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Introduction

There are two possible ways to characterise the process of project management: linear and nonlinear. It encompasses numerous facets of management that can be applied to the successful completion of a certain project, such as various methodological methods, knowledge and skills, evidence, experiences, and many more. South-east England is served by Crossrail, now officially named the Elizabeth line, a railway that spans 73 miles (118 km) (Low, 2022). Crossing beneath the city of London, it stretches from Essex in the east to Berkshire in the west via a network of tunnels. The actual construction of the railway line, the project will also expand London's train capacity by 10%, which will help with the city's ever-increasing transportation needs (Crossrail, 2022). Therefore, a thorough examination of the aforementioned aspects of the project is essential at every stage of the management process. The project's success hinges on its ability to get new classrooms up and running as soon as possible, thus it must meet its delivery deadlines. The project cannot be finished within the deadline because of several reasons and also those reasons also resulted in increasing the overall budget for the project. This project management plan will consider the project initiation document, methodology's advantage and problems, timeline, risk analysis, stakeholder analysis, and also recommendations with a concluding statement.

The document of project initiation

Name of the Project	Cross Rail Project (Elizabeth Line).
Name of the Project Manager	
Name of the Project Sponsor	
The objectives of the Project	• For the purpose of establishing link among London's 45 terminals (Warren and O’Sullivan, 2022) • To improve transportation between London and the region to the south of the city • Time savings and extra storage space are the goals of this expansion. • New stations and explanations of features will be implemented to make ATI more user-friendly. • To lessen the amount of traffic on the roads and in public transportation (Pollalis, 2019) • Increase both overall productivity and business profits. • Facilitate the creation of employment opportunities.
Project Deliverables	• Cost and scheduling • Cross rail track connecting 45 stations • Tunnels • Portals and shafts • 10 new stations

Project Scope In Scope	• Compiling a list of requirements (Expertise and resources) • Construction and layout • Time Management, • Resource Allocation, and Project Coordination • Initial design • Time Management, Resource Allocation, and Project Coordination Initial design • Training and Improvement • Infrastructure verification (navigation, Health and safety, Digital-physical integration,)		• Portfolio • Timeline • Conflicts management •
Required timeline	8 years		
Starting date:	31 May 2015	Closing date:	Expected May 2023
Whether or not information technology will be involved in this project?	Yes, High-frequency, fully-automated train service is made possible by the CBTC system in the central region.		
The cost of the project	• 30% Government • 30% London's farepayers		

	• 40% London businesses
Key assumptions	• It is assumed that the transportation requirement will keep on increasing in Central London • This line can help in increasing the capacity of London's rail by 10% (Pollalis, 2019) • The project will be ready to use by the mid of 2022
Project Milestones	• Design • Railway systems • Depot • Rolling stock • Civil engineering and station construction • Network rail works • Tunnelling
Quality Specification	• Specification of the design • The Construction Process • Platform space specification and construction • Materials • Following legal provisions • Following construction safety regulations

Agile project methodology

Since the beginning of work on the new Elizabeth Line in 2009, Crossrail has attracted its fair share of advocates as well as detractors (Topham, 2022). On the other hand, the project has been a fantastic example of how agile, a concept that is typically associated with software engineers, can be successfully adopted for use in other industries. One of the tenets upon which the agile methodology rests is the belief that software may be constructed more effectively if work is carried out in iterations rather than all at once at the end of the project.

Developers will create a list of all the user stories, rank them in order of importance, and work in sprints to complete their tasks (Ross, 2020). The ability to gauge progress with simple, working versions of software at various phases of development is a major advantage of iterative development.

The Crossrail team has used an incremental strategy to follow the logic of how the project should develop. Crossrail officials decided to roll out the Elizabeth Line to the public in segments rather than force customers to wait for the entire railway to be built (BBC News, 2022). The Cloud has found a home in the agile software development framework by making it easier for programmers to perform tasks like testing. Time and money are saved, and the project as a whole benefit from the improved efficiency. The agile approach has been effectively used to handle a growing project by Crossrail, which has providing high - quality the project's agility. Additionally, the examples of cloud platform and automating increasing operational efficiency in various sectors are noted (Kenyon, 2017).

Advantages

Agile is one of the most popular method of project management, and for good reason: it's the best fit for this building project.

1. Continuous improvement

By dividing their work into shorter "sprints," teams utilising an agile methodology are better able to work together and produce better outcomes (Roy, 2019). Using this strategy, project managers have the potential to address common project concerns such as budget management, expanding scope, and missed deadlines.

2. Speed and flexibility

Adaptability to new circumstances is key to the evolution of this method. Every effort is made to ensure that the strategy and procedures are flexible enough to accommodate any changes in direction or scope. Due to its ease of implementation, Scrum has become one of the most popular agile frameworks. Additionally, it is grounded in an empirical methodology, allowing for future adjustments as the crossrail project develops.

3. Real-time project visibility

One benefit of adopting an agile methodology is the increased openness of the projects as a result of the feedback business receive from the customers (Ross, 2020). This makes them feel like they have a say in the project and encourages them to make suggestions as they go along.

4. Cost Control

Gaining better control over expenses is another area where the agile methodology shines. Each decision the team makes is informed by a review of the budget that occurs after each phase. The next step is a determination of whether or not to proceed with the project's tasks or perhaps to abandon the undertaking altogether.

The problems of using agile methodology

When attempting to apply an Agile approach to the entire organisation, it is easy to make errors. When trying to enhance output, taking on two-week iterations or other experimental ways might help spark creativity and excitement; nevertheless, they are not without danger. Any project manager worth their salt will inevitably run across the three issues listed below when using the Agile methodology.

Long-term initiatives provide in stages

Agile differs from previous techniques in that it doesn't have as many safeguards for team members and less experienced developers (Blokdyk, 2018). The lack of a predetermined design phase in Agile can make it difficult to work on projects that will take a long time to complete. Because Agile is founded on the premise that organizations will not always anticipate the end result's look, it may be challenging to properly predict the budget, schedule, or materials needed at the outset of a project when using the technique.

According to the most recent financial projections, the £1.5 billion in lost fee income could have been collected if Crossrail had opened on time (Tucker, 2017). City Mayor Heidi Alexander revealed a decrease in sales of £1.5 billion owing to the project's existing delays at a conference of the Transport Committee on 1 December 2020. These delays have moved the anticipated launch date from 2021 to 'the first half of 2022.' That amounts to a loss of income that would have been accumulated over the course of four years. When overrun expenses and income implications are added in, it is anticipated that the disruptions in the Crossrail project will have a negative effect on the budget of approximately £5.3 billion.

Collaboration might be challenging

Each member of the team has to be available to perform daily testing (Roy, 2019). Consent must be given after each stage of development before progress can be made. The involvement of end-users in product development guarantees that needs will be met. The Agile framework, when used properly, can be a fascinating and game-changing tool. However, a substantial commitment is needed from all parties engaged in the project, including the clients.

Cost benefit analysis

2009-10

Funding was increased to £14.8 billion when the Comprehensive Spending Review was completed in October 2010 (Topham, 2022).

2018

The budget was bumped up to £17.6 billion (USD \$21 billion) in December of 2018.

2020

Cross rail anticipated in August 2020 that the total cost to completing the project would be up to £1.1 billion higher than the finance package that was approved upon in November 2017 (and £450 million more than the top end of the range that was published in November 2019).

TfL and the government reached an £825 million funding agreement for the project in December 2020 (Uk, 2022).

Benefits

For London's transportation system, Crossrail outlined a bold plan for change:

- Each year, 200 million people will ride the new trains.
- Quicken travel times
- Boost train capacity in the nation's capital by 10%
- Expand public transportation options:
- The addition of 10 stations with ramps for the physically impaired
- Upgrade to a large number of stations.
- Up to 14,000 new construction jobs might be created.
- One thousand positions in operation and maintenance

Stakeholder Analysis

Stakeholder	Internal / External	Quantity of Influence or Interest Currently, the stakeholder	Indicators of success in the stakeholder engagement	Method of Transmission
Manager of the project	Internal/ External	High power/High Interest	Throughout the duration of a project, the project manager holds the position of highest authority	Take Care to Manage Communicating in person, via messaging apps, or over the

			(Ramsing, 2009).	phone are all viable options.
London businesses	Internal	High power/High Interest	The organisation with the highest level of statutory authority in the country. 30% of the budget accommodations are sponsored by one of the major sponsors	Manage Closely Report of project milestones.
National politicians	External	High power/High Interest	They are in charge of making legal policies and frameworks under the supervision of the national assembly	Keep Content A Commitment Letter,
Managers of the site	Internal	Low power/High Interest	In charge of overseeing all setup and daily operations.	Keep Up to Date Microsoft Teams
Teams	Internal	Low power/High Interest	Responsible for coordinating efforts across multiple teams (Du et al., 2018).	Keep Informed Asana

Local people	Internal	Low power/High Interest	Final consumer of the service	Stay Content Methods of advertising.
Travellers	External	Low power/low Interest	Final consumer of the service	Stay Content Methods of advertising.
Employees	Internal	Low power/High Interest	Is in charge of seeing the task through to completion.	Keep abreast of developments Timeline, salary structure diagram..
Local politicians	Internal	High power/High Interest	Local government in London.	Supervise Carefully Checklist for Managing Project Risk, Status Reports
Government	External	High power/High Interest	The stakeholder with the highest level of statutory authority in the country. 30% of the budget accommodations are sponsored by one of the major sponsors.	Keep Content A Commitment Letter,
Impacted communities	External	High power /Low Interest	That's a wide range of places, from homes to	Stay Content

			businesses to non-profits.	Methods of advertising.
Environment	External	Low power/Low Interest	A large carbon footprint and exposure to dangerous construction materials are two ways in which construction can negatively impact the natural environment (Gonze et al., 2020).	Monitoring The report of conformity.

Risk Management of the project

Risk No.	Risk name	Probability of occurrence	Impact Level	Methods for Limiting Danger
01.	Scope Risk	High	High	Exploit: It's important to plan for any unexpected work that might come up as the project progresses (Klein, 2017).
02.	Communication Risks	Low	High	Exploit: Try to guess how well the team's various means of communication will work together.

03.	Planning Risk	Low	High	Mitigate: Guarantee that everyone is on the same page and has a say in the future by keeping them informed (Uzulans, 2016).
04.	Procurement Risks	Low	Low	Reduce: To cut costs, we will use our own social networks to choose the most reliable suppliers.
05.	Time Risk	High	High	Accept: It's important to prepare workers and team members for the reality that delays in schedule are common.
06.	National Emergency	Low	High	Accept: Preparation for unforeseen circumstances
07.	On Site Accidents	High	High	Reduce: Health centre located on the premises. Identification of potentially dangerous substances. Sites are inspected on a daily basis

Conclusion and recommendation

Cross rail and the planned Elizabeth Line will have significant positive effects on the environment as well as the economy of London and the rest of the United Kingdom (Wright, Palczynski and ten Have, 2017). The interpretation of the economic advantages and the relevant parties demonstrates that there is a positive business case for the construction process on a citywide scale. This is especially true when considering the fact that it will relieve congestion on London's established transit system and enable the metropolitan area to boost employment. A total of £16 billion will be spent on building Crossrail, railway, but at least £42 billion will

be returned to the UK economy as a whole (Reuters, 2010). Crossrail is the correct project, and it has been executed flawlessly. Many megaprojects stick to tried-and-true methods because they fear the unknown costs and risks associated with trying anything new. But Crossrail was different because it established a standard for massive construction projects by prioritising innovation and built-in sustainability from the start.

- As it followed agile methodology so before a solid plan or programme can be produced for a project, enough time must be allotted to think through a precise execution strategy.
- The London Assembly Transport Committee has demanded a "forensic" strategy from TfL to finish the Elizabeth Line within the new timeline and amended budget. The Crossrail team will need to employ project management, staff supervision, and financial planning to handle problems related to Covid-19, as stated by the cross-party committee.
- The client should evaluate its own capabilities and those of its key partners and supply chain to determine how best to leverage their use in the execution strategy (Klein, 2017).
- If the project is going to span multiple time periods, the execution approach needs to be flexible enough to adapt to the shifting priorities that come with each stage.
- The more granular a project is broken down into, the more interfaces the customer will have to deal with. Before any purchase can commence per the execution plan, a thorough protocol for managing and controlling interfaces must be designed and released.
- The project's vision and values serve as the foundation for all of the actions and choices, thus it's crucial that they be well-defined. There must be a continuous connection between the project's actions and its vision and values in order to accurately assess the project's performance.
- There needs to be a transparent cascading of the project's aims and objectives via the contracts and an alignment of the entire supply chain. The success of the supply chain in meeting these aims and goals requires a thorough evaluation of its operation.

Reference List

BBC News (2022) “Elizabeth line sections to be joined up in November,” *BBC*, 23 August. Available at: <https://www.bbc.com/news/uk-england-london-62639002> (Accessed: August 24, 2022).

Blokdyk, G. (2018) *Project-oriented agile development methodology the ultimate step-by-step guide*. 5starcooks.

Crossrail (2022) *The Crossrail project in numbers*, Crossrail. Available at: <https://www.crossrail.co.uk/news/crossrail-in-numbers> (Accessed: August 24, 2022).

Kenyon, C. (2017) *3 ways Crossrail demonstrates the benefits of agile methodology in different industries*, Kaleida. Available at: <https://www.kaleida.co.uk/3-ways-crossrail-demonstrates-the-benefits-of-agile-methodology-in-different-industries/> (Accessed: August 24, 2022).

Klein, H. (2017) *Basics Project Planning*. 1st ed. Basel, Switzerland: Birkhauser Verlag AG.

Low, H. (2022) “Elizabeth line: What is it and when will it fully open?,” *BBC*, 24 August. Available at: <https://www.bbc.com/news/uk-england-london-61505172> (Accessed: August 24, 2022).

Pollalis, D. N. (2019) *Crossrail -Elizabeth line 1 London, UK the zofnass program at Harvard*, Harvard.edu. Available at: https://research.gsd.harvard.edu/zofnass/files/2019/04/20190327_Crossrail-case-study.pdf (Accessed: August 24, 2022).

Reuters (2010) “Crossrail scope not hit by cost savings,” 27 September. Available at: <https://www.reuters.com/article/uk-britain-crossrail-idUKTRE68Q1Y820100927> (Accessed: August 24, 2022).

Ross, A. (2020) *Agile project management: The beginner’s step-by-step guide to learn agile methodology to save resources at work and help deliver a successful project on time and within budget*. Viem.

Roy, M. (2019) *Agile project management: Beginner guide for project methodology*. Independently Published.

Topham, G. (2022) “Elizabeth line: Crossrail complete after decades of struggle – a photo essay,” *The guardian*, 23 May. Available at: <https://amp.theguardian.com/uk-news/2022/may/23/building-the-elizabeth-line-london-tube> (Accessed: August 24, 2022).

Tucker, W. (2017) “Crossrail project: the execution strategy for delivering London’s Elizabeth line,” *Proceedings of the Institution of Civil Engineers. Civil Engineering*, 170(5), pp. 3–14. doi: 10.1680/jcien.16.00021.

Uk, G. (2022) *Crossrail: The project at a glance*, Gov.uk. Available at: https://www.london.gov.uk/sites/default/files/crossrail_-_project_at_a_glance.pdf (Accessed: August 24, 2022).

Uzulāns, J. (2016) “Project Risk Register Analysis Based on the Theoretical Analysis of Project Management Notion of Risk,” *Economics & Business*, (1).

Warren, H. and O’Sullivan, F. (2022) *Bloomberg*, *Bloomberg.com*. Available at: <https://www.bloomberg.com/graphics/2022-uk-elizabeth-tube-line-opening/> (Accessed: August 24, 2022).

Wright, S., Palczynski, R. and ten Have, P. (2017) “Crossrail programme organisation and management for delivering London’s Elizabeth line,” *Proceedings of the Institution of Civil Engineers. Civil Engineering*, 170(6), pp. 23–33. doi: 10.1680/jcien.17.00016.