

A photograph showing two astronauts in white space suits working on the exterior of a space station module. The module is a complex structure of metal panels and equipment. The background is the Earth, showing blue oceans, white clouds, and brown landmasses. The image is oriented vertically, with the astronauts at the top and the Earth below.

The Current State of Project Risk Management

Poor project risk management practices are a key root cause of project failure, but we can fix it

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INTRODUCTION

It's a well-known fact that projects fail at an astonishing rate. A number of studies show that only around 40% of projects are successful, in that they deliver the expected benefits on time and to budget. Of the 60% that fail, half fail outright, and the other half run over budget, over time, or both.

Reflecting on the above metrics, we decided to look at current project management practices through the lens of the risk management process. Our instinct was that, if we know why projects fail, and we do because there are numerous studies in this area¹, then why aren't we structuring projects to avoid or mitigate against those reasons?

During the autumn of 2020, we interviewed 22 people who have spent a significant period of their careers in the project management (PM) environment. The interviewees included project managers, suppliers, business stakeholders and subject matter experts. We wanted to understand if their views resonated with our own experiences. Based on those qualitative interviews, we honed our research and launched a follow-on quantitative survey. We received over 150+ responses, upon which the following report is based.

Our analysis indicates a widespread systemic failing to take project risk management seriously. As a number of interviewees and respondents noted, project risk management is more often than not treated as a low priority tick box exercise.

Business change projects are transitory in nature and so are a significant number of the staff that lead and deliver them.

This is a resourcing issue and a root cause of failure. Temporary project staff, whether they are sourced internally from their day jobs or externally, lack the subtle understanding of the structural risks inherent in their respective organisations. Even for internal full time PM resources turnover is high, meaning that the experience they accumulate in avoiding the bear traps is lost to the organisation.

“It just feels like we are constantly re-inventing the wheel in term of projects. It's just exhausting.....”

Senior Project Sponsor

We have identified a gap in terms of the real-life practice of project risk management which is also a huge opportunity for improvement.



We are advocating for a risk centric approach to project management which will ensure that the known reasons for failure are 'baked in' as the project approach is being designed. Adding perceived risks to the project after the project is organised, planned and the approach agreed is far too late.

We discuss the risk centric approach to project management on page 9.

THE HUMAN DOMAIN

Ultimately, risk management as a process within the project management domain, is supported by technology but operated by people. We wanted to focus on the people aspects of risk management to understand if there are any clues that would help us develop our understanding of project failure.

We wanted to understand how people i.e., those 'actors' working in and around projects, influence project outcomes. Understanding this perspective is vital. Our 150+ respondents are drawn from project management professionals, subject matter experts, analysts, business stakeholders at various levels, and 3rd party suppliers. We had the highest number of responses from project managers at **60%**.

90% of respondents felt fully qualified and experienced in the project environment with only **10%** being unfamiliar with any project method, such as Prince2 or PMI/PMBOK. We had good representation from various industries and size of organisations, with **80%** working in large and medium sized organisations. Over a third of the respondents dealt with project budget delivery budgets of over half a million and the vast majority, **88%** reported either wholly externally sourced project staff or a mix of internal/external staff.

“In my 20 years in project work, I’ve only ever seen 2 fully engaged project sponsors.”

Technical Subject Matter Expert

It is clear from the survey that the management of project risk is a secondary process, at least for the wider stakeholder group.



We were surprised to learn that, where projects had a high-risk profile, **40%** reported that they didn't see a change in behaviours in the project team and/or the wider stakeholder group. This is further evidence that the risk management process is treated as a 'tick box' exercise, with very little attention being paid to the consequences of the process.

28% of respondents think that their senior project stakeholders in the business are generally unaware and inactive as regards to their responsibilities around project risks and mitigation plans with only **63%** confirmed that they thought they were generally aware and active.

Managers can only act and make appropriate decisions if they have the right data. In terms of maintaining focus on risks and mitigations, only **2%** of respondents said that progress against risks and mitigations were updated as changes occurred, for instance if a risk actually transpired into an issue. Over **30%** reported that updates were infrequent and unplanned and **64%** reported that the updates were confined to being only issued at the regular project boards. Most of those that said that updates were limited to project boards added the caveat that project boards were often postponed and as such urgent risk issues were left undiscussed.

THE HUMAN DOMAIN



Substitute/ temporary staff arrive with very limited knowledge of the risks inherent within the organisation

Given that **70%** reported the use of a mix of internal and external PMs, we see this as both a blessing and a curse. As projects come and go, but organisations need to flex in terms of project staffing, and bringing in external project resources carries risks.

External project staff that have limited or no understanding of the organisation, even though they might have plenty of experience in specific types of projects (such as ERP implementation), may lack a contextual understanding of the organisation and therefore its 'bear traps'. Additionally, the risks inherent in an organisation are often the risks that traditional 'lessons learned' exercises and solutions fail to capture, because they are wrapped up in internal politics. This is to the detriment of future projects.

Whilst it is essential from a scaling up perspective, bringing on external project expertise comes at a cost, carries much risk and is a root cause issue which contributes to failure.

Conversely, experienced internal project staff have learned to navigate the organisation, understand in-built organisational weaknesses, but also run the risk of taking that knowledge with them when they leave. Individuals who build their careers around change actually value novelty, which is a key contributor to the high attrition rate amongst PMs. It's not uncommon therefore that the weaknesses and risks inherent in an organisation must be regularly re-discovered.

“Getting the balance right between permanent and temporary project staff is a constant concern for me.”

PMO Director

THE RISK MANAGEMENT PROCESS

Process is central to project risk management. Whilst the main project methodologies merely *suggest* processes for risk and issue management (mainly subjective methods), they steer clear of prescribing *when* the methods should be employed, and see the process in isolation to the rest of the project.

It is vital that the whole project team and wider stakeholder group take ownership of project risks. It didn't surprise us however that a majority, **75%**, of respondents said that risks, if they were collated at all were collated and planned by a small number of people within the project team, as opposed to the wider stakeholder group.

Nearly all PMs that responded (**94%**) confirmed that typically they carry the responsibility for managing risks and driving mitigation plans, but do not have the appropriate decision-making authority in the business to ensure the work is progressed. Most respondents (**74%**) also thought that responsibility for project failure (including overruns) often rests with the PM.

In terms of the scoring of risks, only **5%** said that risk scoring was performed by the project team AND the wider stakeholder group. Therefore, we see that most of the process remains within the project team, and not the business/organisation.

86% confirmed that assessment and scoring of risks were relative and qualitative (not quantitative) in nature.

76% said that they thought that that risk management process was adhoc, progressed manually and prone to error.

85% said that if lessons learned exercises are held at all, they are often left to the

end of a project, as opposed to incrementally throughout the project.

88% confirmed that risks and mitigations plans are often too generic and not detailed/specific enough.



Over a third of our respondents said that risks were assessed late, not central, and given a low priority, as an afterthought. What's more, a large majority of people said that project risks were collated by a small inner circle within the project team.

Only **25%** thought that project risks were collated and planned by the wider project stakeholder group.

In terms of maintaining focus on risks and mitigations, only **2%** of respondents said that progress against risks and mitigations were updated as changes occurred, for instance if a risk actually transpired into an issue.

“As a PM I feel I’ve had to carry a lot of responsibility and have felt completely isolated with regards to risk management. It’s not treated seriously in the business and rests on my shoulders, try getting stakeholders into a risk workshop.”

Senior Project Manager

THE TECHNOLOGY GAP

Project risk management is not well served by the existing technology solutions. This was confirmed by almost all (97%) of our respondents who relied on office productivity tools to support their navigation of the risk management process. This is worrying especially given the lack of fit between office productivity solutions and the demands of the risk management process.

An office productivity suite is great for the *presentation* of the manual process of risk management, but that can sometimes fool senior managers into the belief that there is real substance, if not science, behind the scenes. However, what we really see is that a small cohort within the project team, and oftentimes just the PM, collating project risks and scoring them, based on a very limited view of the project and its contextualised organisational setting.

Whilst 77% think the tech is “OK” and that they “make it work”, 14% state that it’s not fit for purpose. With no ‘best of breed solution’ process and technical solution available, we believe that it is difficult to benchmark what great looks like.



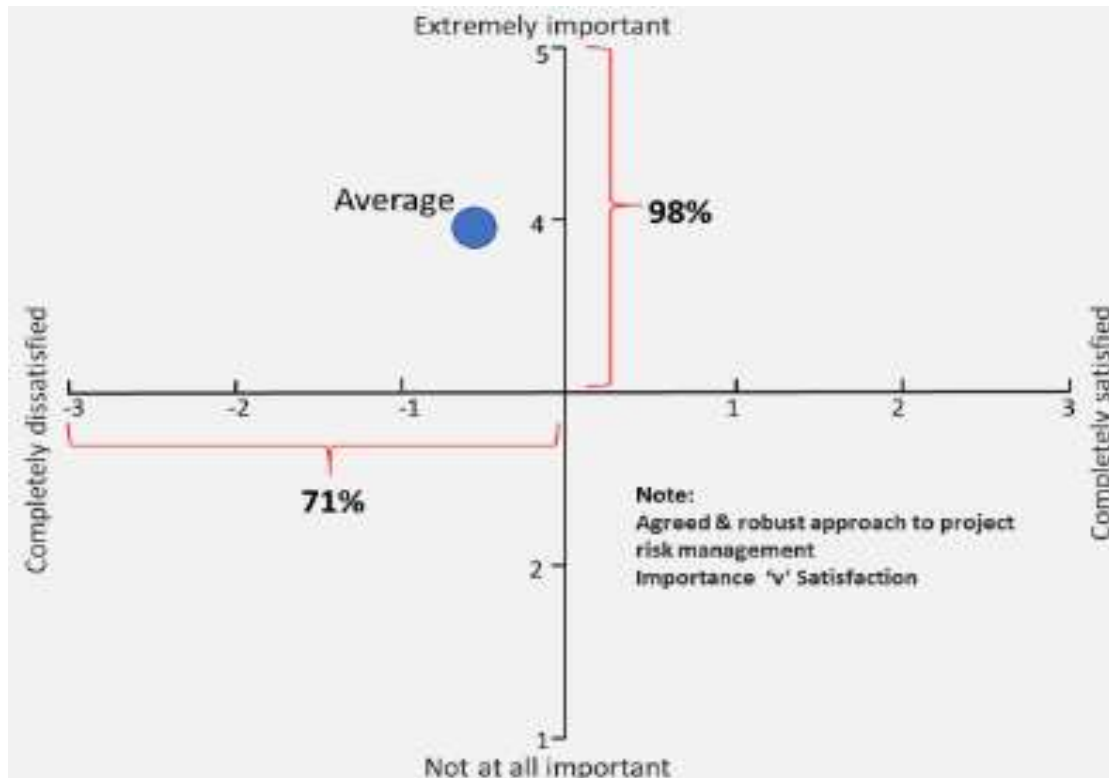
Use of office productivity tools for risk management is an example of the ‘Wizard of Oz’ MVP. There’s really little substance to what’s being offered up.

We have seen that risk management is treated as an “add-on” to the other project processes and it is not engaged with by the wider stakeholder group. We’ve also seen that current technology solutions actively facilitate the demotion of risk management in the project environment. Typically, spreadsheets are used to score risks, just because the adding or multiplication of two related metrics is required. Best practice dictates that two metrics are estimated, those being the relative impact on the project, programme, or organisation if the risk is realised and the relative likelihood of the risk occurring.

“It’s clear to me that there’s not a lot of rigour behind the kind of risk assessments we see in our project management.”

CFO

THE TECHNOLOGY GAP



It was clear to us that most of our respondents thought there was a clear technology gap in servicing the risk management process

These scores, perhaps on a scale of 0 to 5, are assessed not in absolute terms, but relative to each other, and in the mind of a limited cohort, and so are highly subjective. In short, only a small and limited number of (normally temporary) project staff subjectively estimate the relative nature of the risks. The estimates are subjective in nature and not quantitative.

If we consider the **98%** that think that *“an agreed and robust approach to project risk management supported by appropriate technology is extremely or very important”*, with the **71%** that are *“dissatisfied that they had access to agreed and robust approach to project risk management supported by appropriate technology”* we can see a clear gap between desire and reality.

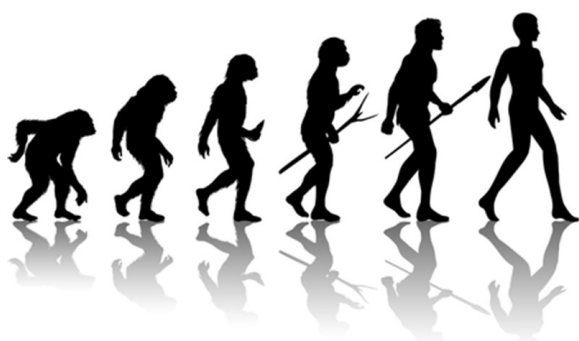
Another area where technology could have an important role is in supporting the evolutionary learning of organisations by tracking failures and successes. Generally speaking, as their careers progress, individuals in the project environment typically accumulate learning, i.e. what works and more importantly what doesn't. Many organisations pay lip service to organisational learning and overly rely on the experience of staff who we know are temporary or who belong to a profession of high turnover. **62%** of respondents reported that lessons learned from previous projects were hard to unearth. In other words, even if we wanted to structure projects around what works, and avoid the organisational specific pitfalls, we couldn't. That learning is either not captured or is hard to unearth. In effect, for the most part, projects start from scratch each and every time.

IN SUMMARY

“The definition of insanity is doing the same thing over and over and expecting different results.”

....often attributed to Einstein

There are well researched reasons¹ why we get entrenched in doing things in a particular way, the way we've always done them, and why we mostly get the same results. In project delivery, different results are often subject to luck and /or emergency management, more than good judgement and planning.



Poor organisational learning prevent evolution

Organisations rarely get better at managing projects, indeed they fail to evolve. Evolution, improvement over an extended period, entails learning about what works and what doesn't, and then deliberately and systematically embedding that learning into project systems and processes. At this point it is well worth reflecting that the current 'best practise' project management approaches, such as Prince 2, do have advice and guidance around project risk management. Much of the advice is based on the standard (and ineffective) subjective approach to risk assessment. Moreover the 'best practice' advice is often generic and is not, nor could it be, tailored for a specific organisation or project type. That being the case qualified project managers simply apply the general principles and more often than not fail to apply the principles against the actual organisational culture/background.

Recommendations

Most organisations utilise transitory project management staff, and even those that use permanent project managers are subject to a relatively high turnover. This results in the loss of organisation specific knowledge which impacts on effective risk management. **Project risk knowledge management should be a core project management process. The process should rigorously capture causes for failure/sub-optimal delivery as 'lessons' and make those causes easily available. All project staff & stakeholders should be intimately familiar with the causes.**

Many senior project stakeholders such as project sponsors, are unaware of their risk management responsibilities and are generally inactive. **Project risk management processes should place responsible project stakeholders in the centre of activities and risk profile 'ownership' must be established. This would entail the very early engagement of stakeholders from project inception, and should continue right through the delivery phase. Stakeholders must feel that they have input to, and impact on, the collation, scoring and mitigation of risks.**

“Our project boards ALWAYS bump the risk section of the project meeting”

Technology Project Manager

More often than not project risk is only discussed at formal project boards, and even then, it is low down the list of agenda items and the first item to be jettisoned if time is limited. **Risk mitigation actions should be monitored continuously. Only updating risks for an infrequent meeting is not enough. The risk management process must result in changes of behaviour, actions, plans and project structure, or it is ineffective.**

IN SUMMARY

Given the lack of timely focus on the risk management process, project personnel need to address it much earlier. ***The project plan, approach, structure, and resourcing should be built around the risks & lessons learned that are specific to the type of project and the industry and organisational setting. Trying to retrofit risk mitigations and lessons is impossible. The very first project meeting, when considering setting up a project, should be about previous projects. Discussions about previous lessons and what worked and what didn't should have a degree of primacy.***

Even if accountability centres on the project sponsor/owner, responsibility for managing the process lies with the PM. However, more often than not the PM does not possess the required authority in the organisation to reduce the risk profile via the mitigating actions. ***The whole project team, including the governance body AND business stakeholders should be involved in identifying, scoring, and managing project risks.***

“There is nothing to learn from the second kick of the mule”. ...Mark Twain

In order to rank them for mitigation, almost all projects score risks relative to each other (i.e. risk A has a higher impact or probability than risk B), as opposed to more informative quantifiable measures, i.e. time and capital costs which are set against the projects benefits or business case. ***A more rigorous approach to quantifying the impact of risks would really focus project business stakeholders and engage them in mitigating them. This would entail reflecting the realisation of risk(s) back to their impact on the business case or other financial impact, such as fines in the case of a regulatory project.***

Most project risks and mitigations are far too generic and are NOT sensitive to the specific context of the organisation, industry setting and/or type of project. ***Organisations, project staff and business stakeholders must manage project knowledge such that they build up a very specific context sensitive set of risks and working mitigations. The ongoing failure to do this is a root cause of project failure.***

The Technology Gap

It is very clear from our survey and from our interviews that, whilst there is a common consensus that technology should support ***“a robust and agreed risk management process”*** there is currently no technology solution that supports leading practice. We envisage that such a platform would:

- a.** Support ongoing and incremental knowledge management of risks and mitigations by allowing the capture of what works and what doesn't, in the context and setting of specific projects. The technology should allow this capture throughout the life of the project and also make lessons learned available at project inception.
- b.** Make provision for key stakeholders to update risk scoring at any time.
- c.** Include for automated risk management workflows in order to embed leading practice and avoid human error.
- d.** Make risk and mitigation reporting available throughout the lifecycle of the project not just accumulated for Project Boards. This would entail a permanent view of the overall risk profile and its impact on the business case and identified benefits.
- e.** Present a list of context specific (organisational, project type and industry sector) risks, linked to previous lessons and workable mitigations right from project inception. This would allow the project to be structured so as to mitigate against the risks.

THE RISK CENTRIC APPROACH TO PROJECT MANAGEMENT

In hindsight, many project risks seem obvious. When we do take the time to evaluate potential risks, there is often not much that is original about them. Yet so many of us fall prey to ‘unforeseen’ issues, believing that they came out of nowhere or that they could not have been anticipated. While this may be true in some cases, most of the time risk blindness occurs due to the way our brains are wired.

As we’ve already discussed, projects fail at an alarming rate¹ with studies regularly estimating failure rates over **40%**. One PwC² study found that only **2.5%** of companies successfully completed **100%** of their projects.

In the main, the reasons that projects fail are well known and are well documented. Indeed, there are various common sets of reasons, enumerated by research. So why is it that if we know why projects fail, we don’t see more success? In general, individual managers and organisations fail to learn the lessons from project failures, in their own organisations, in their industry setting, and wider afield.

“I think our client senior stakeholders assume there will be a crisis, instead of planning to avoid one” *CEO of 3rd party supplier*

Adopting a more risk centric approach to project management would entail organisations ensuring that the known historical root causes of failures, from both within and beyond their organisation, are detailed as project risks early in the process, and previous successful mitigations are ‘baked in’ to the project from its inception.

This ‘baking in’ is currently based on the skill and experience of individual project managers, and their ability to learn from the past. It’s not systemic in nature.

Risk centric project management considers all historical root causes for failure included for the purposes of monitoring, even if they have a very low chance of occurring. The aim being to anchor the project around historical and emerging (from both internal and external sources) risks and facilitating a real and continuing focus by project stakeholders on the risks and mitigations and managing the project and project tasks through the risk management lens. All project activities can be seen as mitigations against failure or indeed against sub-optimal delivery.

The principles of the risk centric approach

Regardless of the project method adopted, Risk Management as a process domain, is often seen as an overhead. Senior stakeholders and sponsors more often than not focus on managing the crisis, as opposed to predicting it.

Organisations that adopt a more risk centric approach need to bear in mind the following principles.

The basic principles of a risk centric approach to project management are:

- The root causes of project failures are well known and can be enumerated. Much research has been conducted into the reason for project failure, but organisations fail to learn the lessons.
- We can avoid project failures by transforming the ‘causes’ into formal risks to be managed.

THE RISK CENTRIC APPROACH TO PROJECT MANAGEMENT

- The management of project risks must be central, rather than additional to, effective project management.
- All projects, to a greater or lesser extent, are vulnerable to failure based on the known root causes.
- Each of the root causes has effective mitigations, which are both specific to the organisation and general in nature across project types and industries.
- More often than not, more than one root cause failure/risk combine in a unique way to threaten the project.
- Spotting root cause combinations and their aggregate effect is problematic.

Once these principles are understood, and processes are amended, project failure can be avoided.

Learning from Failure

Risk blindness is based on the well-researched sunk cost fallacy¹ that we are unfortunately hard wired to throw good money after bad. Having made an investment, we find it near impossible to cut our losses. More often than not we avoid looking at our losses in life because we're afraid to accept poor decision making. Some people are more averse to 'loss assessment' than others. When we throw good money after bad, it is because our brain's logic centre does not contribute to financial decision-making as much as it usually does because our prior investment prevents it from triggering.

Project benefits and costs should be specific and detailed. Risks (and issues) need to be linked to the business case such that the realisation of the risk (or combination) has a specific financial/benefit impact.

Automating sunk cost analyses into the overall project process is essential if continued bad investments are to be avoided.

Another reason why we often don't see impending failure is because we intuitively assume that the future is 'unknown' and can't be tested. Subsequently, we tend to rely on current data rather than seeking to assess and test the 'unknown' future environment. It stands to reason that the bigger the change, for example if a specific project is tackling people, process, AND technology change, then the more problematic future visioning is, and the less we'll seek to predict it. In the most complicated projects, an incremental (baby step) approach is useful such that current data can speak for future data and make the future environment more predictable. In this way, we might frame our projects around predictability and avoid the guess work.

Organisational Politics

Finally, because business changes take place in the 'political' environment of organisations, the definition of success and failure is often left ambiguous. Senior responsables are often happy to allow success factors to be subjective rather than wholly objective for obvious reasons. This is one of the most difficult challenges in terms of project risk. How do we manage project risks such that we maximise the opportunity for success, if that success is ill defined?

Ultimately, this purposeful subjectivity leads to doubt as to whether lessons can be learned, and so the cycle repeats. If we don't learn the lessons, we are liable to repeat them.

1. <https://thedeisionlab.com/biases/the-sunk-cost-fallacy/>