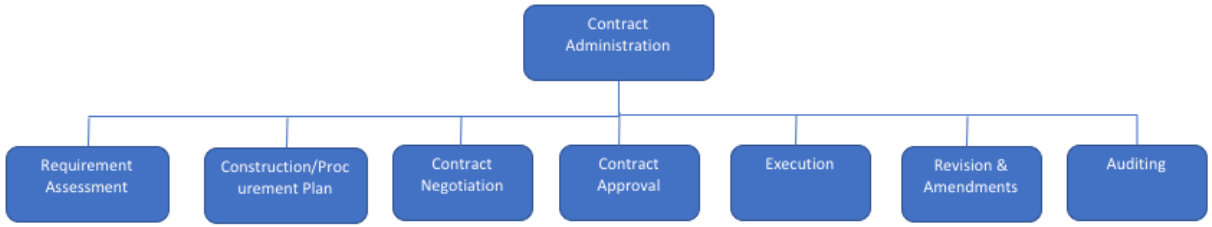
Based on the priority of the task execution, the following milestones have been devised in an orderly fashion. It has been further expanded in the WBS chart to show the subtasks and its relationship with the milestone. The Gantt chart provides the estimated start date and finish date of each task, number of days for the subtasks and overall main task, dependencies to perform a certain task, resources tagged to each task. The major milestones and its description are listed below.

- **Project charter/Contract Approval** This is the first and critical milestone where the contract and procurement plan for construction and set up of the classroom will be analyzed, finalized and approved by the UCD and all vendors for the build process.
- **Finalize Design** In this milestone, the design/structure for curriculum for the inmates' education, classroom types and facilities, Software will go through three phases namely preliminary, revised and final. Once the final design documents are ready, they will be approved.
- **Budget Approval and Receive Grants** This is the milestone to assess the financial requirements, frame an overall budget for the process involved until the project handover, get approval and receive grants from the state Government.
- **Classroom Construction Completed** In this milestone, first phase of the construction will be completed where two classrooms would be ready for the fixtures and hardware setup
- **Resources Procured** All resources required for safety, lighting, thermal, hardware, software, furniture will be procured
- **Classrooms open for Inmates** This milestone marks the end of the construction phase. The classrooms will be ready with kiosks set up for education.

- **Handover classrooms** The final milestone will be achieved by after inspection and verification. The classrooms will be handed over to begin the official teaching for inmates.

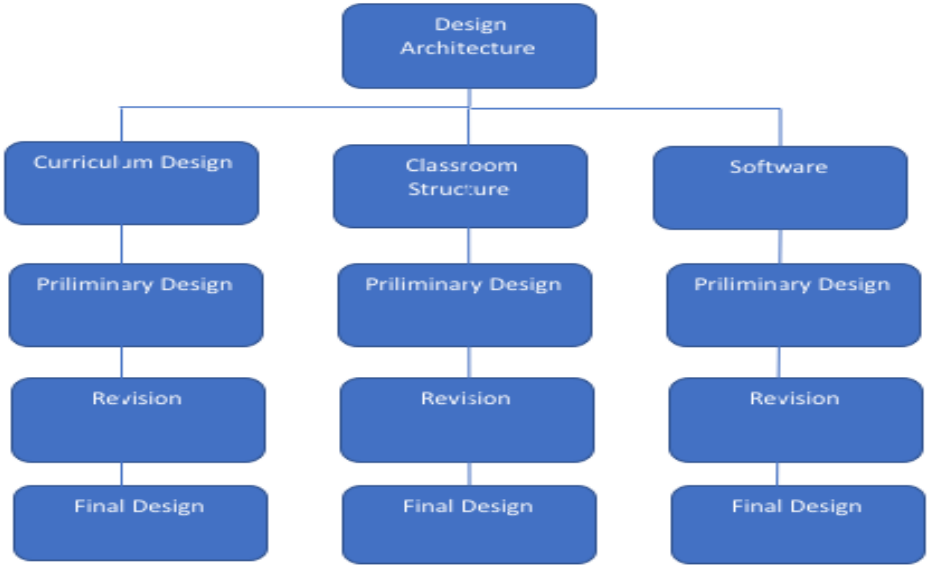


WBS Classroom Design & Build

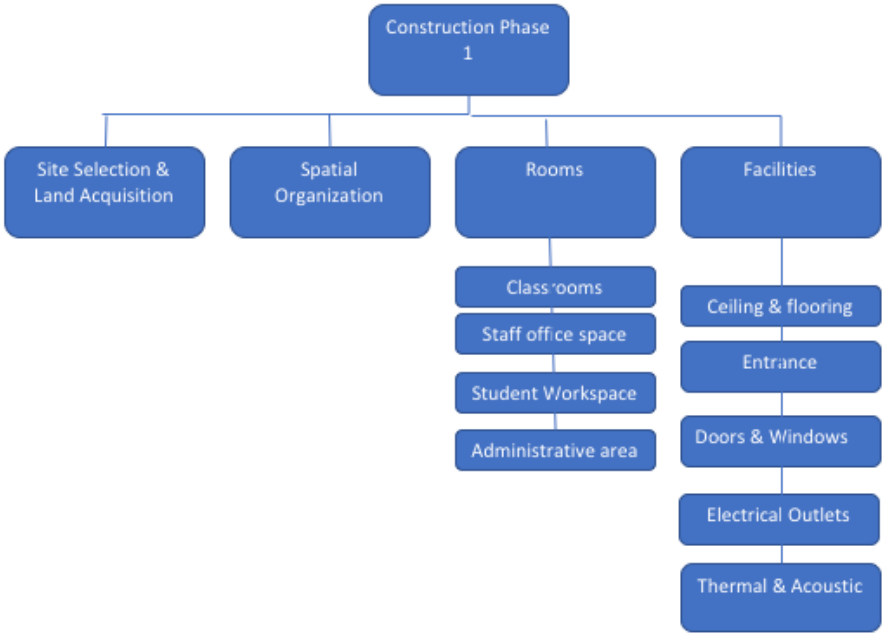


WBS Contract Administration

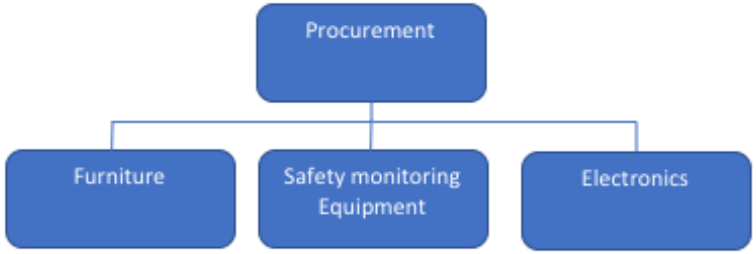
WBS Financial Resource Planning



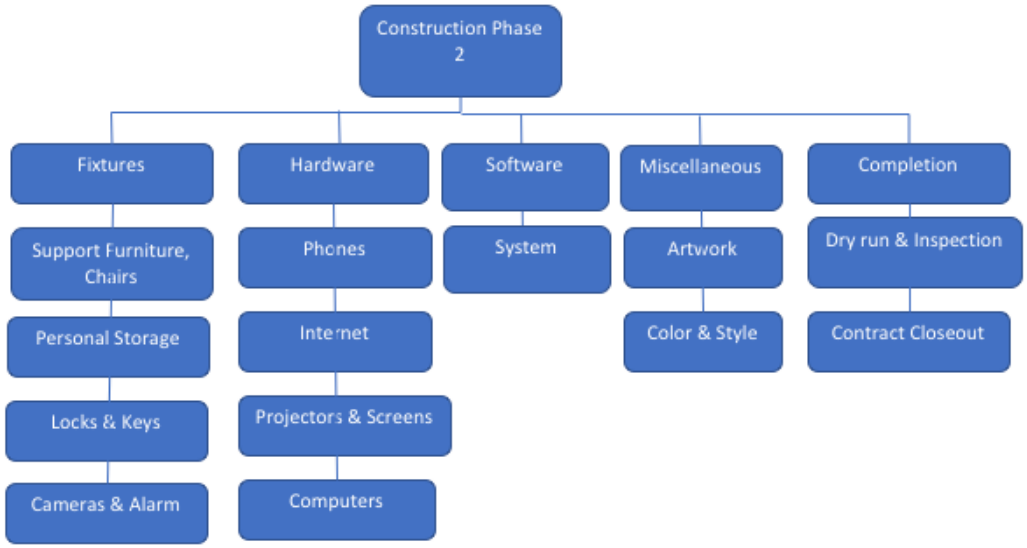
WBS Design Architecture



WBS Construction Phase 1



WBS Procurement



WBS Construction Phase 2

9.2. Estimated Duration

The duration of this project has been accurately estimated with the help of work breakdown structures, drill down, PERT, network diagram and PMO's expertise. Individual task duration has been estimated by taking the following into account- set of relevant assumptions and constraints, risk areas, available resources to work, data dependencies under each phase. Few tasks would run in parallel without any dependencies. With these estimates, the project schedule has been created.

9.3. Project Schedule

With the draft estimate, a gantt chart showing the scheduled activities and assigned resources to tasks has been developed to deliver the project on time. The project manager would control the schedule by monitoring the timings of the project and track each piece of work. The status of the project will be carefully monitored to ensure that all activities are being executed on schedule and within scope.

Gantt chart

10. Cost Management

Cost management involves estimating, allocating, and controlling the costs and determine required budget for installing this learning system, and includes predicting future expenses in order to reduce financial risks. After project closure, planned costs and actual costs are compared for future cost and budget planning.

10.1. Plan cost management

As part of planning, we identified the processes to estimate costs, determine budget and control thresholds.

10.2. Estimate costs

For each project activity stated in the time management, there is a cost involved, in form of salaries of resources who execute the tasks, and the prices of tools/materials to build the output of the task, and this considers the items that need to be procured from external vendors. The total cost has been estimated as **$120,589.00**, explained in below tables.

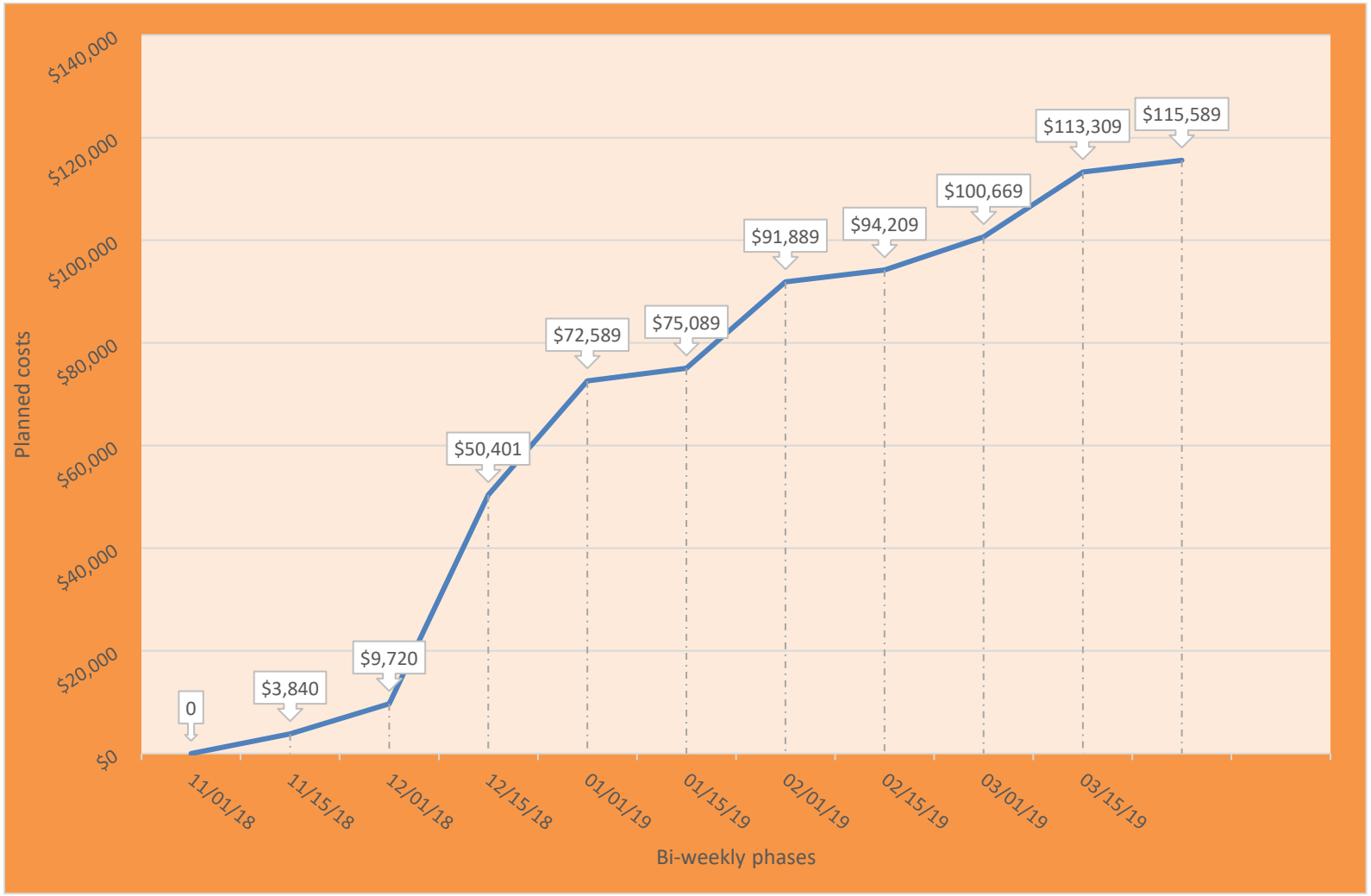
Cost estimation for materials/products

Item #	Item Description	Cost
	Developmental materials costs	
1	Development /QA machines & Servers (6)	$ 15,988.00
2	Computers and peripherals	$ 4,160.00
3	Furniture for Office space, chairs and desks	$ 13,121.00
4	UX - Custom icons for the application	$ 2,500.00
5	Construction raw materials for 4 rooms	$ 25,000.00
6	Projectors - 4	$ 1,180.00
7	Networks and communication	$ 4,500.00
	Operational materials Costs	
8	Server maintenance	$ 7,000.00
		$ 73,449.00

Cost estimation for Task-level resources

Task#	Name	Cost
1	Requirement Assessment	$ 1,920.00
2	Construction/Procurement Plan	$ 560.00
3	Contract Negotiation	$ 240.00
4	Contract Approval	$ 480.00
5	Execution	$ 640.00
6	Revision & Amendments	$ 640.00
7	Auditing	$ 320.00
8	Preliminary Curriculum Design	$ 320.00
9	Preliminary Classroom Structure Design	$ 400.00
10	Preliminary Software Design	$ 720.00
11	Revised Curriculum Design	$ 320.00
12	Revised Classroom Structure Design	$ 400.00
13	Revised Software Design	$ 360.00
14	Final Curriculum Design	$ 320.00
15	Final Classroom Structure Design	$ 400.00
16	Final Software Design	$ 720.00
17	Needs & assessment	$ 960.00
18	Grants	$ 720.00
19	Budgeting	$ 640.00
20	Site Selection & Land Acquisition	$ 1,200.00
21	Spatial Organization	$ 1,400.00
22	Rooms build	$ 4,800.00
23	Software build	$ 12,000.00
24	Facilities Installation	$ 4,800.00
25	Furniture Installation	$ 240.00
26	Safety monitoring Equipment	$ 240.00
27	Electronics Installation	$ 240.00
28	Fixtures Installation	$ 1,600.00
29	Hardware Installation	$ 1,120.00
30	Software Installation	$ 600.00
31	System Integration	$ 800.00
32	Miscellaneous Finishing	$ 2,240.00
33	Dry run & Inspection	$ 840.00
34	Contract Closeout	$ 1,440.00
		$ 44,640.00

Since, this is a non-profit project, there is no tolerance for inaccuracies in cost estimation. A good way to keep track of the project costs is by using an S-curve, to chart the planned and actual costs over the span of the project at biweekly intervals. We have charted the current planned costs against the time phases throughout the project period.



10.3. Determine budget

All cost estimations are combined, and overall project budget is determined. After activity cost estimates are done, there is a contingency reserve for each of the activity to accommodate any risks in future. For simplicity in budgeting, we have an allowable budget overhead of 0.2%. And hence, for total cost, the budget to be obtained is identified as (1+0.2) * 120,589.00 **= $ 144, 706.8**

10.4. Control costs

We aim to control the project expenses and complete the project on determined budget. Expenditures are tracked throughout the length of the project. After determining budget, cost performance is monitored to meet the agreed budget. If there are any concerns with monitoring the costs, the PM must be notified and make a decision that will best benefit the cause. The PM will use a cost control chart for Earned Value management using 3 parameters that are closely documented throughout - *Planned value* – the value of the work that is planned to be done by the given time; *Earned value* is the value of the work completed by the given date; and *Actual cost* is the accumulated expense by a given date.

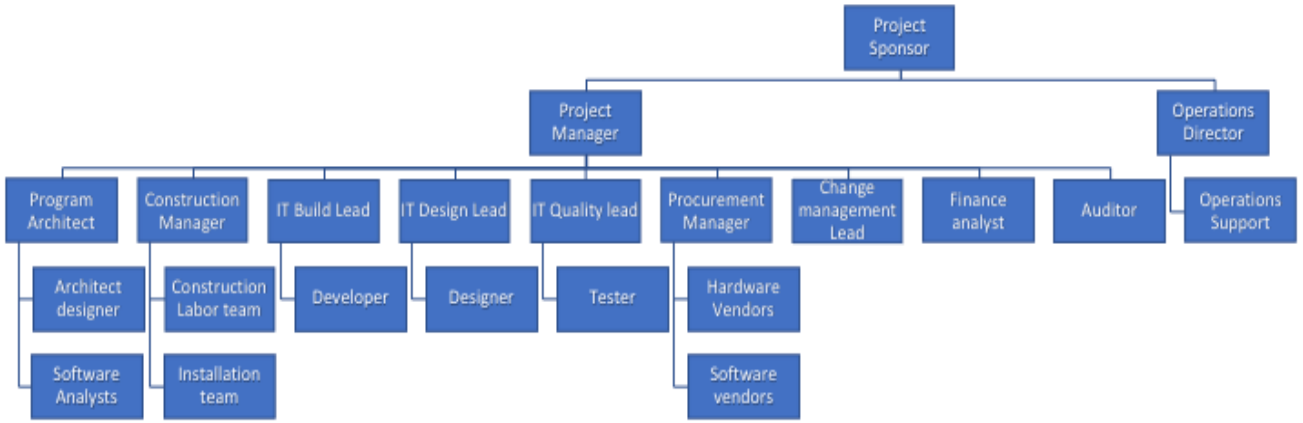
Cost Control Chart				
Month	11/18	12/118	01/19	….
PV				
PV (Cumulative)				
EV				
EV(Cumulative)				
Actual cost				
Cumulative Actual Cost				

11. Human Resources Management

11.1. Plan

Right people in right number at right place in right time is essential to execute the project as planned. This phase includes the estimation of how many qualified people are necessary to perform the assigned tasks, how many people will be available, and to ensure personnel supply and demand at any point throughout the project. Planning is important to effectively and efficiently complete the tasks that will help in achieving the overall project objectives. This project needs the following roles.

Organizational Structure

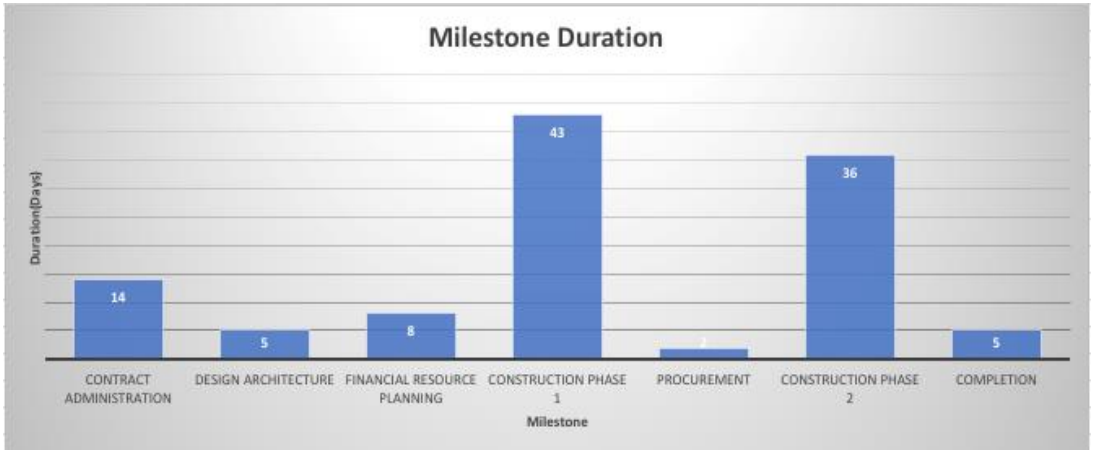


Team roles and responsibilities

ROLES	RESPONSIBILITY
Project Manager	Manages project initiation, planning, design, execution, monitoring, controlling and closure of a project
Program Architect	Bridges the boundaries between engineering and project management, leading the technical workers who contribute to the building of structures or products
Architect designer/Software Analysts	Create plans, drawings, and layouts for buildings and landscapes/design and develop software systems and applications.
Construction Manager	Oversee specialized contractors and other personnel
Labors/Installers	Physical labor on construction sites/Carpentry & Electrical fixtures
IT team	Build, Design ,integrate and test software and IT services
Procurement Manager	Directing purchasing agents and buyers throughout the process of evaluating suppliers, conducting interviews with vendors, negotiating supplier agreements and managing supplier and vendor contracts
Hardware/Software Vendors	Supply Hardware/Software Products
Change Management Lead	Meet objectives on time and on budget by increasing employee adoption and usage

Finance analyst	Improve financial status by analyzing results; monitoring variances; recommending actions to management
Auditor	Ensure obligations are met and value is realized
Operations Director/Support	Assists upper management in setting goals ; Oversees daily activity of the team; Prepares budgets, schedules, and other organizational reports as needed

There are tasks that require multiple people work together. Many roles are contract based, so the team members for certain roles might keep changing is limited for this project. An organizational chart is designed for the team. This involves developing the team organizational chart to identify hierarchy in relationships. People recruited for the above roles should satisfy their responsibilities. Next step in the planning phase is to estimate the number of days spent working for each milestone throughout the duration of the project. The number of hours for a given role could change in the future, still the total number of hours for a team would not to deviate from the estimate. Next is the creation of Responsibility Matrix showing the most important project responsibilities and associated roles. Each person/group's level of responsibility for each task is then given in the table. Then, a label(R/A/P/I) is given in the intersection of role and responsibility box.



Responsibility Matrix

ROLES	PROJECT LEADERSHIP			PROJECT TEAM MEMBERS									PROJECT SUB TEAMS					EXTERNAL RESOURCES		
PROJECT DELIVERABLES	PROJECT SPONSOR	STEERING COMMITTEE	ADVISORY COMMITTEE	PROJECT MANAGER	PROGRAM ARCHITECT	CONSTRUCTION MANAGER	IT LEAD	PROCUREMENT MANAGER	CHANGE MANAGEMENT LEAD	FINANCE ANALYST	AUDITOR	OPERATIONS DIRECTOR	ARCHITECT DESIGNER	SOFTWARE ANALYSTS	CONSTRUCTION LABOR TEAM	INSTALLATION TEAM	IT TEAM	VENDORS	PMO	PROFESSORS
Contract Administration																				
Requirement Assessment	P	I	I	R/A					P			P							I	
Construction/Procurement Plan	P			R		R/A		R/A	P			P							I	
Contract Negotiation	I			R/A								P							I	
Contract Approval	R	I	I	R/A								P							I	
Execution				R								P							I	
Revision & Amendments				R	P	P	P	P	P			P							I	
Auditing				P							R/A								I	
Design Architecture																				
Preliminary Curriculum Design				I																R/A
Preliminary Classroom Structure Design				I	R/A								A							
Preliminary Software Design				I			R/A							A			P			
Revised Curriculum Design				I																R/A
Revised Classroom Structure Design				I	R/A								A							
Revised Software Design				I			R/A							A			P			
Final Curriculum Design			P	P				I												R/A
Final Classroom Structure Design			P	P	R/A			I					A							
Final Software Design			P	P			R/A	I						A			P			
Financial Resource Planning																				
Needs & assessment				R/A					I	R/A		P								
Grants				R/A					I	R/A		P								
Budgeting				R/A					I	R/A		P							I	
Construction Phase 1																				
Site Selection & Land Acquisition				R		R/A						P								
Spatial Organization				R		R/A									A					
Rooms				I		R/A									A					
Facilities				I		R/A									A					
Procurement																				
Furniture				I				R/A										P		
Safety monitoring Equipment				I				R/A										P		
Electronics				I				R/A										P		
Construction Phase 2																				
Fixtures				I		R/A									A	A				
Hardware Installation				I												A	R/A			
Software Installation				I										A			R/A			
System Integration				I										A			R/A			
Miscellaneous Finishing				I		R/A									A	A				
Completion																				
Dry run & Inspection				P	P	P	P	P	P		R/A	P				P	P			
Contract Closeout	P/I	I	I	R/A					I			P							I	

R = Responsible, A = Accountable, P = Participant, I = Informed

11.2. Execute

Acquire Project Team

Once the project resource requirements have been captured , a staffing plan will be finalized and acquired by contracting from external organizations. The Project Manager along with the Procurement manager would be responsible to acquire the team.

Develop the Project Team

The Project Manager is responsible to give an orientation to all the team members which involves the following topics:

- background of the project
- current status of the project
- specific job duties and expectations
- introduction to the existing staff and
- overview of the project processes, including time reporting, attendance, and status meetings.

The Project Manager would review the related skill-sets of project staff against the new and continuing roles and responsibilities needed for each phase. Since this is a short-term project, highly skilled and experienced resources would be hired to avoid the effort of training.

11.3. Monitor & Control

Manage Project Team

The Project Manager along with the delegated team leaders are responsible for the day-to-day management of the team members. In the event of resource attrition during the project, the project manager re-assigns the resource's responsibilities to an existing or new team member. It is important that the transitioning is managed well. On project completion, the Project Manager prepares the project close-out document including lessons learned and conducts the administrative and contract close-out activities, documenting the process thoroughly. The budget, records of costs and payments and any other subsidiary financial and cost-management documents relevant to the staffing history must be updated. A summary of all staff/project team changes that were proposed and either approved or rejected must be prepared. The summary should also detail how the HR variance was managed and whether project contingency or other alternative funding sources were accessed to address HR shortfalls.

12. Lessons Learnt

Harsha Kadiyala

1. With ITPM course I was able to clearly correlate the work I am doing with the PMBOK concepts. I also learnt about earned value and difference type of contracts and when to use which type of contracts.
2. In the class, real-time examples were helpful however at times I felt not all the slides were not covered and skipped few important ones.
3. Introducing us to PM tools like MPP, projectlibre helped us very much in completing individual as well team project.
4. While doing the team project I learnt how important the communication is especially if we are working with team members from different locations.
5. I also noticed that upfront planning for any activity is very important and in the project my team members are very supportive and we have several calls before project kick-off to outline what we need to do and assigned the areas to individual team members which helped us a lot and eliminated the ambiguity.

Aparna Vaidyanathan

1. Daily e-mail communication and peer reviews within the team removed the stoppers and made us deliver the work efficiently. We had a good plan and a strong scope statement that enabled the team to quickly complete the individual track on knowledge areas. Each one's involvement and recommendations helped us collect information quickly.
2. Buying out software and a pre-developed application for course structure and lack of customization would be a constraint for the teaching staff in future if they wish to modify the curriculum.

Geethika Banda

1. Assigning clear responsibilities is the key for better and faster productivity as everyone knows what each person should be doing
2. While assigned roles and responsibilities help your team move forward efficiently, as soon as they start working against you, feel free to change things up to best suit your new needs
3. Keeping the lines of communication open throughout is a great way to keep a project on track, head off small issues before they become big problems, and make your team's job much more enjoyable along the way.
4. Communication is a two-way street, and it involves both talking and listening. So be respectful for an individual's inputs.
5. Stepping in when you have something to offer your team is ultimately what saves the world! So sharing the knowledge and skills like Harsha has explained about the watermelon reporting was a great learning.

Alekhya Rambatla

1. This class taught us various aspects of Project Management. We learned a lot about Agile and Waterfall methodologies. Through the years of work experience, we all carry, we have had Project Management experience in some instances and always thought Project Management was a complex deal. This course definitely changed our idea. You are an outstanding professor and an excellent storyteller!
2. Working as a team in order to present notebook definitely helped us interacting with people, and we were able to effectively identify potential problems and solve the same proactively.
3. All the planned documents were produced in time and this helped in timely implementation of all the project sections.

Jahnavi Srinivasan

1. Knowledge areas were divided equally among the team, so each of us became an expert in the assigned areas. After that we planned a knowledge sharing session and this helped each one of us know all the areas in depth.

2. The division of work increased the feeling of ownership and detail-oriented as well.

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