

Assignment 2: HPAR7003 Archaeological Project Design and Delivery

Introduction

According to Heagney (2016, pg.2), a successful project is one that meets its goals on time and within budget. The Project Management Institute (2021, pg.5) found that on average 13% of projects did not meet these criteria and were considered failures in their 2021 annual survey. The role play scenarios provided the opportunity to identify some of the key challenges to successfully delivering a project's goals on time and within budget when working as a team. They also provided the chance to reflect upon possible ways of overcoming those challenges or at least mitigating against them.

Some challenges to a project's success may be unforeseeable no matter how much planning and mitigation occurs. However, taking action to prevent or mitigate against known challenges developing into potentially serious issues can give a project the best chance of success from the outset. This report will review and reflect upon my experience of the role play scenarios that identified five challenges to successful project delivery and ways of addressing them, concluding with a summary of what was learnt.

Staying within the Scope

The scope of a MoRPHE-compliant archaeological project should be clear from the outset in the initial project proposal (Historic England, 2015). This is because team members exceeding the scope of a project at any stage (also known as 'scope-creep') results in unplanned work, time or resources that will ultimately cost more money than was budgeted (Locock, 2012 pg.43). Unchecked non-budgeted increases in the cost of delivering a project can be crippling, with empirical studies such as Komal et al (2020) proving a direct negative relationship between scope-creep and the success of a project. In some cases, a change in scope and associated budget that exceeds available resources could result in the project executive deciding to close the project (Historic England, 2015 pg. 21).

Therefore, a material challenge to the successful delivery of a project is that staff may exceed the project scope. This was highlighted in the example of the HER task role play scenario, where there was a defined scope to the task goal; identify heritage features on the Derbyshire HER that may require evaluation to achieve planning permission within the client's proposed development area. The team exceeded this scope by agreeing on a programme of geophysical survey and possibly evaluation trenching ultimately extending beyond the area of proposed development. The team's motivation here was a research interest in a spurious prehistoric landscape inferred from two HER entries, rather than fulfilling goals within the scope of the project.

This scenario demonstrated that if left unchecked, it is not difficult for well-meaning but wayward team interests to creep into a project and quickly alter its scope, potentially leading to the problems discussed above. To mitigate against this in a MoRPHE-compliant project, the project executive or project assurance officer would be well-placed, being at a sufficient distance from the day-to-day running of the project, to identify scope-creep before it becomes an issue. Additionally, the PRINCE2 project management system, which underpins MoRPHE, suggests tracking project scope through project initiation and change control documents (PRINCE2.com, 2017).

Keeping to Budget

Creating a budget can be defined as the process of allocating money to achieve a desired outcome over a designated period of time (Shim et al, 2012 pg. 1). According to a recent survey of the state of project management, only 34% of organisations complete their projects to budget most of the time (Wellington, 2021). Over-optimism when budgeting leads to cost overruns and can be blamed for up to 90% of projects that fail to deliver within budget (Flyvbjerg, 2011 pg. 321).

The project planning and costing role play scenario highlighted the challenge of allocating an appropriate and pragmatic amount of money to project costs that will provide a realistic chance of successfully delivering the project's desired outcome. In the example, pressure

was applied on the budget by the developer who proposed a deal where a 15% reduction in costs would see the job awarded. The team consensus was that if the budget is to be revised, the project must still result in an acceptable level of profitability for the company delivering it, representing its desired outcome as a commercial enterprise. However, upon further reflection, the team should also consider that the re-allocation of money and costs must still be realistic and pragmatic enough to actually deliver the project and achieve the desired outcome for the client/sponsor whilst avoiding cost overruns and delays. Any decision to reduce budgeted costs should avoid the trap of over-optimism and have a realistic chance of delivering the project aims and objectives as well as providing an acceptable level of profitability and success for the project as a whole. If either of these desired outcomes cannot be met, the budget cannot be revised and the project should not proceed in its current form.

Managing Risks and Uncertainties

Uncertainty influences the behaviour and judgement of individuals involved in risk management and decision making in an unpredictable way (Park and Shapira ,2017). This was highlighted in a number of the role play scenarios that touched on how best to manage risk and mitigate against it. In the project planning and costing role play scenario, the Facilities Manager decided to use welfare facilities owned by the company rather than hire in, with uncertainty surrounding the requirement for those welfare units at another project. There is the risk of a future liability for additional welfare that is currently not budgeted for by either project, but the possibility of saving money if welfare is not required. Upon reflection, I would personally be more inclined to budget for hiring in additional welfare units to ensure that both projects were provided for. This demonstrates how differing levels of individual team member's aversion to risk and uncertainty can be complex and unpredictable, leading to different decisions being made.

A similar circumstance can be observed in the WSI task role play scenario when the team considered whether to investigate or exclude from development an area of land containing a geophysical anomaly that may be a Roman building. The uncertainty was whether or not a Roman building did exist in this location. The risk was costs and delays associated with a

discovery or an opportunity cost to the client if the area is unnecessarily excluded from development. This uncertainty led to team members assessing these risks in very different ways leading to different decision-making outcomes. One team member was concerned that the risk of significant cost and delays associated with the discovery of a Roman building was too great and the land should be excluded from development, whereas others including myself believed the risk of an opportunity cost to the client would be too great to exclude the land from development without evaluation.

There may be no definitive correct choice in dilemmas such as these and one person may make a very different decision to another in such situations. But the key point is that the possibility of these eventualities occurring has been identified along with the associated risks, their impacts and likelihoods. If they can be mitigated and managed in accordance with MoRPHE-style techniques such as risk logs and tracking documentation (Historic England, 2015 pg. 32), there is a much greater chance of stopping these risks becoming potentially serious issues that threaten the success of a project.

Communicating Effectively

Effective communication is a particularly important factor in the success of a project. According to a study by the Project Management Institute, over half of any given project's budget is likely to be put at risk by ineffective communications (Project Management Institute, 2013). In the historic environment, it is recommended by the MoRPHE project management framework that the project team establishes open channels and effective methods of communication from the outset (Historic England 2015, pg. 31). The role play scenarios provided a number of pertinent examples of why effective communication between team members and stakeholders is important in the context of project success.

The project planning and costing role play scenario emphasised the importance of communication and 'the bigger picture' between project team members who individually all want 'a slice of the cake' when it comes to allocating money to achieve their own desired outcome. For example, in my hypothetical role of Project Officer I proposed a longer fieldwork timeframe for my own interests to ensure the work would be completed on time,

but the role of Staffing Manager independently chose a higher number of staff for their own interests, partially for similar reasons. If the two roles had communicated, it may have been possible to alter timeframe and/or staff numbers to minimise costs and create a more appropriate budget outcome for the project as a whole, rather than for the interests of the individual roles.

In the example of the project start-up (or Goldcliff) scenario, a developer enquired what the heritage implications of their proposed development could be. The team discovered that the area in question had a very high level of archaeological potential but they were unclear on the full impact of the development and the extent of the proposed area. Upon further reflection I believe that clear, concise and relevant communication between the developer (as a non-archaeological audience) and the archaeological contractor would be key to building a mutual understanding of the implications of archaeology upon the development (Locock, 2012 pg. 34-37). Considering these implications carefully will allow the developer to ensure the correct decisions are made regarding if and how the project proceeds. Poor communication skills could lead to misunderstandings regarding the heritage impact of the development. This in turn could result in substantial delays and increased costs that may ultimately have an impact on the project and its success.

Accountability

Without established accountability mechanisms in place, projects encountering difficulties can quickly start to fall apart and may ultimately fail as team members start to pass blame and make bad decisions whilst focusing on protecting themselves (Greengard, 2007).

According to MacDonald et al (2020), established accountability mechanisms such as hierarchies, formal reporting, incentives and disciplinary processes have a positive relationship with the success of a project. In a survey of project managers, the authors find that established mechanisms also have a positive influence on social and behavioural characteristics that promote a sense of informal peer-to-peer accountability and often accountability to subordinates.

The health and safety role play scenario and associated ethics study demonstrated how important accountability is to the success of a project. Part one of the scenario posed a number of widespread health and safety breaches on an example archaeological site which the team identified would likely break laws and could pose a real risk of injury or even death. The widespread nature of the breaches suggests a lack of accountability and an established culture of non-compliance without sanction. If a dangerous incident were to occur, there is a risk the project could start to unravel in the manner described by Greengard (2007). In part two of the scenario, the discovery of an important archaeological feature is covered up and not reported to the client by the site manager or any other member of staff. This raises an ethical issue of intentionally subjecting unrecorded archaeology to possible destruction as well as the consequences for the project of being in breach of planning conditions and not fulfilling the stated aims and objectives.

In both examples, implementing formal accountability mechanisms such as official reporting processes, project performance reviews, site visits and inspections may begin to change the culture and behaviour of team members as it becomes clear they are responsible for their actions. Over time, this could lead to increased levels of accountability amongst peers and even subordinates to make the best decisions for the project as a whole, increasing its chances of success.

Conclusion

The role play scenarios provided a useful opportunity to consider some of the key challenges to successful project delivery when working as a team and a chance to reflect upon the possible ways of overcoming them. All of the challenges identified had the potential to impact upon one or both of the financial viability of the project and the likelihood of it delivering its stated aims and objectives. Possible preventive measures and processes were identified that could be put in place to overcome or at least mitigate against these challenges.

Project oversight roles can help prevent scope-creep by keeping a project on track to deliver its stated aims and objectives. Pragmatic budgeting can reduce the chance of cost overruns.

Risk logs and tracking documents will help mitigate against risks becoming serious project issues. Establishing open channels of communication from the outset of a project minimises miscommunications that cause delays and additional costs. Formal accountability mechanisms help to foster a culture of responsibility, resulting in decisions being made for the good of the project as a whole.

Projects will always face unexpected challenges and nothing ever goes exactly according to plan. But by taking action to prevent known challenges from developing into potentially serious issues, then a project can be given the best chance of success from the outset.

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