



University of Wales Trinity Saint David – London
Programme: BA Business Management Year 2
Module : Project Management

Module code : LCBB5005

Module Tutor: Dr. Molly Jack

Assignment Title: Assignment 2

Student Name: Miroslav Gruychev

Student ID: 2021938

Introduction	3
Critical success or Failure Factors	3
Crossrail Project Requirements	3
Management Plan for Crossrail Project	4
Integral Milestones	5
Open Communication In Project Management	6
Project Management Application Software	6
Testing of Deliverables	7
Learning Objectives:	7
Recommendations	9
Career opportunity in Project Management	9
Conclusion	11
Reference	12

Introduction

The Crossrail Project is critically evaluated and core elements such as the budget, time, quality stakeholders and risk factors are described in the prior study. In his study, the success and failure of the project are evaluated. From the project management of the Crossrail project learning outcomes of the success and failure are discussed. The career opportunities in the project management sector and requirements specified. Lastly, some recommendations to overcome the limitations of the Crossrail project are illustrated (Amami and Beghini, 2000).

Critical success or Failure Factors

Project success is the phase of effectiveness when the project is deliverable, and the stakeholder gets satisfaction by getting benefits from the project. It is the degree to which the ultimate project purposes are accomplished. The fundamental purpose of a project is to complete constraints such as scope, budget and time. When the project manager accomplishes the objective of the project more effectively and efficiently the service of the project gives more favourable outcomes to the end users. That's how project success mainly depends on lessening the failure factors and increasing the success factors with assuming deliverability of the outcome to its users in proper circumstances (Hussin, Ahmed and Muhammad, 2016).

Crossrail is a mega rail transportation project of Transportation for London. It is located in Greater London. The project is intended for delivering high-frequency transportation services by engaging all large railways. This project was approved in 2007 and around the year 2009, its construction activity started. It is also known as the Elizabeth line with a length of 118km railway in the south-eastern part of England. The running area of this is from Essex to Berkshire which goes in tunnelling underground through the area of central London.200

Crossrail Project Requirements

Project management solidifies the foundation for product or service conception, quality, cost, and feasible duration for finishing the project. Features, processes and tasks are the main project requirements that are expected to be done to make a project successful. These requirements set

precise parameters to function for purpose accomplishment. The requirements of the Crossrail project are building a 100km-plus rail line that will cover 40 stations of Europe servicing with faster journey time, decreasing public transport obstruction, and empowering the business and individuals with better productivity and higher income. This project was taken to convey the outstanding frequency hybrid computer rail and immediate transit system (Worsnop, Miraglia and Davies, 2016).

Management Plan for Crossrail Project

A project's accomplishment is assessed against the performance measurement baseline included in the project management plan. The management plan is the document that defines team approaches and is approved by the authority. It indicates the way of monitoring, executing and controlling the project. The formal document of Crossrail- Elizabeth Line outlines the timeline, duration of the project, volume of the project, total budget, and the capacity of the project and defines the objectives and absolute goals. The success of this project is highly dependent on making a proper management plan. At the beginning of the project planning, the UK department estimated that the project is estimated to be operational by 2018 and it will provide high-frequency rail conveyance service for up to 72000 passengers per hour during the peak period. To keep the broad project of Crossrail on track, an adequate plan needs to be made to execute it towards a massive success and to get the most calculated transportation services (Reynolds, 2022).

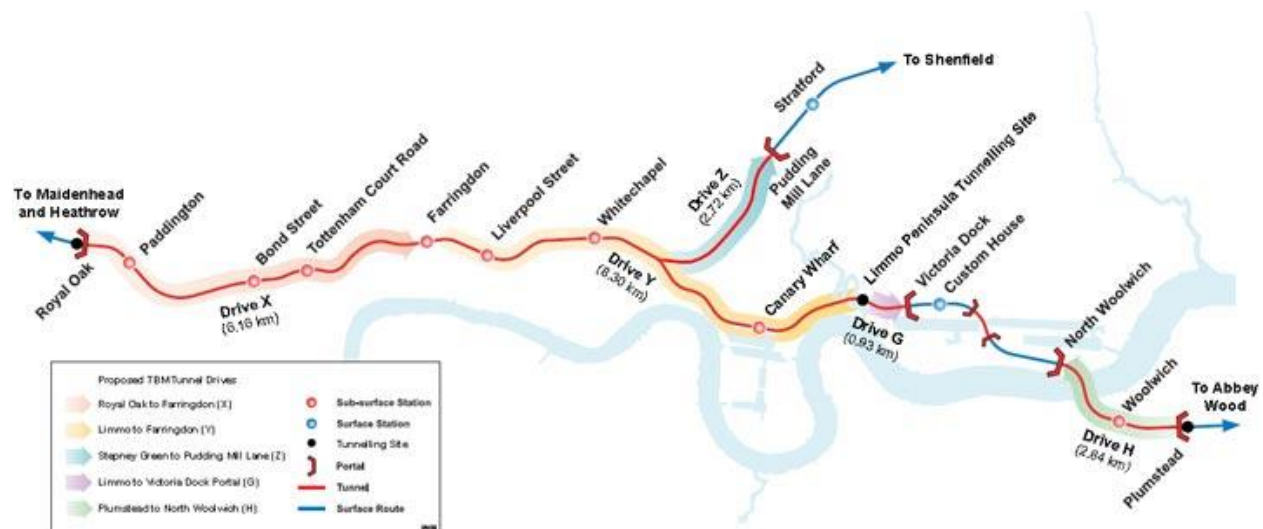


Figure 1: Design of planned tunnel lanes in Crossrail Project (Elizabeth Line)

Integral Milestones

In project management, the progress and performance objectives of the project towards its goals are assessed in critical milestones. A milestone in a project is obtained as a signal post by measuring project beginning date and ending dates, project growth duration, outward appraisals, allotment check and compliance of a primary deliverable. It is the execution purpose which is observed under a particular task order. Four basic levels are usually processed in project milestones, Initiation, Planning, Implementation, and Closure.

In the Crossrail project, some milestones till 2016 were the first train trial of building Derby successfully experimented. The percent project was finished and was provided on time within the allotted budget. In the Crossline tunnel, the permanent track was installed in the year 2016.

Since December 2020, Crossrail has doubled the number of test trains assuring vital development. A Timetable service system was announced around that time. £18bn was predicted as the cost of Crossrail and more than £825 million was funded by the government that year. And it was expected to open the line after the first half of 2022. The project was finally opened on Tuesday 24 May 2022(MacLennan, 2016).

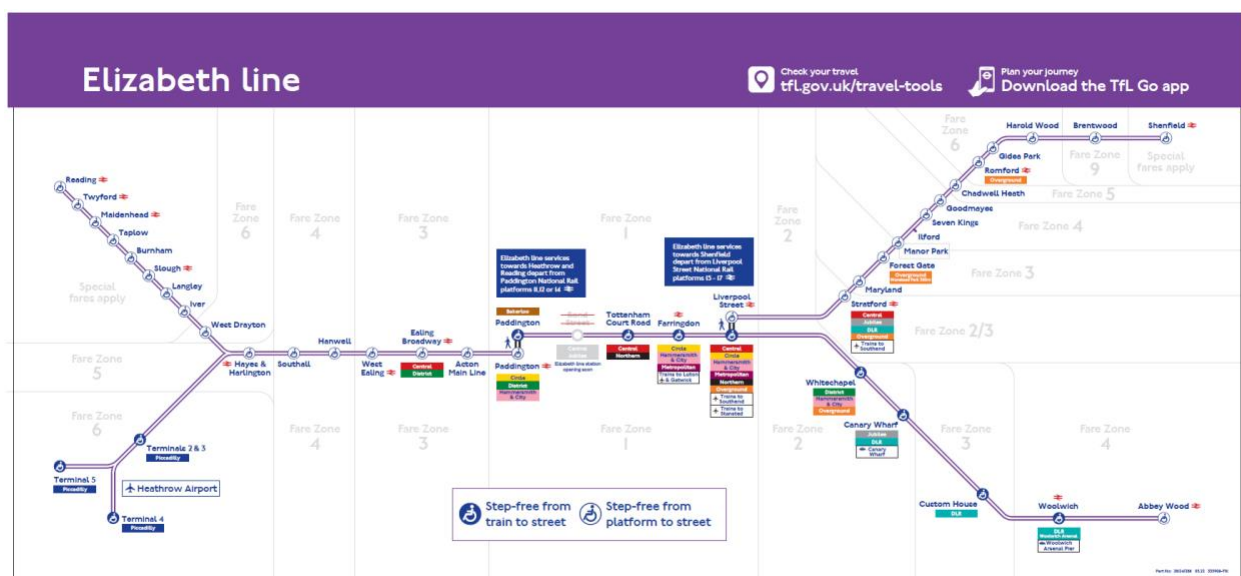


Figure: Full Services Of Elizabeth Line

The Crossrail is giving service between Paddington and Abbey wood. The railway is used by millions of passengers in the first two months of its operation. On 26th July of 2022, the Elizabeth line benefits framework was released by the TFL (Transport for London) and the Department of Transport jointly (Lancefield, 2022).

Open Communication in Project Management

Expressing one's ideas and thoughts freely with others is open communication. In project management, the manager can encourage and inspire everyone to express their project-related ideas and suggestions, thoughts and feedback. Verbal, non-verbal, writing, visual and listening are basic communication in project management. The structure of the hierarchy needs to be open and vertical communication so that communication, collaboration and competitiveness increase in the project.

Lack of proper communication results in an information gap and ultimately results in a loss in project goal achievement. Project managers need to have strong communication skills, without it managers would find it difficult to supervise the team efficiently or effectively. It is also sharing ideas and thoughts between professionals who are conducting projects together. In the Crossrail project, the senior manager and stockholder need to communicate openly with each other to assure information delivery. In the communication framework of the Crossrail project, two different types of factors, input and output, affect the final transportation service performance of the project. Identifying the best processes makes the project accomplishment easier and more efficient for Crossrail (Joubert, 2020).

Project Management Application Software

While managing large projects it becomes hard to measure the data manually. Different types of software applications help to keep the database of project information more accurately. AI is being too helpful in business in the most possible ways. Organisations are choosing to turn into digitization to save cost and to get things done in the least amount of time (Yeates, 1994).

In the Crossrail project, the developers are focusing more on using IT for project accomplishment. The CDE or Common Data Environmental idea was first used by Crossrail as a mega project.

MDM (Master Data Management) is also used for Crossrail project management. Some other software applications such as GIS (Geographical Information System) are inducted while managing that project. The purpose of using the MDM model is to reference all systems and processes that mainly contain the crucial project data while building blocks of contracts of making schedules, location and developing the organisational structure (Zhang, 2020).

Testing of Deliverables

Creating tools, equipment, and documents to measure the activity of a project is the test deliverables. Set of tools needed during, before and after the testing of deliverables. A deliverable product is at that stage where the project turns into the finished product and gets the capacity to provide service.

Crossrail is a mega project that has been providing transportation devices in the UK for more than 50 years. Though around the year 2020, due to the vast negative effect on Covid-19 on the whole economy the Crossrail was delayed. But after recovering from the loss of the pandemic the project was again continued and it will partially start its operation on 24 May 2022. The project is forecasted to remain on track to provide Elizabeth's line within the project's final structure by the end of the year 2023 (Michaelis, 2010).

Learning Objectives:

Learning objectives are the lessons one can learn after the completion of a particular project or task. These are the substantial and critical wisdom that learners archive and can confidently demonstrate at the end of completing the project (Leong, 1991). From the Crossrail project of the UK, various learning concepts came out assessing its success, failure, limitation and used or misused opportunities. Some major learning objectives came out with analysing some factors are specified below:

Design and Delivery: While taking a mega project the authority needs to emphasise the design and delivery of the project. Projects like Crossrail, which is a large rail transportation building

project, need full observation before approving the design and delivery systems. This design impacts the service, cost, and time that is required for the completion of the project. Crossrail needed a specific skilled designer and civil engineering professional for making the designs.

Using Efficient Technology: With the increasing globalisation and initialization of the world we use of efficient technology is mandatory for effective project completion. Project leaders and teams are using their PMO tools which are helping to achieve goals most easily. In the Crossrail project, people from all walks of life and different skilled people have reported on the project. It was a great use of technology to get data easily and efficiently.

Early Involvement: Early involvement indicates the benefits of involving a small constructor rather than a larger constructor. It is believed that small constructors can add more value to the project than the other one. The consequence of Crossrail involving larger contractors is that citizens will only focus on larger success, not on smaller issues. Overcoming this type of issue is mandatory for the success of mega projects.

Favourable Practice: Some best practices that help projects to overcome problems and progress towards success are always good lessons for future project planning. The best practice of Crossrail was the sharing of skills, technologies and knowledge that helped to overcome the delay of the project throughout the Covid-19 crisis. The project has used its technology, ability and aptitude of the workers and made it possible to restart the project work and made it start service in the year 2022.

Boom and Bust: The government of the UK has built back better after the long deadlock of the project work. Lessons learned throughout the completion of the project need to be noted so that the same midstep doesn't occur again shortly. Also, it is necessary to research the faults of the past and develop the projects more productively and deliberately.

Recommendations

To utilise the heights of the Crossrail transportation project some steps need to be taken by the authority for a better outcome.

Health and Safety: Keeping the rights of citizens into account, the project manager needs to take proper health safety measures to ensure the protection of the transportation users.

Design and Architecture: As the Elizabeth line is underground, so to avoid unfamiliarity the underground station space can be designed with architectural shapes and substances that will be recognisably constable and that will give the passenger familiar environment perceptions.

Ensuring Sustainability: Sustainable design of the Elizabeth line can bring a positive change in the social, economic, and environmental circumstances. It will lead the project towards long-term benefits. The mega transportation project of Crossline is considered sustainable and enabling it with making sustainable work decisions will lead to an enormous benefit from this project.

Infrastructure Development: Some improvements can be made to make the project more efficient. Such as constructing new, bright, large ticket halls, supplementary bay platforms, and new lifts or feet over the bridge. For security purposes keep the customer complaint desk and CCTV. Building flyovers that will provide a quicker journey, and upgrade the track to 70km for expanding the dependability of the train (Verhaar and Eshel, n.d.).

Railway Delivering: Delivering the railway is a tough job to accomplish. The opening of the Elizabeth line in phases so that it can ensure safety and security. To add more passengers within the train rules, will require effortless transactions between three signalling systems across the line.

Career opportunity in Project Management

1. Career options are increasing rapidly with time. People are choosing different career paths of their choice. The career opportunity in the project management sector is quite good and beneficial. It is also the most demanding job sector. Growth in the research and consultancy firm, service-based jobs, this demand is increasing. But to start a career in this sector, certain job requirements are seen by the recruiters.
2. An undergraduate degree in the field of management is required and a degree in master's is expected that would be helpful to accomplish the works of project management Some

experiences such as internships in the following sector can be helpful to accomplish the experience requirement of the job description.

3. If one can complete the degree and internship successfully, he will get the opportunity to get a job including a salary of around £50000 per year. In the United Kingdom, the personnel of project management are highly demanding. Other facilities are given to the employees with the progress of their work performance. The remuneration of the employees also increases with time.
4. Project managers are also demanded in other European, American, and other countries. So, a candidate with experience can make a better career in this sector with dedication and enthusiasm towards their job responsibility (McKevitt, Carbery and Lyons, 2017).

Besides all these opportunities the candidates are asked for some specific qualities and skills such as:

Adaptability: Adapting to new changes in the market is a good capacity of an employee. The more one can adapt to new situations, their critical thinking ability is better, and they can make good plans in ever-changing situations of the market environment. So, while acting in the role of project manager their role would be beneficial for the company. That's why candidates need to have good adaptability skills.

Communication Skill: Communication is the key to the success of team and group projects. It helps to share information, and ideas along with the group and helps to create better project plans. Without the communication skill, there would occur a huge information gap and would ultimately result in project loss. These are the reasons good communication skills are required in this job sector.

Leadership Skill: A project manager needs to manage a whole group of people and also an external group of people to accomplish goals. In this circumstance, they needed to act as a leader and lead the team members. Now a candidate with better leadership skills would be preferable in this sector.

Event Management Skill: A project manager needs to handle and manage different events. Event management skill enables one to arrange meetings, and events easily with proper decorating facilities which is also helpful for the role of a project manager.

Conclusion

In the Crossrail (Elizabeth Line) project the role of a project manager is major towards the project's success. Overcoming the pandemic pause of this mega project and making it a successful project was a hard journey for the project manager. They made the best use of technology, knowledge and personal skills to adapt to the situation and make a new way to continue the transportation project. Some more improvements need to be made for the better utilisation of the project opportunities and the project manager needs to be more careful about the completion of such projects (Worsnop, Miraglia and Davies, 2016).

Reference

Amami, M. and Beghini, G., 2000. Project Management and Communication of Product Development through Electronic Document Management. *Project Management Journal*, 31(2), pp.6-19.

Lancefield, N., 2022. [online] Available at: <<https://www.pmtoday.co.uk/crossrail-reaches-important-milestone/>> [Accessed 24 August 2022].

Crossrail Learning Legacy. 2022. *Communication of Results, Feedback and Performance Improvement Planning - Crossrail Learning Legacy*. [online] Available at: <<https://learninglegacy.crossrail.co.uk/documents/communication-results-feedback-performance-improvement-planning/>> [Accessed 24 August 2022].

Hussin, H., Ahmed, U. and Muhammad, M., 2016. Critical Success Factors of Root Cause Failure Analysis. *Indian Journal of Science and Technology*, 9(48).

Joubert, S., 2020. *The Critical Role of Communication in Project Management*. [online] Northeastern University Graduate Programs. Available at: <<https://www.northeastern.edu/graduate/blog/communication-in-project-management/>> [Accessed 24 August 2022].

Leong, C., 1991. Accountability and project management: a convergence of objectives. *International Journal of Project Management*, 9(4), pp.240-249.

MacLennan, P., 2016. *Key milestones for Crossrail project during 2016*. [online] Crossrail. Available at: <<https://www.crossrail.co.uk/news/articles/key-milestones-for-crossrail-project-during-2016>> [Accessed 24 August 2022].

McKevitt, D., Carbery, R. and Lyons, A., 2017. A profession but not a career? Work identity and career satisfaction in project management. *International Journal of Project Management*, 35(8), pp.1673-1682.

Michaelis, G., 2010. The Responsive, Ample CARE doctrine and fundamental performance approaches for achieving high-quality deliverables. *Performance Improvement*, 49(10), pp.21-27.

Reynolds, P., 2022. [online] Available at: <<https://tunneltalk.com/Crossrail-Apr11-Staging-the-excavation-works.php>> [Accessed 24 August 2022].

Verhaar, J. and Eshel, I., n.d. *Project management*.

Worsnop, T., Miraglia, S. and Davies, A., 2016. Balancing Open and Closed Innovation in Megaprojects: Insights from Crossrail. *Project Management Journal*, 47(4), pp.79-94.

Yeates, D., 1994. Software project management. *International Journal of Project Management*, 12(1), p.57.

Zhang, S., 2020. Practical Application of Earned Value in Software Project Management—Taking the Developed IT Project as an Example. *Modern Management Forum*, 4(3), p.67.