B9BA105 Project Management for Business Analytics

Critical Evaluation Report

**Name of the Student:**

**Student Id:**

**Course Name:**

Table of Contents

[Introduction 4](#_Toc173687109)

[1. Goals, Objectives, Deliverables and Milestones 4](#_Toc173687110)

[1.1 Project Goals and Objectives 4](#_Toc173687111)

[1.2 Project Deliverables 4](#_Toc173687112)

[1.3 Milestones for the Project 5](#_Toc173687113)

[2. Project Requirements 6](#_Toc173687114)

[3. Acceptance Criteria for the Project 7](#_Toc173687115)

[4. Project Assumptions and Project Constraints 9](#_Toc173687116)

[4.1 Project Assumptions 9](#_Toc173687117)

[4.2 Project Constraints 9](#_Toc173687118)

[5. Scope Plan including Change Management Process and Change Control 10](#_Toc173687119)

[5.1 Change Management Process 10](#_Toc173687120)

[5.2 Change Control Process for Project Scope 11](#_Toc173687121)

[6. Schedule Plan and Gantt Chart 12](#_Toc173687122)

[6.1 Schedule Planning for the Project 12](#_Toc173687123)

[6.2 Gantt Chart 13](#_Toc173687124)

[7. Project Budget and Simulated Earned Value Management Analysis 14](#_Toc173687125)

[7.1 Planned and Accumulative Planned for the Project Budget 14](#_Toc173687126)

[7.2 Actual and Accumulated Actual Costs 15](#_Toc173687127)

[8. Detailed Resourcing Plan aligned to Tasks and Activities 16](#_Toc173687128)

[9. Project Communication Plan including Stakeholder Analysis 19](#_Toc173687129)

[10. Comprehensive Risk Management Plan 20](#_Toc173687130)

[Conclusion 22](#_Toc173687131)

[References 24](#_Toc173687132)

Table of Figures

[Figure 1: Lewin’s Change Management Model 11](#_Toc173687152)

[Figure 2: Stakeholder Matrix 20](#_Toc173687153)

List of Tables

[Table 1: Project Milestones 6](#_Toc173687183)

[Table 2: Schedule Plan 13](#_Toc173687184)

[Table 3: Gantt Chart 14](#_Toc173687185)

[Table 4: Planned and Accumulative Planned Budget 15](#_Toc173687186)

[Table 5: Actual and Accumulated Actual Costs for the Project 15](#_Toc173687187)

[Table 6: Resource Requirement Plan for the Project 19](#_Toc173687188)

[Table 7: Risk Register 22](#_Toc173687189)

# RACI Matrix

The RACI matrix below outlines the roles and responsibilities for key project activities:

R = Responsible, A = Accountable, C = Consulted, I = Informed

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activity/Deliverable** | **Project Manager** | **Business Analyst** | **System Architect** | **Developers** | **QA Tester** | **Stakeholders** |
| **Requirements Document** | **A** | **R** | **C** | **I** | **I** | **C** |
| **System Design** | **A** | **C** | **R** | **C** | **I** | **I** |
| **Code Development** | **A** | **I** | **C** | **R** | **I** | **I** |
| **Testing** | **A** | **I** | **I** | **C** | **R** | **I** |
| **User Training** | **A** | **C** | **I** | **I** | **I** | **R** |
| **System Deployment** | **A** | **I** | **C** | **R** | **C** | **I** |
| **Change Requests** | **A** | **R** | **C** | **C** | **C** | **C** |

# Introduction

EduLearn for BrightFuture Academy Is a modern learning management which will contribute to improve an online education providing company’s educational process. At the same time, this platform also offers the possibility of following all the students’ activities efficiently and also the convenience of undertaking all the assessments correlated with the online courses (Fiorvanti, Braga and Barbosa, 2023). Therefore, Waterfall. Emphasize that the project will follow a sequential, linear process with distinct phases such as Requirements Gathering, System Design, Implementation, with the integration of the main instruments used for the course delivery, the real-time progress tracking and the assessment tools, a friendly interface and high efficiency will make EduLearn a perfect system for the students and teachers. The main goals of the project are to improve the facilitate Student success at BrightFuture Academy and to effectively provide quality education through and with the assistance of technology.

# 

# 1. Goals, Objectives, Deliverables and Milestones

## 

## 1.1 Project Goals and Objectives

Therefore, the main goal of the EduLearn project of the BrightFuture Academy is to design an efficient Learning Management System contributing to the enhancing of distance learning. It relates to the idea that the system is to decrease the complexity of the skills connected with the online courses, monitor the performance of students and assessment together with feedback (Astorga Jr *et al*., 2022). Hence, the integration of these functions into the system will increase the effectiveness of courses and student engagement in learning will be promoted, as well as the study of the outcomes achieved by students within the framework of the functions of the EduLearn LMS.

## 1.2 Project Deliverables

1. **Course Management:** Design a well-constructed and an effective module of Web Course Creation, Organization and Management (Kim, Chin and Choo, 2022). Among these are such choices as content uploading, time scheduling, and targeting to the seats of the BrightFuture Academy curriculum.
2. **Student Tracking:** As a result, to enhance the efficient accomplishment in the management of students, a proper method of monitoring the performance of the students, their attendance and submission of their course assignments as well as their performance in tests/examinations should be provided (Leidig and Oakes, 2021). The tracking system will provide the current data processing and reporting to monitor the outcomes of the learning process objectives as well as the necessity of the intervention concerning the learner.
3. **Assessment and Feedback:** Account functions for quiz, tests, and assignments and options for assessments to be automatically graded and students to receive feedback (Kim, Chin and Choo, 2022). This shall enhance the assessment practices and enhance the learning of students since they will be receiving feedback that shall enable them enhance their work.
4. **User Experience:** Maintenance of a design that is simple and basic for the useful featuring of the application for both educator and student (Leidig and Oakes, 2021). The elements into the focus of which the system will be targeted will include aspects like navigational functionality, ease of use, and device adaptability.
5. **Data Security and Compliance:** Ensure the LMS complies with the data protection law and protect users’ data from either loss or any unauthorized way (Kim, Chin and Choo, 2022).

## 1.3 Milestones for the Project

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Milestones** | **Month 1** | **Month 2** | **Month 3** | **Month 4** | **Month 5** | **Month 6** | **Month 7** | **Month 8** | **Month 9** |
| **Requirements Gathering and Analysis** |  |  |  |  |  |  |  |  |  |
| **System Design and Architecture** |  |  |  |  |  |  |  |  |  |
| **Development Phase** |  |  |  |  |  |  |  |  |  |
| **Testing and Quality Assurance** |  |  |  |  |  |  |  |  |  |
| **Deployment and Training** |  |  |  |  |  |  |  |  |  |
| **Post-Launch Support** |  |  |  |  |  |  |  |  |  |

##### Table 1: Project Milestones

(Source: As created by author)

# 2. Project Requirements

As the Bright Future Academy’s EduLearn LMS, the project involves a list of essential specifications that are crucial for the device’s success. The first step is then to establish the precise needs of each of the potential users of the system such as administrators, teachers and learners (Gobov and Huchenko, 2021). Acquaintance with their needs is crucial for the optimization of the offered system in terms of the more effective achievement of the target goals and the admiral goals of educating the population. Important technical specifications are the capacity to manage number of users and ability to assure the confidentiality of the received and transmitted information.

These LD systems must work hand in hand with the current technologies in BrightFuture Academy, SIS, and other ed-tech solutions. It should also be compatible to accommodate different types of content including videos, PDFs, and interactive quizzes and have the responsive design. The user management facilities play a vital role here involving role mapping where privileging for different users such as the administrator, instructor, and student has to be well defined (Hey *et al*., 2020). The system should help in the creation and the management of the courses where instructors can upload content, set tasks and track students’ performance. Also, the system must have the reporting mechanism that will enable the tracking of student’s performance, attendance, and participation.

There are also measures such as assessment and feedback mechanisms that are so vital in achieving the goals of an organization. The LMS should allow for inline formative as well as end of course summative assessment, preferably with the option of auto-scoring where appropriate. It ought to allow instructors to give their feedback promptly and in the right manner. Forum, chat and email integration is required to allow the students to support each other and to engage in communication amongst themselves (Umar and Lano, 2024). Before the full deployment, the project needs to be tested and go through the usability testing to determine the real problems that must be solved before the targeted audience encounters them firsthand. Preliminary training of all administrators or instructors using the system will also help in the easy implementation and usage of the system. Some of the everyday tasks that will require attention after the launch of the LMS will include the following:

# 3. Acceptance Criteria for the Project

Acceptance criteria for the EduLearn LMS project establish the conditions and level of quality that are mandatory for the project to be considered concluded successfully (Rapeli, 2023). By applying these criteria, it is hypothesized that need of BrightFuture Academy and its stakeholders will be satisfactorily and appropriately addressed by the system, if it is designed with those criteria in mind.

***User Interface and Experience***

* The LMS consequently has to offer a well-subscribed interface to the users.
* The system should be able to run on all most common used devices and browsers smoothly.
* Any navigation should be logical and the options should be clearly labeled and their functions explained.

***User Management***

* LMS should be able to support the concept of roles and thus always include different privileges for administrators, instructors as well as the learners.
* Registration or sign up, login, and user control panel should be easily understandable to users.
* The following features need to be implemented: There has to be a facility for administrators for bulk user import and export operations.

***Course Management***

* Admins can easily create, edit, or even delete courses and it should be easy for instructors to manage them.
* The system should enable the upload of a range of assets such as; Videos, PDFs and interactive quizzes.
* Courses need to be able to have customizable attribute where you can set prerequisites, if it can be completed, and by when.

***Tracking and Reporting***

* The LMS has to have enrolments for students with timelines on the classes attended, the assignments submitted, and grades received.
* The functionality of the reports should be such that they enable customization and export to the standard formats like CSV, PDF and so on.
* Interactive real-time analytics and dashboards need to be provided to the instructors and administrators.

***Assessment and Feedback***

* The system should allow for a multiple form assessment; these are the quizzes, assignments and exams.
* Automated grading features have to be integrated where relevant.
* Instructors have to be in a position to give feedback to the students’ submissions in detail.

***Communication Tools***

* The communication tools that should be incorporated in the LMS include; forums, chat, and email.
* Notification and alerts have to be made customizable and timely.

***Integration and Security***

* In this case, The LMS should be easily interoperable with other systems in the institution, for instance, SIS, Student Information System.
* Access to the data and data security and privacy must meet the requirements of the healthcare industry wherein data encryption is mandatory.
* It will be necessary to set up the options for regular backups and disaster recovery.

***Testing and Training***

* Here, unit, integration and user acceptance testing has to be performed.
* The training sessions and documentation should be recommended for administrators and instructors to make the switch quite easy.

***Maintenance and Support***

* There has to be a maintenance plan laid down, meeting the necessary expectation of updates, and bug fixing among other things.
* The support channels should include interaction options that allow users to describe problems and seek help.

# 4. Project Assumptions and Project Constraints

## 4.1 Project Assumptions

It is worth stating that several assumptions have been made when creating the EduLearn LMS for BrightFuture Academy. First of all, it is assumed that during gathering of the requirements and testing phases the feedback from the stakeholders including the administrators, instructors and students will be comprehensive and submitted in a timely manner as well (Farhangi, Rohracher and Magnusson, 2024). These inputs are very necessary since it helps the design of the LMS to address the users need appropriately. It is also assumed that in BrightFuture Academy there are all IT resources and predispositions needed to implement and deploy a new LMS.

These are enough servers, internet connection, and technical support staff in order to meet their needs in the processes. Another assumption is that the different tools and systems in use in education such as the SIS has standard APIs that can easily integrate the LMS. In addition, ad hoc it is supposed that project team could have all necessary tools and technologies for development, testing and deployment (Kane, 2020). This includes development platforms, testing tools, and program/project management tools. Also, the project supposes that there will be no appearances of inappreciable alterations in the regulation and/or conformity which might affect the system.

## 4.2 Project Constraints

There are several limitations within which the EduLearn LMS project has to be run strictly for achieving the planned goal. This is actually one major limitation, the time frame within which the project is to be accomplished. The LMS has to be created, improved, and implemented within a given time frame to match BrightFuture Academy’s school calendar (Mishra, 2020). In any of the stages, any form of delay may potentially affect the readiness of the system for students and instructors to use. Budgetary restrictions are also another maintaining factors contributing to high levels of mental health disorders.

The project must be delivered on schedule, considering all the expenses related to development, testing, integration, training of the end users and equipment, and regular maintenance. There is always a high risk of any unpredictable event that would demand hard currency and if this adversely affects the over projected financial muscle, any aspect of certain projects may be compromised (Mohamud and NYANG’AU PAUL, 2020). Some of the limitation technical limitations may include challenges that relate to compatibility of the proposed solutions with the current systems and technologies in BrightFuture Academy. The LMS has to smoothly work with the SIS and other educational tools and instruments without any interference.

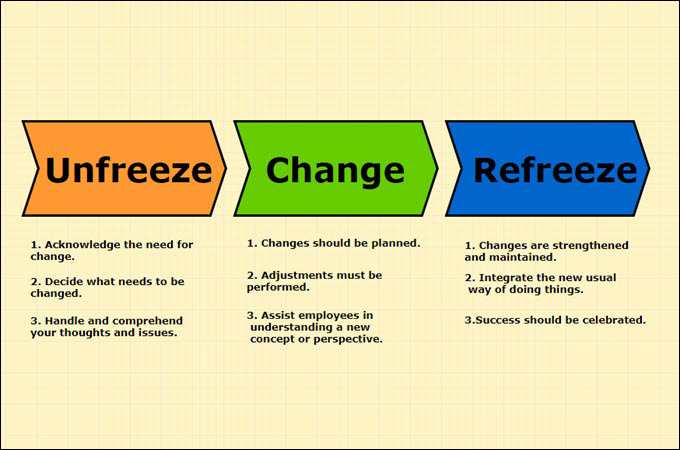
In addition, the system needs to meet the requirements of data protection and privacy which can put more limitations on the applicability and design of the specified system. Availability of resources is also considered a restrictive factor as we proceed to the next element of resource investment. When it comes to the implementation of a project it is highly dependent on the number of capable developers, testers, and project managers available (Masoetsa *et al*., 2022). Any scarcity or change in the use of these resources affects the period and quality of the project. Also, the feedback and testing phases require the availability of the users, which in most cases is a challenge to coordinate well. As such, by understanding these assumptions and constraints, the management of the EduLearn LMS project will be possible to deal with to provide a proper and efficient learning management system for BFA.

# 5. Scope Plan including Change Management Process and Change Control

## 5.1 Change Management Process

***Lewin’s Change Management Process***

1. **Unfreeze:** Carry out the first action, which is the creation of awareness about the changes that are expected with the implementation of the new LMS. The sub-process also involves defining the LMS need and talking about it, explaining how it will be of value, and any issues which crop up (Errida and Lotfi, 2021). End-users, which include administrators, instructors and students, have to be reached for purpose of meeting, questionnaires, and feedback sessions in order to establish requirements and expectations. In this phase, the latter tries to establish the need for the transition and prepare the stakeholders for change.
2. **Change:** This phase is characterized by proper development of the LMS and its integration into practical use. The project team’s task is to design, develop and implement the LMS based on the identified specifications (Kanstantsin, 2022). Thus, it is necessary to maintain the communication with stakeholders on a regular basis to address any newly identified changes to the scope and to provide everyone with the objectives of the project. Like with all functional changes, training sessions and pilot testing are used to help users adapt to new environment and gather information about the adjustments to be made.
3. **Refreeze:** It is after this that efforts are directed towards sustaining it in order to improve the probabilities of actual use of the LMS. This includes new processes and workflows documentation, maintenance and resolution of the new implementation problems. Continued updates and proper maintenance help in boosting the efficiency of the system and relevance (Errida and Lotfi, 2021). Performance indicators are measured to ensure the achievement of the goals outlined at the start of the change process as well as the expectations of the stakeholders in order to sustain the implementation of the LMS in the academy.



#### Figure 1: Lewin’s Change Management Model

(Source: Kanstantsin, 2022)

## 5.2 Change Control Process for Project Scope

The Change Control Process for the EduLearn LMS project aims at documenting, reviewing, and approving any alteration to the project scope in order to decrease the impact on the objectives, budget and schedule of the project (Lappalainen, 2022).

1. **Change Request Submission:** It starts with stakeholders or project team members realizing the need to change the project scope; therefore, they present a request for change (Aborhor, 2021). This request must provide the specifics of the change, why it needs to be made, the advantages of change, as well as the effects on resources, timetable, and cost.
2. **Initial Review:** The first activity that the project manager performs is to make an evaluation of the change request to determine its veracity and its need to be implemented or not (Komal *et al*., 2020). If the request is considered reasonable, it goes to the next level; if not, it is recorded and is no longer a pending case.
3. **Impact Analysis:** The analysis is carried out to assess the effects of the change if implemented on the scope, time, cost, resources, and the quality of the project (Aborhor, 2021). Such rulings consist of meetings with policymakers and individuals with specialized knowledge concerning the issues being addressed.
4. **Decision-Making:** The Change Control Board carries out the governance by reviewing the impact analysis and makes a decision of approval, amendment or outright rejection of the change request (Komal *et al*., 2020). The decision is made according to the objectives of the project being to be completed, the feasibility of completion and the general impacts of the decision made.
5. **Implementation Planning:** In the case of approved change, an implementation plan is prepared for change which allows the identification of steps, resources and time frame needed to support change (Aborhor, 2021). Consequently, the project plan, schedule and the budget of the project are adjusted.
6. **Communication:** Communicated to all the stakeholders are the details regarding the approved change, prospects containing the new project schedule (Komal *et al*., 2020). It helps let all people know about changed processes and their responsibilities to support the change.
7. **Monitoring and Reporting:** The change is constantly observed as the process advances to guarantee it responds to the anticipated results (Aizaz *et al*., 2021). Achievements are recorded and any variation noticed is forwarded to the CCB as feedback.

# 6. Schedule Plan and Gantt Chart

## 6.1 Schedule Planning for the Project

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Phase | Task | Duration | Start Date | End Date |
| Planning | Define project scope and requirements | 2 weeks | 01-Aug-2024 | 14-Aug-2024 |
| Design | Create wireframes and UI/UX designs | 3 weeks | 15-Aug-2024 | 04-Sep-2024 |
| Development | Develop core LMS features | 6 weeks | 05-Sep-2024 | 16-Oct-2024 |
| Testing | Unit testing and bug fixes | 3 weeks | 17-Oct-2024 | 06-Nov-2024 |
| Deployment | Launch beta version and gather feedback | 2 weeks | 07-Nov-2024 | 20-Nov-2024 |
| Final Adjustments | Implement final changes and improvements | 2 weeks | 21-Nov-2024 | 04-Dec-2024 |
| Go Live | Full release and monitoring | Ongoing | 05-Dec-2024 | TBD |

##### Table 2: Schedule Plan

(Source: As created by author)

## 6.2 Gantt Chart

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Periodic Activities** | **August 2024** | **September 2024** | **October 2024** | **November 2024** | **December 2024** | **TBD** |
| **Definition of Project Scope and Requirements** |  |  |  |  |  |  |
| **Creation of Wireframe and UI/UX Designs** |  |  |  |  |  |  |
| **Development of Core LMS Features** |  |  |  |  |  |  |
| **Unit Testing and Bug Fixes**  **Launching Beta Version and Gather Feedback** |  |  |  |  |  |  |
| **Launching Beta Version and Gathering Feedback** |  |  |  |  |  |  |
| **Implementation of Final Changes and Improvements** |  |  |  |  |  |  |
| **Full Release and Monitoring** |  |  |  |  |  |  |

##### Table 3: Gantt Chart

(Source: As created by author)

# 7. Project Budget and Simulated Earned Value Management Analysis

## 7.1 Planned and Accumulative Planned for the Project Budget

|  |  |  |  |
| --- | --- | --- | --- |
| Phase | Task | Planned Budget (USD) | Accumulative Planned Budget (USD) |
| Planning | Define project scope and requirements | 5,000 | 5,000 |
| Design | Create wireframes and UI/UX designs | 10,000 | 15,000 |
| Development | Develop core LMS features | 30,000 | 45,000 |
| Testing | Unit testing and bug fixes | 8,000 | 53,000 |
| Deployment | Launch beta version and gather feedback | 6,000 | 59,000 |
| Final Adjustments | Implement final changes and improvements | 5,000 | 64,000 |
| Go Live | Full release and monitoring | 10,000 | 74,000 |

##### Table 4: Planned and Accumulative Planned Budget

(Source: As created by author)

## 7.2 Actual and Accumulated Actual Costs

|  |  |  |  |
| --- | --- | --- | --- |
| Phase | Task | Actual Costs (USD) | Accumulated Actual Costs (USD) |
| Planning | Define project scope and requirements | 4,800 | 4,800 |
| Design | Create wireframes and UI/UX designs | 9,500 | 14,300 |
| Development | Develop core LMS features | 28,000 | 42,300 |
| Testing | Unit testing and bug fixes | 8,200 | 50,500 |
| Deployment | Launch beta version and gather feedback | 6,500 | 57,000 |
| Final Adjustments | Implement final changes and improvements | 5,200 | 62,200 |
| Go Live | Full release and monitoring | 10,000 | 72,200 |

##### Table 5: Actual and Accumulated Actual Costs for the Project

(Source: As created by author)

This table shows the breakdown for the actual cost of every phase in the development of the EduLearn LMS and the total actual cost. The sum of disposed actual costs represents the consolidated expenditure for each phase up to and including it.

1. **Planning:** The actual cost was slightly under the planned budget, totaling $4,800, which was within the expected range.
2. **Design:** Actual costs were slightly over the planned budget but still manageable, bringing the accumulated cost to $14,300.
3. **Development:** The costs were well within the budgeted amount, with an accumulated total of $42,300.
4. **Testing:** The actual costs were marginally higher than planned, bringing the total accumulated cost to $50,500.
5. **Deployments:** The costs matched the planned budget, totaling $57,000 in accumulated costs.
6. **Final Adjustments:** Actual expenses were slightly above the planned budget, making the accumulated total $62,200.
7. **Go Live:** The full release and monitoring costs were as anticipated, leading to an overall accumulated cost of $72,200.

# 8. Detailed Resourcing Plan aligned to Tasks and Activities

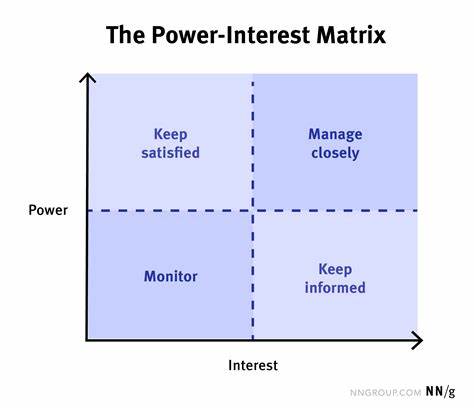
|  |  |  |  |
| --- | --- | --- | --- |
| **Tasks** | **Required Resources** | **Descriptions** | **Date** |
| **Planning** | **Project Manager** | Oversee the planning phase, ensure scope definition and requirement gathering. | 1st August, 2024 – 14th August, 2024 |
| **Business Analyst** | Conduct stakeholder interviews, document project requirements. |
| **Administrative Support** | Assist with scheduling and documentation. |
| **Design** | **UI/UX Designer** | Create wireframes and design prototypes based on requirements. | 15th August 2024 – 4th September 2024 |
| **Project Manager** | Review design progress and ensure alignment with requirements. |
| **Design Review Team** | Provide feedback and approval on design outputs. |
| **Development** | **Lead Developer** | Oversee development of core LMS features and ensure adherence to technical specifications. | 5th September 2024 – 16th October 2024 |
| **Software Developers (2)** | Code the LMS features, integrate functionalities. |
| **Database Administrator** | Set up and manage the database for the LMS. |
| **Testing** | **Quality Assurance Tester** | Conduct unit testing, report bugs, and validate fixes. | 17th October 2024 – 6th November 2024 |
| **Lead Developer** | Fix bugs and ensure the system meets quality standards. |
| **Project Manager** | Monitor testing progress and manage issue resolution. |
| **Deployment** | **Deployment Specialist** | Manage the launch of the beta version, coordinate feedback collection. | 7th November 2024 – 20th November 2024 |
| **Support Staff** | Assist with user feedback collection and initial troubleshooting. |
| **Final Adjustment** | **Development Team** | Implement final changes based on beta feedback. | 21st November 2024 – 4th December 2024 |
| **QA Tester** | Conduct final testing to ensure all adjustments are effective. |
| **Go Live** | **Project Manager** | Oversee full release, monitor system performance, and manage ongoing support. | 5th December 2024 Onwards |
| **Technical Support Team** | Provide user support and address post-launch issues. |

##### Table 6: Resource Requirement Plan for the Project

(Source: As created by author)

# 9. Project Communication Plan including Stakeholder Analysis

1. **Keep Satisfied:** Senior Executives, Major Funding Bodies are the stakeholders in this group. Communication strategy is occasional traditional reporting of the status and the funds of the projects to the management and the major progress through briefs on a monthly, weekly or daily basis (Bahadorestani, Naderpajouh and Sadiq, 2020). Also, their need and concern are guaranteed to be attended to in order to maintain consumer satisfaction and support.
2. **Manage Closely:** In this group of stakeholders Residents, Project Sponsors, Key Internal Team Members (IT, HR etc) are included. It is therefore a communication approach that is used more often and is usually comprehensive and contains updates of the status, risks and issues, as well as action plans on how to tackle them (Shakeri and Khalilzadeh, 2020). Guaranteeing that the project includes periodical planned meetings, which are based on the construction of the project and which also involve heated issues that may arise.
3. **Monitoring:** The stakeholders in this group include the End Users being students and educators and Technical support staff. Concerning communication approach, there are meetings and questionnaires, which helps to keep the user satisfaction level and identify the weakness (Bahadorestani, Naderpajouh & Sadiq, 2020). Update the users on new changes within the system and address any concern that the user may have concerning locations they might have or any technical impediment they come across.
4. **Keep Informed:** In this group of stakeholders for a public organization, there are General Staff and External Partners. Communication method is an ordinary bulletin as means of weekly newsletter, with email updates on the current project, new inclusion in the project, other changes as well (Shakeri and Khalilzadeh, 2020). Ensuring that they are aware of major developments and in what manner these may affect either their position or business relationship with the system.



#### Figure 2: Stakeholder Matrix

(Source: )

# 10. Comprehensive Risk Management Plan

***Risk Register***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Risk ID** | **Risk Description** | **Risk Category** | **Likelihood (1-5)** | **Impact (1-5)** | **Risk Score** | **Qualitative Assessment** | **Quantitative Assessment** | **Risk Tolerance** | **Risk Threshold** | **Mitigation Plan** |
| R001 | Delay in project schedule due to resource unavailability | Schedule | 4 | 3 | 12 | High probability of delay affecting milestones | 30-day delay resulting in $50,000 extra cost | Low (must be avoided) | 15-day delay acceptable | Identify backup resources, cross-train team members |
| R002 | Budget overrun due to unforeseen expenses | Financial | 3 | 4 | 12 | Potential for significant budget impact | 10% budget increase resulting in $100,000 impact | Medium (can be managed) | 5% budget overrun | Regular budget reviews, contingency funds allocation |
| R003 | Technical failure causing downtime | Technical | 2 | 5 | 10 | Critical system failure affecting operations | 1-day downtime resulting in $20,000 loss | High (tolerable short-term) | 2-hour downtime | Implement redundant systems, regular maintenance |
| R004 | Regulatory changes impacting project compliance | Compliance | 3 | 3 | 9 | Medium likelihood with significant compliance cost | $30,000 cost for compliance adaptation | Medium (requires adjustments) | Minor adjustments | Monitor regulatory changes, engage compliance experts |
| R005 | Key stakeholder withdrawal | Strategic | 2 | 4 | 8 | Low likelihood but high impact on project scope | Loss of $200,000 funding | Low (critical impact) | Stakeholder re-engagement | Engage stakeholders regularly, diversify funding sources |
| R006 | Negative public perception impacting project approval | Reputational | 3 | 2 | 6 | Medium likelihood with manageable impact | Reduced community support costing $10,000 | Medium (manage PR) | Minimal negative feedback | Public relations campaign, stakeholder engagement |

##### Table 7: Risk Register

(Source: As created by author)

# Conclusion

Developing the solution for BrightFuture Academy’s EduLearn LMS is a major project that can be divided into such phrases as planning, design, implementation, testing, deployment, and fine-tuning. Managing scope is conducted according to an outlined approach using Lewin’s Change Management Model to avoid problems with changes. The concept of change control and resourcing strategy with appreciation to the project activities are established with lots of concerns towards the contextualization of the change control process toward the aspects of the corresponding tasks and activities in a way that it can be effectively applied to the corresponding tasks and activities and within the prescribed budget and time frame. Thus, following these structured methodologies, the project intends to complete the development of a highly functional, purposeful, and effective LMS to contribute to the achievement of educational goals and the promotion of active learning at the BrightFuture Academy.

# References

Aborhor, B.K., 2021. *The effects of scope management on project success in Construction project management* (Doctoral dissertation).

Aizaz, F., Khan, S.U.R., Khan, J.A. and Akhunzada, A., 2021. An empirical investigation of factors causing scope creep in agile global software development context: a conceptual model for project managers. *IEEE Access*, *9*, pp.109166-109195.

Astorga Jr, E.R., Vertucio, H.D., Conti, B.L.J. and Polison, E.M., 2022. Acceptability and impact of vision, mission, goals, and objectives: Basis in formulating VMGO Impact Model (VMGOIM). *International Journal of Research*, *11*(15), pp.57-65.

Bahadorestani, A., Naderpajouh, N. and Sadiq, R., 2020. Planning for sustainable stakeholder engagement based on the assessment of conflicting interests in projects. *Journal of Cleaner Production*, *242*, p.118402.

Errida, A. and Lotfi, B., 2021. The determinants of organizational change management success: Literature review and case study. *International Journal of Engineering Business Management*, *13*, p.18479790211016273.

Farhangi, M., Rohracher, H. and Magnusson, D., 2024. More than wires and screens: Assumptions about agency of devices in smart energy projects. *Energy Research & Social Science*, *114*, p.103592.

Fioravanti, M.L., Braga, R.V. and Barbosa, E.F., 2023. Software project management education during the covid-19 pandemic: an experience report of emergency remote education. In *EDULEARN23 Proceedings* (pp. 3811-3815). IATED.

Gobov, D. and Huchenko, I., 2021, February. Software Requirements Elicitation Techniques Selection Method for the Project Scope Management. In *ITPM* (pp. 1-10).

Hey, T., Keim, J., Koziolek, A. and Tichy, W.F., 2020, August. Norbert: Transfer learning for requirements classification. In *2020 IEEE 28th international requirements engineering conference (RE)* (pp. 169-179). IEEE.

Kane, V.E., 2020. Using lean six sigma implied assumptions. *The TQM Journal*, *32*(6), pp.1561-1575.

Kanstantsin, Z., 2022. Secure change management process: on the effectiveness of DevSecOps. *Computer Science and Information Technology*, *10*(4), pp.37-51.

Kim, Y., Chin, S. and Choo, S., 2022. BIM data requirements for 2D deliverables in construction documentation. *Automation in Construction*, *140*, p.104340.

Komal, B., Janjua, U.I., Anwar, F., Madni, T.M., Cheema, M.F., Malik, M.N. and Shahid, A.R., 2020. The impact of scope creep on project success: An empirical investigation. *IEEE Access*, *8*, pp.125755-125775.

Lappalainen, J., 2022. Improving Customer Change and Project Scope Management in Order-To-Delivery Process.

Leidig, P. and Oakes, W., 2021. Model for project-based community engagement. *International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship*, *16*(2), pp.1-13.

Masoetsa, T.G., Ogunbayo, B.F., Aigbavboa, C.O. and Awuzie, B.O., 2022. Assessing construction constraint factors on project performance in the construction industry. *Buildings*, *12*(8), p.1183.

Mishra, A.K., 2020. Implication of theory of constraints in project management. *International Journal of Advanced Trends in Engineering and Technology*, *5*(1), pp.1-13.

Mohamud, G.I. and NYANG’AU PAUL, S.A.M.S.O.N., 2020. Effect of Project Management Constraints on Implementation of Public Housing Projects in Isiolo County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *4*(1).

Rapeli, H., 2023. Comparison of societal risk acceptance criteria in different areas of society.

Shakeri, H. and Khalilzadeh, M., 2020. Analysis of factors affecting project communications with a hybrid DEMATEL-ISM approach (A case study in Iran). *Heliyon*, *6*(8).

Umar, M.A. and Lano, K., 2024. Advances in automated support for requirements engineering: a systematic literature review. *Requirements Engineering*, pp.1-31.