

Pre-empting project failure by using a pre-mortem

ABSTRACT

In health care, a post-mortem might be required after a patient has died, to try and establish why, and sometimes when and how, the patient died. Many projects are likely to fail, with reasons including the lack of tools to facilitate change, and failure to consider the organizational and environmental situation a change project faces. When projects or initiatives fail, clinicians often carry out a 'post-mortem', trying to understand the factors that contributed to the failure, with the aim of learning lessons and not repeating the same mistakes. This article discusses the management technique known as the 'pre-mortem', with application of tools and strategies to help mitigate the risks of a change leading to failure.

The 'pre-mortem' is a strategy that aims to consider why a project might fail, thinking prospectively rather than retrospectively. The main principle of the pre-mortem is to imagine that a project has failed (when it is still alive or yet to be born) and then to consider what factors have resulted in the failure of the project or initiative.

Many projects are destined for failure with exceptionally high rates reported in software development projects (Cerpa et al, 2016), while Pelletiere (2006) cites a 70% failure rate of all change-initiated programmes. Despite the high risk of change initiatives failing, organizations need to make changes (often substantial) in order to remain competitive (Klärner et al, 2008). It may be that a reason for such a high failure rate of changes is the lack of clear structures or organizational tools to help facilitate such changes, or lack of consideration for potential threats and weaknesses against a change process. Organizations that have positive experiences and attitudes towards change are more likely to succeed in making changes (Heckmann et al, 2016).

One phenomenon observed as a potential contributor of failure is 'groupthink', where a psychological pressure for consensus causes those who disagree to suppress concerns, and where the group is less likely to consider alternative decisions (Janis, 1972). The pre-mortem technique helps change agents or project champions to create a scenario whereby a project has hypothetically failed. Trying to decide what has

gone wrong provides a safe forum in which those dissenting about how to proceed with a project have the opportunity to voice their concerns (Klein, 2007). Imagining an event has already occurred (prospective hindsight) increases the ability to identify reasons for future outcomes by 30% (Mitchell et al, 1989). There is the potential for time and resources to be dedicated to considering risks and threats that may never materialize, but if clinicians could accurately predict the future, they may never make mistakes. Any sensible organization makes provision for risks. *Table 1* outlines some advantages and disadvantages of the pre-mortem.

How to carry out a pre-mortem

One strategy for conducting a pre-mortem is that the members of a group involved in a project independently write down reasons they can think of why a project may fail, be they personal, environmental, internal or external, before collating all the reasons for failure suggested by the team (Klein, 2007). Here, different techniques might be used to generate reasons for failure, such as carrying out a SWOT analysis (strengths, weaknesses, opportunities and threats), PESTLE analysis (looking at external factors – political, economic, sociocultural, technological, legal, environmental) or risk analysis (looking at the probability of things going wrong, and the possible impact). Among other open access resources, the MindTools website (www.mindtools.com) provides many examples of different management tools.

Once the reasons for failure are collected, then the group can work together to address areas that can be strengthened and mitigate threats and weaknesses. There may be reasons that are outside of an organization's or individual's control, but focussing on the weaknesses and threats of a SWOT analysis feeds into the risk analysis, with the pre-mortem offering prospective hindsight that other methods do not address (Klein, 2007). Where technology and pace of change is growing, the corresponding increase in complexity and uncertainty makes risk harder to predict, and potentially more significant.

Another technique which could help generate discussion and identify solutions is derived from law, conflict resolution and mediation: to consider BATNA, WATNA and MLATNA (Carneiro et al, 2014) in relation to each of the reasons for project failure identified.

- BATNA – what would be the best alternative (to a negotiated agreement), i.e. to the project failing for X reason
- WATNA – what would be the worst alternative (to a negotiated agreement), i.e. to the project failing for X reason

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- MLATNA – what would be the most likely alternative (to a negotiated agreement), i.e. to the project failing for X reason.

Adding the pre-mortem technique into the range of project planning tools helps teams to provide greater insight into risks, develop a range of flexible strategies (Gallop et al, 2016) and identify issues that may not have been considered before.

Developing collective intelligence

While confidence is an important trait for a leader to have, overconfidence can lead to individuals failing to see the whole picture, or leading without due consideration of alternative suggestions. A pre-mortem approach reduces the danger associated with overconfidence, and generates a more reasonable and holistic plan. It also helps team members and other stakeholders buy into the project. Peabody (2017) cites the example of those using the pre-mortem approach against 'worst-case scenario' methods, with more reasons for failure generated with the pre-mortem method and more solutions proposed, suggesting the pre-mortem approach changes how problems are viewed and solutions given.

Involving the whole team in a decision-making process, and encouraging the whole group to contribute to possible weaknesses improves the sense of value that individuals have within a group, but also allows the group to consider each individual's contribution (Matzler et al, 2016). Collective intelligence is described as having cognitive diversity where each person adds his/her information, independence where opinions are formed independently, decentralisations where people draw on their own specialist knowledge and effective aggregation where the collective knowledge becomes a collective decision (Surowiecki, 2005). This is in keeping with a transformational leadership style, which inspires others to show flair and take responsibility (Bass, 1990), and an inclusive and person-centred leadership approach (Nishii and Mayer, 2009). The pre-mortem approach therefore encourages the whole team to use their skills, knowledge and experiences.

Conclusions

By using the pre-mortem when initiating a project or as part of ongoing risk analysis, mitigation and avoiding of potential threats to the success of a project can be addressed. Addressing the weaknesses and threats can improve the structural integrity and action of a project in motion, instead improving the strengths and maybe identifying new opportunities along the way. With the high potential for many projects to fail, it might be wise to carry out a pre-mortem in a timely manner rather than be forced into doing a post-mortem when a project has struggled or failed. **BJHM**

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KEY POINTS

- Pre-mortem thinks prospectively about why a project might not succeed, giving opportunity to reduce threats and strengthen weaknesses.
- A pre-mortem can be conducted at an individual or group level.
- A pre-mortem may yield more reasons for possible failure and greater number of potential solutions proposed compared to the 'worst-case scenario' method.
- Pre-mortem techniques can encourage and enhance the collective intelligence of a group.

Table 1. Advantages and disadvantages of the pre-mortem

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| Advantages | Consider the threats and weaknesses of a project by presuming hypothetical failure |
| | A strategy to break groupthink |
| | More likely to succeed in the project if threats and weaknesses are addressed |
| | Can turn weaknesses and threats into strengths and opportunities |
| | Can improve followership via active engagement of the whole team |
| | Improves collective intelligence in a group |
| Disadvantages | Spending time thinking of causes of failure may waste time if they never happen |
| | Costs associated with addressing potential causes of failure that may never happen |

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