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Assessment 001: Individual Report

Critical Evaluation of Project Management Issues at Elizabeth Rail

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1.0 Introduction

This report details the Crossrail project that was undertaken in the UK through the primary participation of Crossrail Ltd company, a subsidiary of the Transport for London department of the government. The project was affected by various issues despite a promising start, which led to undesirable outcomes across the project life cycle such as project delay, budget and scope creep and communication breakdown between managers and construction line workers. Several deaths also occurred throughout the project's development, and the Covid-19 pandemic greatly delayed the project and further impeded its successful development. The report assesses the performance of the Crossrail project by determining the issues and causes of the problems, which are analysed to develop a stronger understanding of the project's missteps. The recommendations summarily address this by providing guiding suggestions for similar future project plans.

2.0 Background of the project

The Crossrail project developed in the UK is a largely unique project due to the scope and size of its requirements in constructing underground railway systems. The project was intended to be developed for many years and had to await contemporary advancements to be made in construction and technology to secure a feasible project plan for the Crossrail project. The project aimed to cut down on the time taken during commuting by public transportation users (Sandle, 2022). Through the successful development of the project, the Crossrail project would therefore reduce the chokepoints caused in public transit systems by securing a new rail route for commuters in London. The potential for cost-savings and time savings in commuting across London in this way maintained the project's relevance during its conceptual development phase, as the possibility of improving the quality of life of London citizens prioritised the project's eventual development in the pre-planning stage. The Crossrail project, therefore, offered utility to society through this reduction in transit time, and the eventual development of the project relied on collaboration to achieve a successful outcome (Sandle, 2022).

The collaboration in the Crossrail project saw companies across different sectors come together to perform the undertaking. The UK government established Crossrail Ltd, under the Transport for London government department which is responsible for public transportation affairs and undertakings in the city of London (Railway Technology, 2015). Private sector partners such as

Canary Wharf Group Plc were also involved in the development of the project, symbolising the Crossrail project undertaken as a joint public-private sector effort to deliver the new railway line to the public (Railway Technology, 2015). Such collaborative undertakings have the advantage of pooling together the individual expertise and resources of private and public sector representatives. It also has the advantage of mitigating the outcomes of red tape due to bureaucratic interference, as Crossrail Ltd itself represented the interests of the UK government through Transport for London. The Hong-Kong based firm MTR also won the contract to participate in the development of the Crossrail project, thereby creating a multinational undertaking in the development of this project (Press Association, 2014).

Collaborative undertakings between the private and public sector in this way secures the necessary interventions required to develop public utilities such as underground railways. Through the participation of the public sector representatives i.e. Crossrail Ltd., the project can gain requisite government clearances at the local and national levels to successfully initiate the project development. The participation of the private sector companies ensures that the contemporary advancements in construction and development are made accessible by the public sector entity represented by Crossrail Ltd, as well as the performance of the private sector in general as for-profit enterprises. Therefore, this positive quality of collaboration sees the expertise of diverse stakeholders come together in a demonstration of knowledge-sharing and mutually aligned project development (Garg and Garg, 2017).

Across project stakeholders, collaboration and knowledge-sharing lead to greater risk mitigation in the project, as open communications in collaborative undertakings succeed in identifying performance gaps or barriers that occur during the lifespan of the project plan. From this position, the project benefits from control mechanisms and quality control observations put into place through collaborative management of the project (Dodge Data & Analytics, 2017). Risks related to projects in construction are lessened through collaboration, and this positive quality of the Crossrail project secured further resiliency across environmental, security and logistics risks (Dodge Data & Analytics, 2017). Through collaborative performance, the environmental risks are addressed as stakeholder engagement is broadly performed from different positions in the project plan. The scope of misconduct such as fraud is also mitigated as the project stakeholders are involved together, creating a greater sense of shared accountability and personal liability across the participating organisations (Bond-Barnard, Fletcher and Steyn, 2018). Lastly, the provision of

public utilities through the public sector company Crossrail Ltd allowed the project to overcome potential chokepoints such as the transportation of large amounts of construction material across main roads and city areas without being impeded.

3.0 Issues faced in the project

Firstly, the project was affected by poor management and planning from the beginning, as Crossrail Ltd made ambitious deadlines that were not feasible to be achieved in a realistic capacity (Tunnicliffe, 2022). The participation of all the stakeholders was not optimal, as their communication gaps were frequent and led to more confusion developing around short-term deadlines and the main delivery deadline of the handover. The project's support, being a responsibility of the government through the Crossrail Ltd company, was short of the full scope of benefit the government could supply for the well-being of the project development. The construction project failed to analyse the soil composition and other ground factors, which led to its vulnerability being expressed through the unstable composition of the ground on which the Crossrail system would be placed. The shortcomings in industrial relations among the stakeholders led to the construction phase of the project commencing with this oversight remaining active, and its consequences were felt across the timeline of the project; in 2014, a construction worker on-site was killed due to falling concrete as a result of the unstable ground layout and its effects on the on-site construction development (Tunnicliffe, 2022). The lack of worker safety in this regard was an outcome of ineffective communication and cross-industrial relations.

Secondly, the workplace climate was not suitable for maintaining the project's development according to good practices. Workers in construction projects must have the freedom to express any issues or problems they identify, such as hazardous occurrences on the job site (Tunnicliffe, 2022). The workers engaged in the Crossrail project were not empowered to raise their voices in such a manner, as they were threatened with consequences ranging from dismissal from their jobs to other forms of reprisal. Union members were also not present to represent the workers in their capacity as advocates, which further endangered the well-being of the workers engaged in the project development. By 2019, three more on-site fatalities had developed across the construction project activities, and subsequent findings left an indecisive conclusion regarding the role of health and safety regulatory negligence as a contributing factor to the deaths (Tunnicliffe, 2022). The official investigation by the National Audit Office in 2019 examined the relationship of Crossrail

Ltd with the incident, and further assessed the reasoning behind project days and schedule redevelopments. The findings tie back to the first issue identified in this report, as it revealed that the unrealistic scheduling of the project deadline was a root cause in enabling the cascading chain of negative outcomes such as rescheduling, missing short-term deadlines and rushed proceedings at construction sites. Time crunch in projects can be detrimental in this way, as deadline mismanagement leads to ineffective implementation of any monitoring or control measures applied to secure the project's timely outcome.

Thirdly, poor collaboration, deadline mismanagement and other hindrances led to the cost of the project inflating beyond its original estimations (Tunnicliffe, 2022). The contract arrangement under which Crossrail Ltd performed its role offered it greater autonomy, which created a silo quality that blunted interactions between real-time developments and the internal decision-making and project perceptions at Crossrail Ltd. This dissonance is seen in the delay of the initial completion date of December 2018, which was missed due to the prior commitment to an unrealistic time frame for the project development. The shortcomings in stakeholder participation led to such assumptions growing along the project's life span, leading to poor strategic decisions such as preemptively laying off construction workers on the mistaken assumption that the project would be completed by December 2018. After the project was delayed, the workers were again sought for contractual work at the Crossrail project as the developers found themselves short on human resources in this area. The negative reporting of this development in the public consciousness led to the then-CEO of Crossrail Ltd resigning in favour of the appointment of a new CEO (Tunnicliffe, 2022). A lack of strong, grounded and capable leadership was therefore one of the core reasons that enabled such issues to develop in the project.

Fourthly, as publicity around the project grew due to its issues, the shortcomings in other stakeholders' participation were summarily revealed. It was found that the Mayor of London was involved with the project's development, and was consequently aware of the issues and rushed the deadline allotted to the project completion (Plimmer, 2019). However the Mayor's office raised no complaint or warning over this shortcoming, and critical problems were overlooked to speed up the development of the project plan (Plimmer, 2019). One such oversight led to digital bugs developing in the software integration of automated signalling systems for the Crossrail line with the rest of the underground rail system (Plimmer, 2019). A total of three different signal systems were meant to be integrated seamlessly with Crossrail to connect the train systems, and the rushed

behaviour of the stakeholders led to inadequate software being used to address this requirement (Plimmer, 2019). The integration of rail signalling systems was critical to maintaining the safety and continuity of the performance of underground rail systems, and this bottleneck caused by software bugs delayed the project further. However, the issue was resolved as private sector collaboration was involved from Crossrail Ltd. The participation of Siemens and Bombardier in this collaborative capacity led to the bugs being removed and the signalling systems being fully integrated for the Crossrail project (Diaconu, 2019).

4.0 Analysis of the issues

Firstly, the workers involved in the project were exposed to the various vulnerabilities that developed owing to project mismanagement by Crossrail Ltd. Apart from the fatal casualties involved in the project's development over the years, other incidents led workers in the Bond Street area of the project to commence a collective strike in protest of the poor health and safety conditions at the project site (Hockaday, 2019). During the protest, they alleged that management was complicit in creating this outcome for the workers in the project, as they were overtly suppressing the worker's capability of raising their voices to inform about project issues. The project's internal problems were compounded further as Covid-19 struck in early 2020, forcing the project to be put on hold completely to maintain social distancing and other lockdown measures in public spaces (BBC News, 2020). This resulted in the Crossrail project being delayed for two years, thereby delaying the original deadline for project completion beyond the original target of December 2018 (BBC News, 2020). The analysis here shows that the project would inevitably have been delayed had it been given a more realistic time frame, such as delivery in 2020 or 2021. Therefore, the main delay of two years caused by the pandemic is an unavoidable occurrence that would have happened regardless of the deadline allotted to the project completion. This does not exonerate the poor leadership at Crossrail Ltd or its stakeholders, as the project would have been more safeguarded had it been developed more sustainably to meet a realistic deadline. The associated deaths of workers, delays and poor working conditions were avoidable developments in the life span of the project.

Secondly, the ineffective participation among stakeholders led to their agreement to the premature delivery timeframe for the Crossrail project. Their complicit participation in creating this delay in the project resulted in many of the issues caused in the project life cycle. From budget creep to

scope creep, the delays created a further liability to the stakeholders and limited the healthy performance of the stakeholders in the project development. This led to the wastage of private resources and public utilities as well, as cost overruns and losses were prominent during the project development. The premature delivery date therefore intersected with other developments such as improper planning, communication and budget and scope creep to delay the project independently from the Covid-19 pandemic.

Thirdly, the workplace climate and overall company culture were constrained by these factors, which prevented standardised methodology to be deployed for the performance of the project. Concepts of sound project management, such as waste minimisation through lean management, were not followed across the Crossrail project. The budget creep was followed by the recruitment of independent subcontractors that brought their outside teams to participate in the Crossrail project (Topham, 2019). This dilution of workplace authority led to conflicts developing across different teams, as their disagreements ranged from disagreements in their professional approaches to disagreements over the deadline of the project. The participation of project managers was hands-off for the most part, as workers complained about the lack of project managers, leaders or other authority figures being absent onsite. This led to further preventable delays as communications were disrupted between construction workers and project managers (Topham, 2019). A cascading effect of mismanagement from such developments could conceivably have led to the deaths of workers involved in the project, as factual reports note that there was no template assigned with pre-planned activities designed to maintain planned operations performance across the timeline of the project itself. This led to the improvisation of specifications related to the construction elements, and the workers were unable to raise complaints due to the absenteeism of managers from the workplace site. These critical shortcomings were entirely preventable, much like the remainder of the issues, and the project was ultimately left vulnerable to the unforeseen and unpreventable Covid-19 development.

5.0 Recommendations

Firstly, future projects must be led by responsible leadership, whose performance must be held accountable through regular meetings among the stakeholders. This will create a feedback loop where the stakeholders and the project leader will be held accountable and liable for any shortcomings, thereby instilling control measures safeguarding the project from negligence by its

stakeholders. It will also ensure that the project does not suffer from outcomes like scope creep and budget creep which are caused by premature deadlines.

Secondly, the attendance of managers onsite must be monitored as their participation creates a linkage between the workers and the leadership as well as other stakeholders. Workers must be given a line of communication directly with the top stakeholders in case of such issues develop, which will allow the stakeholders to raise the concern directly and address the lack of attendance by the managers. Empowering the workers to raise issues and gain access to necessary support from senior members will increase their motivation and well-being, thereby improving the ethical performance of the project.

Thirdly, maintaining a daily record of the progress through improvised scrum meetings and other agile approaches will maintain operational agility and transparency of the project development. This will ensure that objective and grounded perspectives are maintained among the stakeholders regarding the project's deadline and other time-bound commitments. Meetings can also be held digitally to allow remote stakeholders to participate simultaneously, and such virtual collaboration overcomes traditional barriers such as time and distance among project stakeholders.

6.0 Conclusion

The report analysed the Crossrail project in London to analyse the issues associated with the project's development. The findings showed that the issues were largely preventable and were caused by a combination of poor leadership, management absenteeism, improper workplace health and safety standards as well as suboptimal use of the construction workers' outputs. The Crossrail project presents an instance of a highly public project with stakeholders collaborating across different public and private sector backgrounds and the issues developed despite the apparent safeguarding measures that should have been present as a positive outcome of collaboration. The recommendations address the shortcomings of the issues and present proactive measures that can be adapted for similar future projects. By focusing on preventive measures to alleviate the issues from this case study, the recommendations are made more accessible and practically suited for usage across different project contexts.

References

BBC News (2020). Crossrail managers blame Covid-19 for further delays. *BBC News*. [online] 23 Jul. Available at: https://www.bbc.com/news/uk-england-london-53521386 [Accessed 16 Mar. 2023].

Bond-Barnard, T.J., Fletcher, L. and Steyn, H. (2018). Linking Trust and Collaboration in Project Teams to Project Management Success. *International Journal of Managing Projects in Business*, [online] 11(2), pp.432–457. doi:https://doi.org/10.1108/ijmpb-06-2017-0068.

Diaconu, C. (2019). *CrossRail Blames Bugs for Potential Delay*. [online] Transport & Logistics Magazine. Available at: https://tandlonline.com/rail/crossrail-blames-bugs-for-potential-delay-33910 [Accessed 16 Mar. 2023].

Dodge Data & Analytics (2017). *New RNew Research Shows How Collaboration Can Reduce Construction Risk*. [online] www.forconstructionpros.com. Available at: https://www.forconstructionpros.com/business/news/12299200/new-research-shows-how-collaboration-can-reduce-construction-risk [Accessed 16 Mar. 2023].

Garg, S. and Garg, S. (2017). Rethinking Public-private Partnerships: An Unbundling Approach. *Transportation Research Procedia*, [online] 25, pp.3789–3807. doi:https://doi.org/10.1016/j.trpro.2017.05.241.

Hockaday, J. (2019). *'Fifth Crossrail worker dies in their sleep in just six months'*. [online] Metro. Available at: https://metro.co.uk/2019/10/03/fifth-crossrail-worker-dies-sleep-just-six-months-10841276/ [Accessed 16 Mar. 2023].

Plimmer, G. (2019). Crossrail blames software 'bugs' for possible two-year delay. *Financial Times*. [online] 25 Apr. Available at: https://www.ft.com/content/1358fa0a-675b-11e9-9adc-98bf1d35a056 [Accessed 16 Mar. 2023].

Press Association (2014). Hong Kong-based transport operator MTR to run Crossrail trains. *The Guardian*. [online] 18 Jul. Available at: https://www.theguardian.com/uk-news/2014/jul/18/mtr-wins-crossrail-train-route-franchise [Accessed 16 Mar. 2023].

Railway Technology (2015). *Crossrail's Canary Wharf station construction complete*. [online] Railway Technology. Available at: https://www.railway-technology.com/news/newscrossrails-canary-wharf-station-construction-complete-4673697/ [Accessed 16 Mar. 2023].

Sandle, P. (2022). London's $24 billion Crossrail finally opens. *Reuters*. [online] 24 May. Available at: https://www.reuters.com/world/uk/londons-24-billion-crossrail-finally-opens-2022-05-23/ [Accessed 16 Mar. 2023].

Topham, G. (2019). Crossrail delays caused by desire to cling to 'unrealistic' timeframe. *The Guardian*. [online] 3 May. Available at: https://www.theguardian.com/uk-news/2019/may/03/crossrail-delays-caused-by-desire-to-cling-to-unrealistic-timeframe [Accessed 16 Mar. 2023].

Tunnicliffe, A. (2022). *A timeline of Crossrail delays*. [online] Railway Technology. Available at: https://www.railway-technology.com/features/timeline-crossrail-delays/ [Accessed 16 Mar. 2023].

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