How Project Management Enables Businesses to either Fail or Succeed in the Modern Economy[1]

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Abstract

The triple constraint of scope, schedule and cost provides a well-known framework project managers and leaders rely on every day to manage projects. Regrettably, overreliance on this also quietly breeds opportunities to erode business success. When this business erosion occurs and accumulates over time, it deteriorates a company's competitiveness to a point where the company may die. It is therefore critical for company leadership and project managers alike to understand the pitfalls associated with a strict adherence to the triple constraint, both for managing projects as well as defining project success, and instead supplement those methods with timely and critical actions which are necessary to ensure vibrant and sustained success.

This paper in particular outlines several "traps" which look good on the surface but through which companies can squander resources by relying too heavily on scope, schedule and cost levers to control projects and measure project outcomes. Examples cite public and highly visible company successes and failures including Blockbuster vs. Netflix, MySpace vs. Facebook, etc. to reinforce the cost of missteps. Proposed actions are suggested for when a project manager feels their company and/or project is enabling a trap. Lastly, this paper also makes a case that beyond simply avoiding the pitfalls, project managers must employ improved risk management and prioritization efforts in conjunction with newer project management methodologies to produce efficiency and generate sustained success.

Introduction

Traditional methods and frameworks of modern project management, such as using the triple constraint of scope, schedule and quality to manage projects, formed the primary teachings of project management in the latter half of the 20th century. While still valid, I believe overreliance on this framework can cause negative consequences such as squandered resources and eventually, weakened competitiveness or even failure.

[1] *Second Editions are previously published papers that have continued relevance in today's project management world, or which were originally published in conference proceedings or in a language other than English. Original publication acknowledged; authors retain copyright. This paper was originally presented at the 9th Annual University of Texas at Dallas Project Management Symposium in August 2015. It is republished here with the permission of the author and conference organizers.*

This paper describes three traps I've found which are associated with such an overreliance on the triple constraint framework and offers alternatives using newer methods of Project Management. In addition to avoiding these scenarios I also recommend leveraging risk management and prioritization efforts to further offset and mitigate any potential inefficiency and offer some suggestions on how to do that.

Trap #1 (Scope): What I think is best is always best

John F. Kennedy once said "Change is the law of life. And those who look only to the past or present are certain to miss the future."[2] Surely most everyone in today's globalized economy with compressed product cycles and ever-changing economies must realize this. Yet, projects are still formed with fixed scope every day which is essentially saying that by the time the project is delivered the need will be the same with nothing changed from what I know now. Why, if everyone realizes the danger, does this dichotomy between knowledge and inaction exist? Before I can explain, one needs to understand the concept of how performance matures and changes over time as it plays a critical factor in creating the environment for this type of issue.

As early as the 1800s with the advent of the Logistic Function, the relationship between growth or performance and time has been studied deeply. More recent studies of this relationship, when mapped on a two dimensional graph have yielded some aspect of an S curve (shown at right).[3] I see this happen so frequently in business that it is one of those things I ensure everyone on my team understands. While the steepness of the S Curve can alter depending on the actual performance item being measured, an S Curve will, in my experience, always apply as a two dimensional measure of performance and time until such time as performance degrades. As examples, an S Curve applies even when learning something new (at which point you start slow then accelerate and eventually reach a point where you know most things) or when a product matures (which starts slow as infrastructure is built then accelerates to a point where it is eventually incrementally improved).

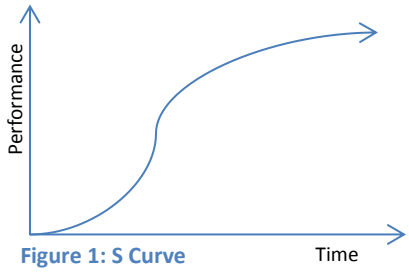

Figure 1: S Curve

From a project management perspective this basic concept of progression is important to understand because in general, over time, a company is expected to continually improve its performance more than incrementally. The constant striving to improve provides an ever-renewing source of projects and consequently project managers to lead them. But how

[2] (Kennedy, 1963)
[3] (Christensen, 2009)

companies choose projects, and particularly how they choose to scope them, is a key differentiator in performance and the likelihood of the trap emerging.

The greatest companies are those that continually create entirely new S Curves and pursue projects that provide an entirely new category of products. These are the innovators, disrupters and inventors and in reality, represent only a tiny fraction of the business world at any given time. While avoiding this trap is critically applicable to those companies as well (look at Kodak and how they missed digital technology while pursuing instead more traditional improvements), in general an innovator's nature is such that they can produce new inventions faster than the rest of the industry and that alone will largely keep them from feeling the pain of setting scope upfront. Everyone else, however, is naturally susceptible to falling victim and must fight actively to avoid this trap.

Simplistically, this trap should be easy to identify. Companies that choose fixed scope at a time when performance is rapidly increasing will deliver irrelevant projects. Companies that invest in products whose performance is nearly fully yielded are missing opportunities to create new products. The difficulty lies in trying to identify this in real time. According to Timothy Stenvoec at the Huffington Post, this failure to identify it fast enough is precisely what happened to MySpace. Instead of moving with agility after whatever the market allowed, they tried to predict and plan the product's improvements. Facebook took exactly the opposite approach and modified their plan continually and on the fly. MySpace, founded in 2003, was the most visited website in the US by 2006[4] and in 2010 it lost $350 million and was looking for a way to make money that didn't compete head to head with Facebook.[5] It's a stark reminder that the rise and fall of a company can happen very quickly.

One of the reasons it is difficult to identify in real time is because so much happens so fast when leading a project. I think about the progression of a business as being akin to driving down a new highway on a long journey. The lesson is that while you are driving something unfamiliar and are focused on an end objective, you can't see all the details along the way. You can and will, however, stand up and take notice if you see construction signs or police lights or the like. This same experience of tuning out information happens to companies' leaders and project managers in their journey so it's critically urgent to recognize the signs that suggest trouble and then spend time evaluating conditions and deciding whether corrective action is required. I believe there are three such warning signs that suggest a company has fallen into this "What I think is best is always best" trap and thus requires corrective action to pull them out.

[4] (Stenovec, 2011)
[5] (Hartung, 2011)

Outdated Methodologies

The first sign a company is falling into this trap is when they primarily leverage outdated project management methodologies to build something which requires alignment with ever-changing environmental conditions. That isn't to say that outdated methodologies are the bane of all existence. While the Waterfall Methodology has received a lot of recent criticism, it should also be credited for forming one of the first and most well-known foundations from which Project Managers can pursue improvement. In fact, I believe it probably still has some applicability in repetitive and non-strategic applications. In just about every other instance I can think of, however, the degree of environmental change in play in today's world and the methodology's relative stativity creates increased and unnecessary risk.

The challenge will be finding non-strategic realms in which to work. A convergence of events has led to ever-accelerating environmental conditions which require us to run even faster just to stay in place[6] and it is precisely in this environment where there is greatest risk. Left unchecked, the risk of using a fixed scope approach in a dynamic environment nearly assures you will waste resources while producing out of date products. The more likely reality is what a company thinks is best at the outset of a project is rarely the best by the time the project completes and additional investment will be needed to mitigate the impacts. If you are working with a company that is putting themselves at such risk, try emphasizing the risks and costs of not changing to steer them toward the right path before too many resources have been squandered.

Optimization

The second sign a company is falling into this trap is when projects are pursued that are primarily intended to optimize something. I'm not meaning all instances of optimization are bad as in fact many can be quite strategic. For example, Walmart created sustained strategic advantage by creating a stock replenishment system that optimized a number of previously-manual activities. Bad optimization, and a sign you are falling into the trap, happens when companies lack a game-changing idea and spend money instead incrementally improving an existing product.

The challenge is that optimization projects usually sound strategic or substantial. Consider an example of reducing the customer onboarding process from three weeks to three days. The challenge and risk associated with a project like this is that the three day objective will eventually be obsolete. What happens when you need the customer onboarding process to be one day but it has been optimized to three? At best this could require a rewrite of what was done (waste of money) and at worst your competitors are beating your performance because they can do something you can't. If you are faced with an optimization project don't settle for

[6] (Friedman, 2005)

sub-optimum performance. Also look at the project pipeline; if you feel there's a bigger opportunity that's being unnecessarily delayed, fight for it instead.

Decreasing Business Case Revenue

The third and final sign a company is falling into this trap is pushing a new business case on a mature product to save revenue losses. I've often seen these justified by assuming revenues will drop off if investments are not made to add incremental features. In reality, this falloff happens far fewer times than it is predicted and the incremental improvement that can be yielded from a mature product simply isn't worth the investment. The more likely scenario is that revenue will stay relatively flat until such time as a gamechanger is introduced, obliterates the original business model and revenue drops markedly.

As an example, when Netflix was in its infancy the tech team at Blockbuster was no doubt focused on things like integrating acquisitions and supporting the corporate headquarters move from Florida to Texas[7]. I am confident that there were likely some operational improvement projects as well. For example, I would surmise they focused on improving their understanding of consumer behavior, tweaking rental and/or overdue procedures which were big topics at that time and optimizing its convenience store mentality that had started in the mid-1990s[8]. By the time Blockbuster started looking at brand new business models and the technology they required (which didn't come until 2002[9]) Netflix was going public on Nasdaq with 600,000 monthly subscribers[10]. Blockbuster (as well as Hollywood Video) soon filed for bankruptcy in 2010[11]. One takeaway lesson that companies should have from this experience is that pumping funds into mature products leads to a diminished opportunity to compete. If you think your company is potentially looking the wrong way, you'll need to be organizationally savvy enough to partner with the right folks and get the project stalled or lowered in priority in favor of other (likely more speculative) opportunities.

With all three signs be sure to conduct your own investigation to yield what's really going on. The reality is that Walmart had to make incremental improvements to their new replenishment system to achieve the performance they wanted and Blockbuster probably thought their investments into operational projects during the late 1990s were strategic. I would also put additional emphasis on hiring the best and most dynamic leaders and project managers; they can change history books if they are able to recognize these situations while they are occurring and take corrective action before too much time and capital is wasted.

[7] (1996 PR Newswire Association)
[8] (Baskin, 2013)
[9] (BLOCKBUSTER LLC)
[10] (Netflix)
[11] (BLOCKBUSTER LLC)

Trap #2 (Scope): Let's use Agile so we can modify scope as we go

Projects that leverage Agile methodologies, when applied well, are great at capturing business value and reducing risk over time. As a new product is developed and introduced to others across the company it gives a chance for the best ideas to come forth and the eventual product to definitively meet the objective that originally spawned the project.

Agile methodologies can be quite dangerous, however, if they are not applied well. Companies and project managers that do not understand Agile, risk wasting countless amounts of money "chasing" scope. In some cases, I've heard stories where the original scope was lost entirely as projects lost direction and jumped from idea to idea and the final product left everyone asking "Remind me why we built this?".

I believe the key differentiator between what helps companies have success and what causes them to fall into scope chasing is the strength of the primary stakeholder and the project manager at the outset of the project and the political clout the project manager is afforded during the project. Great project managers will define what business value the project seeks to create and will hold the team to it as the project progresses through scope discussions. Those who fail to define it both upfront ***and*** ensure it is kept top of mind during the project's execution are at risk of squandering a company's resources and momentum.

If you find you are on a project that seems to be chasing scope all is not lost. While it is ideal to define the business value upfront, there is nothing preventing you from putting the brakes on and forcing the team to deal with it now. Be prepared though as it could prove quite challenging, especially as personal goals and interests will also now be more significantly in play.

Trap #3 (Schedule): We must deliver by a certain date

When companies are so focused on producing something by a certain time that either scope or cost is sacrificed, companies either lose sight of what they are building or what business case they are trying to deliver. Both scenarios can squander resources and in both cases by the time the problem manifests it is too late to turn the ship effectively. The only way I know of to avoid these scenarios is with ample upfront diligence and risk assessment. I'll get more into this later because it is generally a best practice that is applicable to all of the traps, but it is particularly so when schedule is emphasized so heavily.

Schedule+Cost (We must deliver by a certain date and cost)

In this scenario scope, and in particular quality, is often sacrificed to maintain appearances on upfront costs and the project is "completed" in whatever state it is in when the scheduled date arrives. If this is intentional and serves a productive purpose, such as might happen with an

experimental project or a pilot, then it might actually help a company preserve resources. Companies are at risk of losing sight of what they are building, however, when they employ this thought process in other scenarios. For example, consider the company that decides to push a buggy product to market (thinking they could fix bugs later) only to find customers walk away and don't come back. Or the company that considers reporting an add-on function which can be delivered later subsequently finds they can't respond timely to inquiries from customers and receive increasing complaints. These scenarios usually manifest due to poor alignment with the market and pressure late in the project to deliver. They are also costly.

To be certain, it isn't always clear upfront that scope will be sacrificed on a project. Initially the plan might be to sacrifice schedule but then market conditions change; maybe a competitor takes their version of the solution to market and the pressure is on. It is in these pivotal moments where the outstanding project manager ensures the right collaborations are done before critical decisions are made. Perhaps this might mean leveraging a relationship with a sales rep to poll some customers. Regardless, the decision needs to be made thoughtfully with adequate risk assessment.

Schedule+Scope (We must deliver it all by a certain date – regardless of cost)

When costs are flexed in order to maintain scope, quality and schedule, my experience is that it often has a "gamechanger" or strategic label associated with it. Most times these projects aren't at high risk of impacting a company to the point it hurts. That's because most projects have a goal in mind and the funding plug will be pulled in favor of better ideas if sufficient progress is not made toward realizing the goal.

When this plug won't be pulled it has usually morphed into a "pet project" and it can hurt. A lot.
I define a pet project as one where an important stakeholder has interests that either contradict or exceed the company's interests in the project. Stakeholders that have "pets" will continue to invest resources into them, despite their failure to produce, until the costs of doing so outweigh their interest in the pet. Examples in this area are rife; whether it is AOL's patch service[12] or so-called "Megaflops"[13] in the film industry, there is no doubt that pet projects caused financial harm and lost opportunities while their sponsors tirelessly chased something that in the end, did not produce as promised.

So enough bad news. There are two areas I feel project sponsors and their Project Managers should emphasize more heavily in their projects, over and above newer methodologies and other suggestions above, as these behaviors will help avoid all of these traps (and more). These areas are risk management and improved prioritization.

[12] (Brown, 2013)
[13] (James, 2005)

Behavior #1: Risk Management

Risk Management has long been a focal area for Project Management excellence and was included as its own chapter in the first edition of the Project Management Book of Knowledge[14]. New multinational and global standards are emerging though. At the time I am writing this, The International Organization for Standardization (ISO) is considering whether to publish edits to their standards in 2016 or an entirely new standard in 2017[15]. North Carolina State University surveyed 1,093 business executives and found that 59% believe the volume and complexity have changed significantly while risk oversight has not matured[16]. So effectively one could infer from these facts that the world has learned more, projects are growing in complexity and there are few doing anything about it. By themselves, these trends suggest a growing problem which warrants additional effort. But couple that theoretical need with the applied and proven ability to improve project performance by effectively managing risks and it's a headscratcher as to why such lackluster performance is allowed to continue.

When I've talked with other leaders and project managers about risks, I've found that most know how to identify risks but break down when systemically identifying, communicating and managing them. There are three reasons.

First, it takes discipline to brainstorm everything that's possible and get it all documented. Not everyone who is a project manager enjoys this aspect of the work and many choose to focus their attention elsewhere.

Second, team dynamics impact the approach that's taken. Throughout a new venture it is a lot more fun to talk about the possibilities that are being built than the potential causes of failure. I've seen some project managers spoil the team's fun by talking only about risks and others try to do the identification and prioritization alone without input from others. The first scenario causes low priority risks to be over-managed and the second can leave the team unaware of important risks (and therefore not mitigating them) until they manifest. Both of these behaviors inhibit business efficiency, which is often why a project was pursued.

Third, Project Managers are not often effective at identifying all the risks nor facilitating their teams to do so. I talked previously about the pitfalls of emphasizing a project's schedule above scope or cost but even so not many projects identify and talk about risks that regularly manifest related to this.

As an alternative, project managers have to find a method that works in their company's culture and includes people at the right time. They need to use this method to flush out all of

[14] (William R. Duncan, 1996)
[15] (Tranchard, 2015)
[16] (Report on the Current State of Enterprise Risk Management: Update of Trends and Opportunities, 2015)

the important risks and get the team's innovators to produce creative solutions to the most problematic risks. Lastly, they need to maintain a flexible execution plan that ensures important mitigation strategies are successfully executed, stakeholders are aware of the ever changing balance of risks, costs and benefits, and project team members are contributing optimally to the project's goals. Doing these things more consistently will produce better results.

Behavior #2: Prioritization

While risk management is evolving quickly, that isn't necessarily the case for prioritization. The concept of portfolios and programs has been around for quite some time and obviously prioritization is an important function of those who manage them. The behavior I want to emphasize be taken up isn't to reinvent those processes but rather to challenge when they are flawed. Doing this well requires getting the right projects into the pipeline and filtering them out at the right time while underway.

The Project Management Institute offers five criteria for organizations to prioritize projects: ROI, Budget, Human Resources, Technology, and Organizational Priority[17]. I would argue that these are flawed at best. For example, prioritizing strictly based on ROI leads to fuzzy ROI assumptions and missed strategic opportunities. The most effective way to handle prioritization is not by a systemic arbitrary measure but rather by careful calculation of perceived business value after looking through all available lenses. This includes evaluation of competing projects, risks involved and a team's perceived ability to deliver sustained value on the project

Once a project is underway good prioritization practices must inevitably continue on a virtually around the clock basis. Risks must be continually assessed and prioritized as the landscape changes and also features must be prioritized against each other. Using the Agile methodology as a base framework can to some extent encourage this. I've seen or heard about a number of methods including project tollgates, project contingency usage, and fixed-timeline reviews which are meant to serve this need but all fall short of optimizing efficiency because they wait until a point in time to make a decision based on partial information. Companies should instead be empowering those who are in the trench to make real-time and more accurate decisions. Project managers who are empowered and encouraged to make a case for killing projects in favor of others will add more value to an organization, even though it is likely that not all of their recommendations would be accepted.

All this said, at the end of the day the ability for a team to deliver business value extends beyond prioritization and will be impacted by the effectiveness of the company's strategy, maintaining alignment to the external environment, how well risks have been managed and how effectively the team executes. Prioritization remains at the center of this success though and project stakeholders and Project Managers alike have to maintain constant focus on these

[17] (Project Management Institute, Inc., 2011)

things and advocate for change when it becomes warranted in order to produce sustained business value across the enterprise. Even so, the bottom line is if a team can't deliver the business value it really doesn't matter how well the project aligns with what the company wants to do nor how fantastic the business case looks.

Conclusion

Traditional project management methods and frameworks spawned a leap in performance from the 1960s to 1990s. Beginning in the 1990s and continuing through today are large, visible examples where overreliance on traditional project management methods likely caused severe harm to their organization. In today's global economy it is not sufficient to produce a completed project; it has to have the right strategy, have the right approach and have great execution. Those individuals that help their companies get this right will outperform their peers.

It is my sincere hope that original content such as this helps propel individuals, and eventually companies, forward into a new age of project management enlightenment. I recognize that this paper will not be timeless and new ideas will continue to emerge. I welcome anyone at any time to reach out to me and discuss current events in project management. Through those experiences I learn fast and stay sharp. We all have to do that to help our companies remain competitive.

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