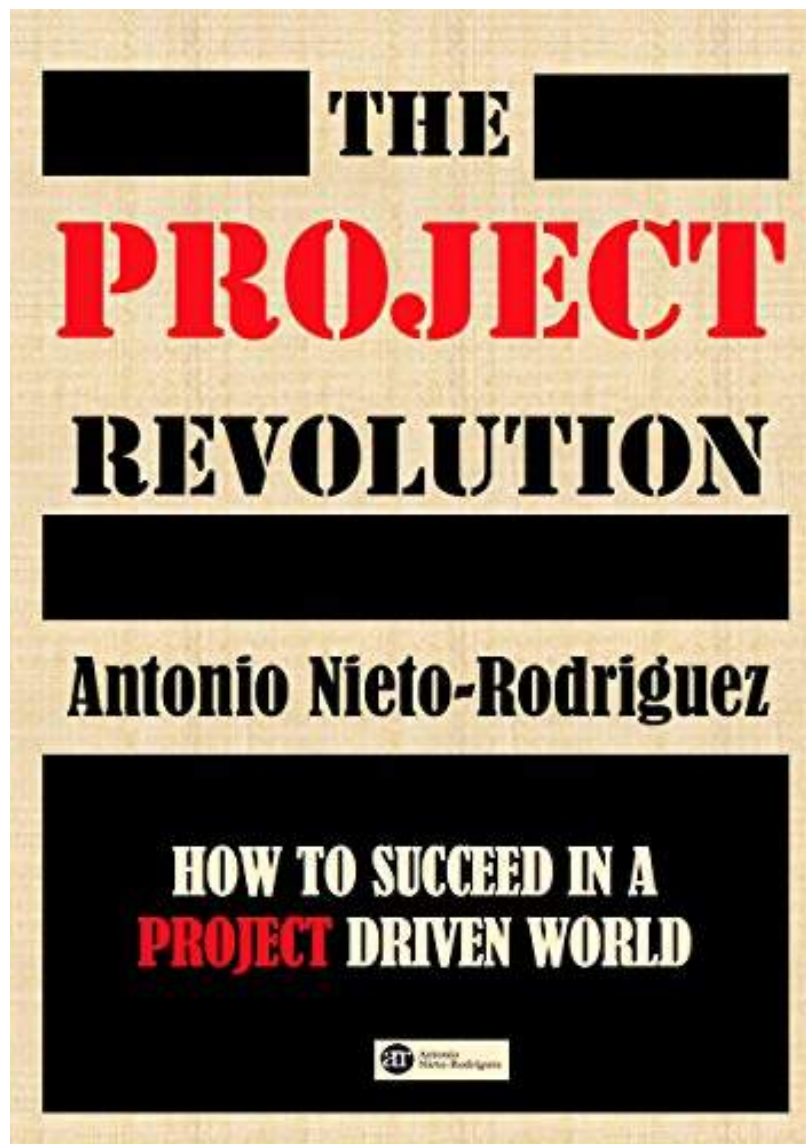


The Project Canvas Guide

Introducing the Project Canvas. What really makes projects work?

Chapter 5 from the book, "[The Project Revolution](#)", Antonio Nieto-Rodriguez



Widely used management disciplines are often linked to a few simple frameworks that can be easily understood, and applied, not only by managers but also by the majority of individuals. Porter's Five Forces¹ and value chain² analysis help to make strategy a key area for every organization to apply. The Boston Consulting Group (BCG)'s Growth Share Product Portfolio matrix,³ developed by BCG founder Bruce Henderson, helps us to understand product mix in a simple manner. And the seven Ps⁴ in marketing, first proposed in 1960 by E. Jerome McCarthy (originally there were four Ps), are an essential framework to help us determine a product's or brand's market offering. These four frameworks are some of the best known and most widely used in their domains thanks to the ability of their founders to simplify complex matters.

In contrast, project management methods have tended to be too complex to be easily understood and applied by non-experts.

Stuart Crainer and Des Dearlove, founders of Thinkers50, the Oscars of management thinking according to the *Financial Times*, told me why project management has been ignored:

People have an urge to overcomplicate and to reinvent. This is especially true in the realm of management thinking where ideas are perpetually relabelled and recycled. Project management sounds straightforward and somewhat traditional. A lot of managers are uncomfortable with these two things. They want something new and complicated, something that carries status. The reality that project management is complex, multifaceted, and universal seems to have passed people by. The fact that project management is not really taught at business schools perpetuates this.⁵

As outlined in chapter three, modern project management methods were developed primarily in the 1970s and 1980s by expert practitioners (at the beginning mostly engineers) for practitioners (also predominantly engineers). Their initial aim was to define standard project management processes and phases while also establishing common terms, roles, techniques and templates that could be used to plan and control any type of project, regardless of the area, size, complexity and industry.

The Project Management Institute (PMI)'s Project Management Body of Knowledge,⁶ better known as the PMBOK®, is considered the global gold standard in project management. In the late 1980s, the PMI witnessed a need to put together all official documents and guides to improve the way projects were managed. First published by the PMI as a white paper in 1987, the PMBOK was an attempt to document and standardize accepted project management information and practices. The first edition was published in 1996 and became an essential tool in the project management profession, with over 2 million copies in circulation.

¹ "What are Porter's 5 Forces" (Investopedia), accessed 24 October 2018, <https://www.investopedia.com/terms/p/porter.asp>

² "Porter's Value Chain" (IfM), accessed 2 October 2018, <https://www.ifm.eng.cam.ac.uk/research/dstools/value-chain->

³ "BCG Classics Revisited: The Growth Share Matrix" (BCG), last modified 4 June 2014, <https://www.bcg.com/publications/2014/growth-share-matrix-bcg-classics-revisited.aspx>.

⁴ "The 7 Ps of marketing" (Business Queensland), last modified 21 June 2014, <https://www.business.qld.gov.au/running-business/marketing-sales/marketing-promotion/marketing-basics/seven-ps-marketing>

⁵ "Leader's View – Thinkers50" (Antonio Nieto-Rodriguez), accessed 2 October 2018, <http://antonionietorodriguez.com/leaders-view-thinkers50>.

⁶ See Frank P. Saladis, "Bringing the PMBOK® Guide to Life" (Project Management Institute), last modified 2006, <https://www.pmi.org/learning/library/bringing-pmbok-guide-life-practical-8009>.

In 2017, the PMI launched the sixth edition of the PMBOK Guide, with a massive 756 pages (924 pages if we include the enclosed *Agile Practice Guide*). When compared with the fifth edition of the PMBOK, which was a meagre 589 pages, the sixth edition brings the largest content update since its creation. The *Agile Practice Guide* alone is 182 pages. In the sixth edition, the number of unique project-management-related tools and techniques proposed increased from 118 to 131.

Year	Edition	Pages	Knowledge Areas	Project Management Processes
1994	<i>Exposure Draft</i>	64	8	37
1996	First	176	9	37
2000	Second	211	9	39
2004	Third	390	9	44
2008	Fourth	467	9	42
2012	Fifth	589	9	47
2017	Sixth	756	9	49

Figure 5: Exponential growth in the complexity of project management illustrated via the growth of the PMBOK

A 756-page book is a very rich and detailed document, with lots of technical information for the advanced project managers. However, it is obviously unlikely to be accessible for any leader or executive, let alone a normal person. It is very far from the simple yet insightful frameworks of the more mainstream disciplines referred to earlier.

The pivotal assumption of the project management methods has been that documenting every aspect of a project in detail will provide a high level of control of the planned activities during the implementation of the project. Many project managers ended up producing massive numbers of documents and swathes of paperwork, leading to an overall feeling that the role was primarily administrative. It has often been seen as low added value and distant from the frontline of the organization. The elements that matter most to executives – the rationale of the project, the business case and the delivery of the benefits to the organization – are often not a relevant part in the existing project management methodologies.

A final point about traditional project management techniques is that they work well when the context (internal and external) in which the project is implemented is stable and outcomes are predictable and fixed. However, they don't work well in the connected and fast-changing ecosystems that most organizations are operating in today.

Under these circumstances, it is not surprising that we saw the raise of agile, triggered by the Agile Manifesto,⁷ written in February 2001 by 17 independent-minded software practitioners.

⁷ See <http://agilemanifesto.org>.

They valued “individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation and responding to change over following a plan”. This new methodology meant a reverse of some fundamental assumptions of project management in the changing environment driven by IT and the internet. It meant moving the focus from rigid, long-term and detailed planning to a flexible, short-term and iterative process. Agile removed most of the burdens that developers were facing working in a controlled and structured approach. The power shifted from the project manager to the IT developer. And this proved to be quite successful. Agile techniques were embraced, not only by the high-tech companies but also by almost every IT department in the world. As software itself is becoming a critical driver in almost all organizations, agile is now spreading to most aspect of work.⁸ As I will explain in chapter eight when talking about agile organizations, these are all signs that the Project Revolution is here, and that it is here to stay.



Figure 6: The gap: evidence that project management is too complex to understand and be used by the non-expert

All in all, there is no doubt about the tremendous value of these collections of knowledge and best practices. Yet, as can be seen from figure 6, which compares the numbers of occurrences of ‘project’ and ‘project management’ throughout the corpus of books accessed through Google Ngram Viewer, the disconnection between projects and project management is gigantic and continuing to grow. While the increase in projects has been spectacular – every country, region, organization and individual carries out numerous projects – the complexity just explained means that very few people use any form of project management method.

I always believed that there had to be a way to develop a simplified version of project management concepts and tools that would be easy to understand and to apply by any individual, business, official or organization, to any kind of project. This belief is reflected in the Project Canvas, a new framework that will reduce the gap between projects and project management and increase the adoption of best practices that will lead to more successful projects.

In my career of over 20 years as an executive educator, I have worked with hundreds of leaders who don’t understand, or are not interested in, the day-to-day aspects of managing a project. The trouble is that the existing methodologies and courses are too complicated and

⁸ Darrell K. Rigby, Jeff Sutherland and Hirakata Takeuchi, “Embracing Agile” (Harvard Business Review), last modified 2016, <https://hbr.org/2016/05/embracing-agile>.

train project managers to talk in technical terms about matters that don't interest the majority of stakeholders. Leaders, and those impacted by a project, primarily want to know the 'why' – the purpose, the benefits, the impact and the key elements that will make a project successful – and 'how' they can contribute to it.

Faced with the challenges of teaching project management to executives and MBAs, I developed the Project Canvas. If I wanted to keep them engaged and interested for days, I had to move away from the expert jargon – I had to simplify the language and the project management tools and techniques so that everyone was able to understand and apply them.

The framework is based on another premise. Every project – regardless of the industry, the organization (profit or non-profit), the sector (public or private), or whether it is personal or professional – is composed of exactly the same elements, which determine whether the project is a success or failure. If individuals, leaders and organizations focus on these elements and apply the techniques behind them, project success will almost be guaranteed.

In addition, as an expert practitioner, currently director of the Global Project Management Office at GlaxoSmithKline Vaccines and previously at BNP Paribas Fortis, I have a unique competitive advantage compared to other management experts from academia and/or the area of consulting: I am able to test in reality what works and what doesn't. And, not surprisingly, I have found that most of the standard project management theories are far from the reality. Like the saying goes: "In theory, theory and practice are the same. In practice, they are not."

The changes I propose are not intended to refute the methods of project management. On the contrary, my changes should make them more accessible. I want to universalize them. Neither I am against the agile methodology. I am a big fan of the improvements and shift in mindset it introduced. Instead, the Project Canvas leverages ideas from some of these concepts and allows anyone who is dealing with a project to apply them when needed.

The Project Canvas is composed of 14 dimensions – the ones that research has proven to influence and determine project success. These are grouped into four major domains. Each domain, or area of expertise, has a specific weight in the success of a project, which is indicated by a percentage. The four domains are:

- **Why:** the **rationale** and the **purpose and passion** for launching and implementing the project successfully (~20%)
- **Who:** the **accountability** and the **governance** that will ensure the project is resourced and delivered (~20%)
- **What, How & When:** the **hard aspects** of projects (definition, design, plans, milestones, cost, risk, procurement) as well as the **soft aspects** (motivation, skills, stakeholders, change management, communication) (~50%)
- **Where:** the **organization**, the **culture**, the **priorities** and the **context** (internal and external) in which the project is being carried out (~10%).

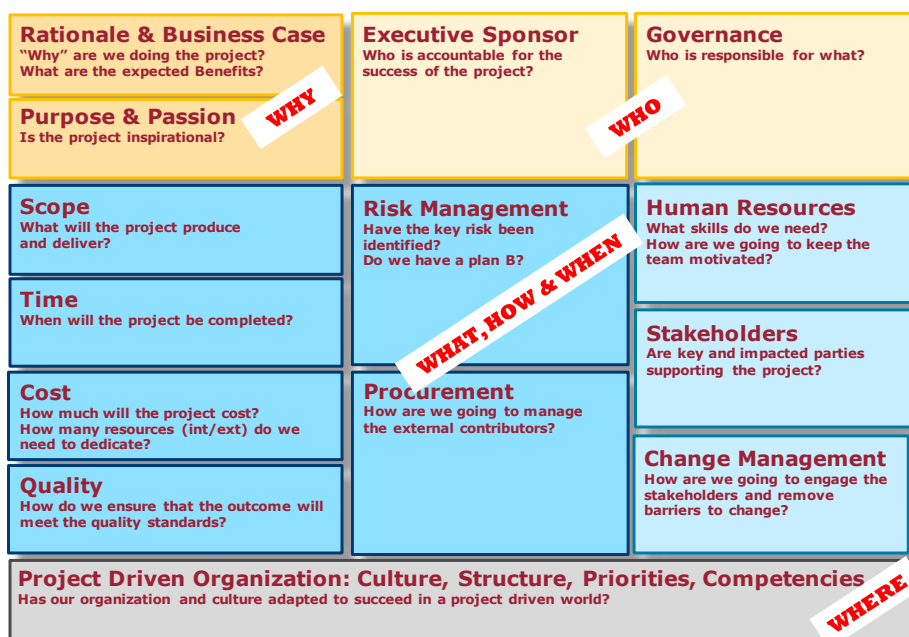


Figure 7: The Project Canvas: four domains, 14 dimensions.

In some projects, a domain might have more weight than others. However, as a project leader, owner or sponsor, you need to ensure that all four are addressed.

So, what makes the Project Canvas, this new project management framework, unique and different from all the other existing project management methods?

- It is made specifically for executives, officers and managers, but also for the newcomers to the profession: students, millennials, etc.
- It is simple and universal, and can be applied by anyone, in any kind of project.
- It focuses on value and benefits rather than processes and controls.
- It encourages the generation of benefits and impact faster.
- It ensures that every project has a purpose and aligns to the strategy of the organization.
- It focuses on implementation rather than detailed planning.
- It expands the horizons beyond the traditional project life cycle, looking at the pre-project and post-project phases.
- It is fast and flexible – it allows changes to the project whenever needed.
- It transforms project managers into true leaders of projects and organizations.
- It significantly increases the likelihood of project success.

The framework can be used by leaders and organizations at the beginning of a project to assess how well it has been defined and whether it is worth starting right away or needs further refinement. It can be applied to programmes, strategic initiatives and any other activities that can be considered projects.

The success of the Project Canvas lies on the following **12 principles**:

1. Developing a full business case is an arduous and lengthy process, yet projects need a clear rationale, purpose and connection to a higher strategy, before they are launched.
2. An active, ongoing and fully engaged executive sponsor is critical for project success.
3. Projects bring adjustments and changes to the status quo; thus resistance is expected and ought to be considered and addressed from the early stages.

4. Effective project managers have to be true leaders; they must understand the content and yet oversee the detailed activities to ensure successful completion.
5. People over processes: projects will always need motivated people to lead them, run them, execute them and close them.
6. Project failure is not always bad; often it is an opportunity to learn, to mature and to increase the focus on other more relevant projects.
7. Uncertainty is inherent in projects; risk management is essential to project management.
8. Change of initial project plans and requirements will most likely occur; agility is therefore indispensable throughout.
9. Project-driven organizations work across silos, allowing higher flexibility and faster response time to competition and changing market conditions than traditional hierarchical organizations.
10. Prioritization of projects is essential for increasing the success rate of project execution.
11. Project performance indicators should focus on outcomes (benefits, value creation, impact, opportunities and risks) instead of inputs (costs, time, material and scope).
12. Projects cannot go on forever; they have to be closed, even if sometimes not all tasks are fully completed.

Besides GlaxoSmithKline Vaccines and BNP Paribas Fortis, the Project Canvas has been implemented successfully in several organizations, yielding significant tangible improvements both in terms of return on investment and in terms of developing an execution-driven mindset and culture:

- a French–Dutch leading financial exchange company
- a leading Swiss biotech multinational
- a world’s top-ten cinema conglomerate with more than 100 theatres in Europe and North America
- a US-based top corporate law firm, one of the most prestigious in the world.

Let’s now look into each of the four domains and their 14 dimensions. All of these elements appear, to a greater or lesser extent, in every project. Besides providing descriptions and real examples, I will include some recommended questions to ask in each dimension. The answers will lead to the most relevant information for the project. There are also sections about the tools to use. There are many available, but I have selected the ones that are the most straightforward, least complicated and easiest to apply, which are also the ones I use the most.

Domain 1: Why

The **Why** dimension covers the triggers and actual meaning of a project (the rationale and business case, and the purpose and passion), which will become the drivers once the project gets underway. The drivers are to obtain buy-in and resources (from the organization), to obtain attention and time from the executives, to obtain engagement from the members of the team and to obtain support from the individuals impacted by the project.



Figure 8: Project Canvas Domain 1: Why

Rationale and business case

All project management methodologies demand that projects always have a well-defined business case. Experience shows, however, that business cases have biases and subjective assumptions, especially concerning the financial benefits from the project, which often get inflated in order to make the project seem more attractive to the decision makers. Have you ever seen a project with a negative or meagre return being presented?

One of the best-known examples is Concorde, a British–French turbojet-powered supersonic passenger airliner that was operated from 1976 until 2003. The business case claimed there would be an enormous demand, estimating that up to 350 units would be sold.⁹ Air France and British Airways were the only airlines to purchase and fly the Concorde. The company ultimately built 20 units and sold 14, at a loss of at least £4 billion.

There are hundreds of examples of overly optimistic predictions in high-profile projects. Another breakthrough project that has failed to deliver the expected benefits is the Energiewende energy project in Germany, which as described in chapter four is realizing limited benefits while costing German taxpayers an estimated €1.5 trillion by 2050. The issue with the Energiewende project is that the objectives (good practice) were overly optimistic and based on wrong assumptions (most probably to sell the project to the German people). Although there are some indications of good progress, the project as presented will still take a huge toll.

Don't get me wrong – preparation of a business case is a very useful exercise and should not be skipped or cut short. The thinking process, the research and the analysis of the options are helpful in getting a good understanding of the project and whether it is worth investing in or not. Nevertheless, I recommend caution regarding the business case and the projected returns (the financial figures), especially the expected benefits. Based on my experience, evaluating costs tends to be more accurate, to some extent, than evaluating benefits (there can be more unknowns, extra assumptions and extend over years, even decades).

My recommendation is to think in terms of the **rationale** for the project, to complement the business case.

In a very simple way, the two main rationales for launching a project are either to solve a problem or to capture an opportunity.

- *What is the problem we are going to solve with this project?*

For example, the reconciliation project that began in the 1990s aimed to solve the

⁹ “Concorde Prototypes in Production (1967)” (Aviation Week), last modified 7 May 2015, <http://aviationweek.com/quest-speed/concorde-prototypes-production-1967>.

problems in Rwanda caused by years of war between the Tutsi and Hutu peoples.

- ***What is the opportunity we are going to capture with the project?***

For example, the goal of the Boeing 777 project was to capture a huge opportunity in the commercial aerospace market. Airline customers wanted a wider fuselage cross-section, fully flexible interior configurations, short- to intercontinental-range capability, and an operating cost lower than existing models.

If you cannot answer either of these two questions easily and plainly, you should refrain from launching your project and research it further until you find the real rationale behind it.

Projects should have a clear rationale and at least one SMART objective (specific, measurable, action oriented, relevant and time-based; see further details below). Every project should have at least one clear and easy-to-memorize objective linked to the ultimate purpose. Business cases theoretically should have goal statements spelled out within them, yet practice tells us that these typically get diluted in endless swirls of information. Having one single objective for the project that uses the SMART technique is a necessity. It is incredible how many project managers talk about the products or deliverables of their project: the new software, the new platform, the expansion programme, the new company values, the reorganization, the digital transformation project... All of this is dull – it doesn't inspire either organizations or people to want to work on a project.

However, it is important to highlight that the project rationale and key objective should not be overly optimistic or based on the wrong assumptions. The project manager and sponsor have to ensure that the goals are realistic – or, even better, stretched but achievable.

Key questions to ask:

- *Does the project have a solid business case with a clear rationale?*
- *Does the project have a clear purpose with at least one quantifiable objective?*

Tools to use

SMART objectives: The November 1981 issue of *Management Review* contained a paper by George T. Doran called “There’s a S.M.A.R.T. Way to Write Management’s Goals and Objectives.”¹⁰ Since then, SMART objectives have become an essential tool to focus people on what really matters and remove distractions. Every successful project needs at least one clearly articulated objective. SMART is an acronym for the following five elements:

- **Specific:** provide the “who” and the “what” of the project.
- **Measurable:** focus on “how much” the project will produce.
- **Action-oriented:** trigger practical actions to achieve the project objective.
- **Relevant:** accurately address the purpose of the project.
- **Time-based:** have a time frame indicating when the objective will be met.

An iconic example of a SMART objective is John F. Kennedy’ moon landing project: he wanted the US to be the first country to put a man on the moon, before the end of the 1960s.

What to do to ensure project success

¹⁰ George T. Doran, “There’s a S.M.A.R.T. Way to Write Management’s Goals and Objectives,” *Management Review* 70 (1981).

Starting a project with an unclear rationale, an absent purpose and imprecise goals will most likely lead to project failure. Having clarity on the purpose and the benefits is not only important for making the decision on whether to invest or not; it also serves as key driver to engage and motivate the team members and the organization as a whole in supporting the project.

Purpose and passion

Two of the newer elements in the Project Canvas are purpose and passion. Besides having a rationale, a project should be linked to a higher purpose. Jim Collins and Jerry Porras, authors of the business classic *Built to Last: Successful Habits of Visionary Companies*,¹¹ provided a useful definition of ‘purpose’, which we can adapt as follows:

A project’s purpose is its fundamental reason for being. An effective purpose reflects the importance people attach to the project’s work – it taps their idealistic motivations – and gets at the deeper reasons for a project’s existence beyond just making money.

Passion is a very strong feeling or an emotional connection about something or a strong belief in something. Passion is when you put more energy into something than is required to do it. It is more than just enthusiasm or excitement; passion is ambition that is materialized into actions intended to achieve something bigger. Passion is closely related to purpose. If passion and purpose are aligned, project success is almost guaranteed. Hunter S. Thompson, the gonzo journalist and novelist, once said: “Anything that gets your blood racing is probably worth doing.”

People have enormous strengths; when a project they work on is connected to their purpose and passion, they can do amazing things, more than they have ever imagined. The best project leaders know that it is possible to tap into people’s strengths through their hearts. The nice thing about it is that people don’t have to be great at something to be passionate. Steve Jobs was not the world’s greatest engineer, salesperson, designer or businessman. But he was uniquely good enough at all of these things, and was driven by his purpose and passion to do something far greater. Conversely, too, lack of conviction about a project can quickly be expanded to the rest of the team.

According to strategy implementation guru Jeroen De Flander, passion is the emotional connection that kick-starts travellers¹². Successful strategists aim for the heart first.

Key questions to ask:

- *What is the emotional connection to the project?*
- *What would make people volunteer and contribute to the project?*

Tools to use

Choosing the purpose: Defining your project’s purpose is all about clarity and alignment. The purpose should not be fancy words – it has to be genuine and it has to feel meaningful. These are a few questions that can help you to determine the purpose of your project:

- Why does the project matter?

¹¹ Jim Collins and Jerry I. Porras, *Built to Last: Successful Habits of Visionary Companies* (New York: HarperBusiness, 1997).

¹² Jeroen De Flander, *The Execution Shortcut: Why Some Strategies Take the Hidden Path to Success and Others Never Reach the Finish Line* (The Performance Factory, 2013)

- What opportunity would be lost if the project were not carried out?
- To whom does the project matter most? The sponsor, the project leader, everyone?
- Why would anyone dedicate their precious time, energy and passion to the project?

Another easier method of finding the purpose of a project is to ask, “Why are you doing the project?” Usually it is necessary to ask this question five to seven times to get to the essence of the matter. Once you have the real reason, ask “by when” and “how much”. If after the exercise you don’t reach something concrete, then I would strongly recommend that you do not start the project.

Questions to ask to identify a project’s passion:

- Does the project have an emotional element?
- What makes the project great and unique?
- What will be remembered about the project ten years from now?
- What aspects would make people volunteer to participate and to contribute to the project?
- Is the project’s passion aligned with the project’s purpose?

Develop and share stories: As Jeroen De Flander explained me, “stories make messages stickier. Wrap a story around your message and it becomes 20 times easier for the listener to remember.”¹³ Stories put information in a context that people can relate to. Also, they offer a second benefit, which is to facilitate an emotional connection – “they reach for the heart.” Finally, a good thing about stories, including project stories, is that they do not have to be invented, just spotted.

As Anders Inset, a world-leading business philosopher, once told me:

Bezos is not using PowerPoints, he’s using storytelling, and people are tapping into that, getting an understanding of the topics, trying to visualize how to explain it. And that’s how a project succeeds, and I’m a strong believer of that.¹⁴

What to do to ensure project success

Psychologists have done extensive research on the impact positive thinking and ‘believing in success’ can have on individuals. In fact, success is a self-fulfilling prophecy. When we expect to succeed, we automatically mobilize our internal resources to achieve the expected, and all this happens without our rational consent. Moreover, when others believe in us, the dynamic is reinforced. That is why it is important for a project leader to create a positive environment where successes are applauded and the difficulties of a project are downplayed, so that a can-do spirit and attitude can be cultivated in the team. People need someone who believes in them so they can believe in themselves.

Domain 2: Who

The **Who** domain relates to the executive sponsor and governance, and it addresses the elements of accountability and allocation of responsibilities. An organization or business has a chief executive in charge and accountable for its operations. The same should happen with a project, in the role of the executive sponsor, who is the ultimate accountable person. Yet,

¹³ Personal communication.

¹⁴ Personal communication.

more often than not, the role is either not understood or not performed consistently with the importance it has for the success of the project. Establishing a clear governance structure at the beginning of the initiative is essential too.

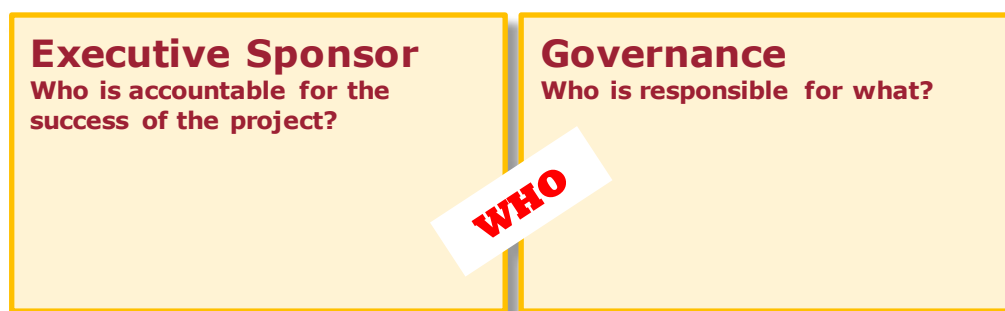


Figure 9: Project Canvas Domain 2: Who

Executive sponsor

Many projects start without it being decided who is ultimately accountable for their successful delivery. As projects tend to go across departments, business units and countries, they are often prone to ‘shared accountability and collective sponsorship.’ As a result, many executives feel responsible, yet no one is really accountable for driving the project to completion.

In many projects, the selection of the executive sponsor is not done purposefully. The role is often seen as something symbolic, often a reflection of authority: “The more projects I sponsor, the more powerful I am.” This is one of the most common errors that lead to systematic project failure.

Organizations need to understand that the executive sponsor is one of the most vital and influential roles in any project, especially those that are strategic and transversal. The more complex the project, the more critical the executive sponsor role and the more time it demands.

Once, when I was speaking to the CEO of a large global telecoms company, he bluntly admitted that, “Currently, I am the executive sponsor of 18 projects. The five projects that I dedicate time to follow through – where I support the project leader and team, and chair the steering committee – go much better than the 13 that I sponsor but don’t dedicate any time to.”

Let’s look at an example of executive sponsorship. On 6 August 2007, over 90% of votes at Fortis’s shareholder meetings in Brussels and Utrecht backed one of Europe’s largest takeovers ever in the financial industry. The €71 billion (mostly cash) offer by Fortis, Royal Bank of Scotland and Spain’s Banco Santander was made for the Netherlands’ largest bank, ABN AMRO. On 3 October 2008, Fortis Bank was broken up after experiencing extreme difficulty financing its part of the joint acquisition of ABN AMRO. After receiving a bailout from the Benelux governments, its Belgian banking operations were disposed of in a fire-sale to BNP Paribas, after its insurance and banking subsidiaries in the Netherlands had been nationalized by the Dutch government and renamed back to ABN AMRO.

Over the period of 14 months that the project lasted before it collapsed, the ultimate executive sponsor, Fortis’s CEO, Jean-Paul Votron, was seen in Amsterdam on only two occasions. Splitting and integrating the acquired ABN AMRO bank was a tremendous challenge that generated a high level of resistance and required a fast decision-making process. The absence of Fortis’s CEO was seen by the old ABN AMRO directors and

employees as a sign of weakness, which they exploited by not supporting the separation project and avoiding sharing vital information – such as customer data – needed to advance the project according to the tight deadlines. Critical decisions (such as management appointments) needed to be made quickly but ended up taking weeks and sometimes months. In the end, the lack of executive support for the most important strategic initiative of the bank became one of the main reasons for the failure and the destruction of more than €20 billion of shareholders' value.

Key questions to ask:

- *Has the executive sponsor been appointed?*
- *Are they ready to dedicate enough time (for a strategic project, between 20% and 40% of their time, depending on the project phase) to drive the project to success?*

Tools to use

Checklist: How to select the right executive sponsor

Most of the time, the executive sponsor is naturally selected, based on where the project originates. However, here are a few criteria that may help you to choose the right person:

- has the highest vested interest in the outcome of the project
- owner of a budget, both financial and resources
- high enough up in the organization to be able to make budget decisions
- ready to dedicate at least one day of their time each week to support the project
- preferably has a good understanding of the technical matters of the project.

Checklist: Responsibilities of the executive sponsor

- ensure the project's strategic significance
- establish approval and funding for the project
- promote support from key stakeholders
- resolve conflicts and make decisions
- be accessible and approachable – on-call support for the project leader
- participate in periodic reviews
- chair the steering committee
- encourage recognition
- support closure review
- be ultimately accountable for the project.

The *Harvard Business Review* article “How to Be an Effective Executive Sponsor” provides good insights on the expectations for the role.¹⁵

What to do to ensure project success

Appoint the most appropriate executive sponsor – one person, not many. They will be accountable for the outcome of the project; it should become a priority for them.

¹⁵ “How to Be an Effective Executive Sponsor” (Harvard Business Review), last modified 18 May 2015, <https://hbr.org/2015/05/how-to-be-an-effective-executive-sponsor>.

Governance

The executive sponsor, together with the project manager, should define the project governance. The governance in a project is represented by a project chart in which the various contributing roles and decision-making bodies are defined.

One of the most important bodies in a project is the steering committee, which is chaired by the executive sponsor and run by the project manager. The members and the frequency with which they meet often determine the importance the project has for the organization. I remember being on a large integration project of two European banks. Its steering committee, chaired by the CEO, met every day at 5pm to discuss the status of the merger. Imagine the pressure that this reflected on the organization. For all of us, it was evident that the integration project was the number-one priority, and we had to show progress every day. In contrast, I have also worked on a project where the steering committee met every three months. In addition, most senior leaders didn't show up because they had other priorities, and those who were present hardly remembered what the project was about. The first project was extremely successful, the second a complete failure.

Three of the organizational challenges faced by projects that executives need to be aware of and that strong governance will address are:

- **Resources are often not fully dedicated to the project and have other responsibilities:** For example, a Java development expert whose main job is to keep the website up and running is asked to join a digitalization project. Her current responsibilities are not modified, therefore her contribution to the strategic project will be on top of her day-to-day job. Not being fully dedicated will have an impact on the speed of the project.
- **Resources have different reporting lines outside the project:** For example, a legal expert is part of a GDPR (General Data Protection Regulation) project, which is led by the vice president of the business. The legal expert is not participating in the weekly project team meetings. The vice president has tried to convince the legal expert to join, but as she doesn't report to him she doesn't feel obliged to follow his instructions.
- **Departments' objectives are different and regularly more important than the project's objectives:** For example, a finance controller is required to participate in the development of the business case of a large company-wide project. However, his direct boss, the CFO, is under pressure to finalize the annual accounts, a key objective for the finance department. Despite having some tight deadlines, the project is at the mercy of the CFO's willingness to cooperate.

Without strong governance, the inertia of the organization will make a project battle for resources and attention, leading the project to delays and eventually failure.

To address these organizational forces, senior leaders need to play a key role in supporting the project and providing the resources and time required to complete the work. Therefore, it is essential for the success of large transversal projects that senior leaders assume the steering committee role and responsibilities reflected in the organizational chart.

Key questions to ask:

- *Has the project's steering committee been established, including the frequency with which it will meet?*
- *Are appointed and selected members committed to participate?*

Tools to use

Checklist: Best practices for establishing and running a steering committee

- Does the project require major investments and impact large segments (or the entirety) of the organization, region or country?
- Have you identified which resources, departments, suppliers, partners, etc. need to contribute to the project? If any of them has an involvement of 10% or more of the total budget, they should be part of the Steering Committee.
- Are the members of the steering committee budget owners (of resources, capital, etc.) with enough decision-making power?
- How much momentum and pressure does the project need? The higher this is, the more frequently the steering committee should meet.

Use the Responsibility Assignment Matrix (RACI)¹⁶ to reflect who does what: This is a simple tool used to cross-match key activities with the various roles in a project. It considers who should be:

- responsible: for carrying out the activity
- accountable: the ultimate owner of the activity
- consulted: individuals or groups that need to be consulted and provide input
- informed: individuals or groups that ought to be informed.

What to do to ensure project success

Define and agree on a strong governance structure to ensure the commitment of the organization. Establish clear roles and responsibilities. Make sure that all contributors know the role they play and how much time and resources are requested from their teams.

Finally, appoint the right level in the hierarchy of decision makers – senior roles, often budgets owners – to the steering committee, and determine the frequency of their meetings. A steering committee should meet at least once a month. For a strategic project, a steering committee meeting every two weeks will create momentum. The higher the frequency, the higher the pressure.

Domain 3: What, How & When

The **What, How & When** domain covers the fundamental elements that constitute the project. They can be split into technical areas and people-related elements. These are the project fundamentals: hard aspects (definition, design, plans, milestones, cost, risk and procurement) and soft aspects (motivation, skills, stakeholders, change and communication). Addressing all of the elements at the right time and with enough depth will increase the chances of project success. As opposed to the other three domains, which have to be tackled from the senior level of the organization, the fundamental areas in this domain are the responsibility of the project leader.

¹⁶ “Understanding Responsibility Assignment Matrix (RACI Matrix)”, last modified 2 October 2018, <https://project-management.com/understanding-responsibility-assignment-matrix-raci-matrix/>

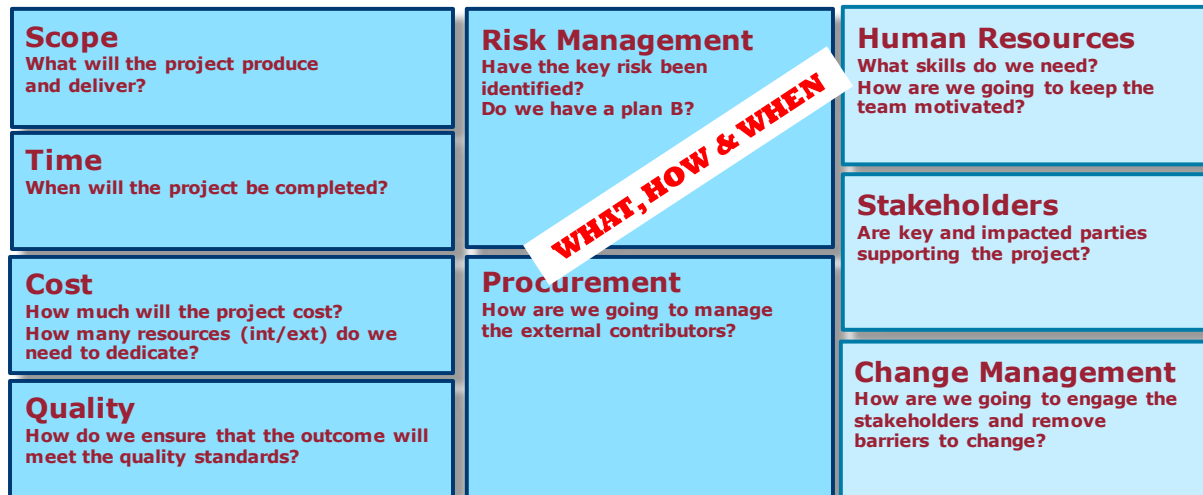


Figure 10: Project Canvas Domain 3: What, How & When

Scope

Understanding and agreeing what the project will consist of and deliver – the scope – is one of the *raisons d'être* of project management. Other terms for scope include specifications, detailed requirements, design and functionality. The scope is the most important element in making an accurate estimation of the cost, duration, plan and benefits of the project. Various tools can be used to try to determine what the outcome of the project will look like, yet this remains one of the most difficult tasks.

Depending on the type of project, there is a good chance that it will be possible, more or less, to clearly define the scope in the early stages of the project (e.g. a property development initiative). There are other projects, however, in which the scope will be impossible to determine at the beginning (e.g. a digital transformation initiative). Therefore, duration and costs estimated at the beginning of the project will mostly be wrong. Basically, if the project has a vague scope, the time and cost estimated will be utterly wrong.

The other common challenge is that even if the scope has been well defined at the beginning of the project, there is a good chance that it will change during the lifecycle of the project (also known as 'scope creep'). This will again impact the duration, cost, plans and benefits of the project. The more the scope changes (i.e. in terms design, requirements, functionality, features and characteristics), the more challenging it is to deliver the project successfully and according to the initial plan.

Key questions to ask:

- *Has the scope been clearly defined? Do you know, with precision, how the outcome of the project should look? From 0% to 100%, how certain are you that the scope will not change?*
- *Is there a clear process for managing changes to the scope?*

Tools to use

BOSCARD Framework: Created in the 1980s by Cap Gemini to help define scope of projects, this framework consists of the following seven questions:

1. **Background – what is the background of the project?** Describe the relevant facts to show an understanding of the environment, political, business and other contexts in which the project will be carried out.
2. **Objective – what are the key objectives?** State the goals of the project and demonstrate an understanding of its business rationale (the ‘why’).
3. **Scope – what is the solution the project will implement?** Describe what the project will develop and break its various stages down into milestones. Describe the resources that will be made available and the corresponding external partners, if applicable.
4. **Constraints – what are the key constraints to deliver the project successfully?** Describe the key challenges and blocking factors to be addressed in planning the project.
5. **Assumptions – what are the main assumptions taken?** State the key hypothesis that has been used to define the project rationale, objectives, plan and budget. If assumptions change later, it might justify a renegotiation of the project.
6. **Risks – what are the risks that could make the project fail?** List the risks that may materialize and affect the realization of the objectives of the project. Also, list any risks that could have an impact on the timeline and finances (such as tax and other transaction costs).
7. **Deliverables – what are the desired outcomes of the project?** Describe the key elements that will be produced by the project, and how they connect to each other and to the project objectives.

By addressing each area, you can be clear on what is expected to be done and not done, and have an upfront discussion on the boundaries of the project with the executive sponsor and key stakeholders.

What to do to ensure project success

At the beginning of the project, gather the main stakeholders and key contributors together to define and agree to the scope, in as detailed a manner as possible. Don’t be afraid of taking some extra days to address major uncertainties. A delay of one week during the scoping phase can save significant time. If the uncertainty leads to a change during the implementation, it will probably lead to a longer delay, and perhaps derail the whole project altogether.

Time

“Time is money”: this famous phrase, attributed to Benjamin Franklin, is an absolute in projects. Time is one of the major characteristics of projects in that, unless there is an articulated, compelling, official and publicly announced deadline, there is a good chance that the project will be delivered later than originally planned. Delays in projects mean, besides extra costs, a loss of benefits and expected revenues, both having a tremendous negative impact in the business case of the initiative. A project without a deadline should not be considered a project – better call it an experiment, an exploration or daily business activities.

Olympic Games, World Cups and World Expositions are massive projects that have fixed deadlines, announced and established years in advance. The way these projects are implemented varies significantly according to the means and the country’s working culture: some are finished in advance (e.g. London 2012), others just in time (Rio de Janeiro 2016). However, what is fantastic is that, despite all the challenges and different ways of dealing with projects, the Olympic Games are always delivered on time!

As we will see later, another problem in projects is that the people working on them most often have other jobs and duties that will take most of their attention. They are hardly ever 100% dedicated to the project. Time, and deadlines, are essential to help people to focus and to exert some pressure on getting the work done.

A great example of the immense power of deadlines is the project of landing the first man on the moon. When he announced his bold dream, in May 1961, US president John F. Kennedy set a clear deadline for it: “by the end of the 1960s”. That deadline stuck in people’s minds, and it pushed them to work together to achieve an impossible dream. That deadline was one of the project’s biggest success factors. Without that deadline, it is uncertain that humans would not yet have landed on the moon. The bill for the 1969 moon landing by the Apollo 11 Lunar Module came to \$25.4 billion;¹⁷ it remains one of the most expensive projects in history yet one of humanity’s greatest accomplishments.

Time in projects is peculiar. The week at the beginning of a project is the same as a week at the end of the project, but it doesn’t feel the same. Closer to the deadline, people will become nervous and tend to make mistakes. The role of the project leader is therefore similar to the role of the conductor of an orchestra. They set the tempo and intermediary deadlines, which vary throughout the project life cycle.

One of the most significant issues with the failed Google Glass project was that Google was not able to build momentum around it; the company didn’t set a definite date for the official launch of the product. Consumers were informed neither about an actual product release date nor where they could purchase the product. In fact, Google co-founder Sergey Brin suggested that Glass should be treated like a finished product when Google started selling it to the public, despite everyone in the lab knowing it was more of a prototype with significant twists to be worked out. Google should have learned from Apple on how to create buzz about new products with a public release date.

Key questions to ask:

- *Does the project have a clear deadline well known by everyone, including external stakeholders?*
- *Is the deadline realistic and likely to be achieved?*

Tools to use

Top-down, bottom-up planning: The best and most accurate way to create a plan and establish a realistic deadline is by first having an initial high-level orientation on the best timing to complete the project (e.g. launch date or opening day). After breaking down the project into activities, perform a bottom-up plan and assess whether the initial deadline is realistic to achieve. If not, think of ways to reduce the duration of the project: for example, by adding resources, by working in parallel or by doing the project in different phases. When possible, and to increase the pressure on the team, reduce the deadline by 5% to 20%. Also, to maintain the momentum, it is important to work with intermediary deadlines (or milestones) of about three to six weeks. With anything beyond that, there is a risk that people will drag along and procrastinate until they are close to the milestone date and then rush, with the risk of impacting the final quality.

¹⁷ “Top 10 Most Expensive Projects In History of Mankind” (Exploredia), last modified 26 January 2016, <https://exploredia.com/top-10-most-expensive-projects-in-history-of-mankind>.

What to do to ensure project success

It is essential that every project has a clear deadline. For the most relevant and strategic ones, the executive team has to commit to it, and it has to be officially announced. That way people will keep the end date of the project in their minds, all the time, creating the necessary focus that will help them when they have to decide how to allocate their time. A clear deadline will create pressure to make the project a success.

Cost

Budget in projects is composed mostly of the time dedicated by the project resources. These mainly include the people working on the project plus all other investments (consultants, material, software, hardware, etc.) required to develop the scope of the project. Budget is, together with time and scope, the third main constraint in traditional project management. Without budget, there is no project.

As explained earlier, the accuracy of the budget estimates depends on the scope's definition and its stability.

In the yearly budgeting and resource allocation cycle, organizations usually have two main types of budgets: capital and operational. The capital expenditure (often called CAPEX) budget is fully allocated to large investment projects, which makes the execution of projects easier. The operational expenditure (often called OPEX) budget is often higher, used for the resources that are running the organization. Two of the most frequently encountered challenges for organizations are the ambiguity that arises in projects that are funded from the OPEX budget, and the allocation of resources between operations and project activities.

Dedicating sufficient resources to a project is critical for ensuring its success.

Some projects have the luxury to receive an unlimited budget. This helps to engage more resources, accelerate the project and deliver it successful. This is often the case for projects that are launched and supported by senior leaders or top officials. This is the case for some of the majestic projects built in the Middle East in the past decade – for example, the Burj Khalifa, at 828 metres the tallest building in the world, was sponsored by the sheikh of Dubai. The project didn't have any problems with budget. Construction began in 2004, with the exterior completed five years later and the building opened to the public in 2010.

However, having an unlimited budget is not a guarantee of success. If some of the key elements described in this section are missing, there are chances that the project will fail. A clear example is the launch of the Obama administration's Healthcare.gov website project. When the website was launched on 1 October 2013, it collapsed, causing tremendous reputational damages. Yet budget was not a constraint.

Key questions to ask:

- *Does the project have a fully dedicated budget that has been well estimated?*
- *Could the project's budget absorb overruns?*

Tools to use

Top-down, bottom-up budget estimation: It is important to note that most of the cost in a project is the time spent by the team members (human resources) to perform the project activities. The best and most accurate way to create a budget is by first having an initial high-level (**top-down**) orientation on the total project cost. Identify the potential budget available

and look at the costs of similar past projects. Then, after breaking the project down into activities, estimate the cost of each activity (**bottom up**).

As with the planning, this exercise should be carried out together with the main contributors to the project. Some activities will be performed by external parties; they have to provide their cost projections. Some activities or extra cost could transpire after the project has been completed. Adding together the costs of all the activities will provide an accurate view of the total investment required to carry out the project. Large projects usually include a contingency amount (5–10%) of the total estimated cost to handle unforeseen expenses. Compare the bottom-up estimate with the initial top-down estimate and see whether there is a big gap. If that is the case, and there is an important budget constraint, consider reducing the scope or even re-evaluating carrying out the project.

What to do to ensure project success

The budget is derived directly from the scope of the project and the urgency to deliver. The more detailed the scope and the more fixed it is, the better the budget will be estimated. To reduce the risk of budget overruns, never allocate the total amount of the budget to the project at the beginning. Break it down into portions. Establish quarterly review cycles to check status and budget consumption. If the project's original business case is still valid, release another portion of budget. If the project is having serious problems, ignore sunk costs and consider seriously cancelling it.

Quality

Ensuring that the outcome of the project meets the quality expectations is an integral part of project management, yet it is often overlooked or not a priority. Often teams focus on doing the work and leave the quality part to the end of the project, when adjustments are most expensive.

It is the responsibility of the project manager to ensure that a project meets, or exceeds, the expected quality. Lack of quality should lead to the cancellation of the project.

Some projects require official and significant quality validation tests in order to start commercial production. This is the case with many infrastructure, production, life science and engineering projects.

For IT development, it is common to do user testing and other simulations to ensure that the end product satisfies the needs of the organization. Traditionally, the testing of new systems was done towards the end of the project, often leading to additional work and delays in the schedule. Nowadays, with agile development methods, quality checks are done almost on a weekly basis.

One of Apple's greatest strengths is that it makes its products look and feel easy to use. But there was nothing easy about making the iPhone – its inventors say the process was often nerve-wracking. Steve Jobs wanted to see a demo of everything. Designers would often create mock-ups of a single design element – such as a button on the iPhone – up to 50 times until it met his stellar quality standards.¹⁸

Key questions to ask:

¹⁸ Brian Merchant, *The One Device: The Secret History of the iPhone* (London: Bantam Press, 2017).

- *Have the expected quality and acceptance criteria of the project been defined?*
- *Does the project include periodic quality checks, including end customer and stakeholders' feedback?*

Tools to use

Quality assurance and quality control: Achieving success in a project requires both quality assurance (QA) and quality control (QC). Although QA and QC are closely related concepts, they are distinct. QC is used to verify the quality of the outputs of the project,¹⁹ while QA is the process of managing for quality.²⁰

In simple terms, make sure your project has a process or method to test whatever the project is delivering (whether a product, system, bridge, phone, plane or something else) and that the project plan includes regular quality checks, prototyping and testing time.

What to do to ensure project success

Quality has to be embedded in the life of the project. Involve the quality experts – internal and/or external – and ensure they commit time to your project. Quality checks, prototyping, testing, rehearsals and so on all have to be incorporated into the project plan and reported upon. The sooner potential deviations and faults in the end product are found, the less impact they will have in the project's progress, budget and timelines.

Risk management

Risk management is one of the most important techniques in project management and an essential duty of the project manager. Bluntly, if a project fails, it is because the risks that caused the failure were either not identified or not mitigated on time by the project team.

The pure nature of projects, which is to produce something new and unique, is intrinsically uncertain. Therefore, one of the central purposes of project management is to manage the risk of the project. If a project is being carried out for the first time, superior attention to risks is needed.

Monte Carlo simulation, or probability simulation, is an advanced technique used to understand the effect of risk and uncertainty in large projects, based on what-if-scenarios. It was invented by a polish born atomic nuclear scientist named Stanislaw Ulam²¹ in 1940 and named for the city in Monaco famed for its casinos and games of chance. The formula provides a series of possible values for each risk to help decision making and planning.

The Monte Carlo simulation method has many benefits: it helps in evaluating the risk of a project, predict the chances of failure, and build a realistic project budget and schedule. It is still very much in use today in large infrastructure and capital projects.

As shown in figure 11, the sooner the risks are identified and (if necessary) mitigated, the less costly it will be for the project. A great example of this phenomenon of late risk identification is the French railway operator SNCF, which in 2014 ordered 2,000 new trains that were too

¹⁹ ISO 9000, clause 3.2.10, defines QC as “a part of quality management focused on fulfilling quality requirements”.

²⁰ ISO 9000, clause 3.2.11, defines QA as “a part of quality management focused on providing confidence that quality requirements will be fulfilled”.

²¹ See <https://www.britannica.com/biography/Stanislaw-Ulam>, accessed on 24 October 2018

big for many of the stations they needed to visit.²² The train operator admitted failing to verify measurements before ordering its new stock. As a result of the mistake, some 1,300 platforms had to be modified at a cost of €50 million.

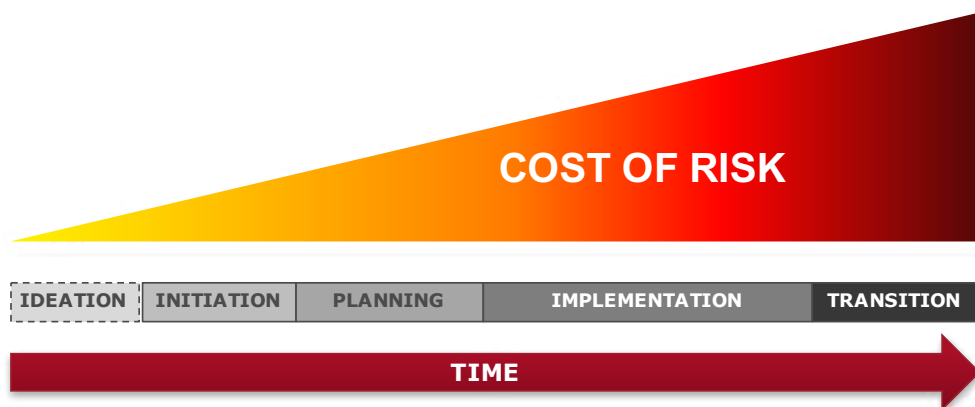


Figure 11: Cost of risk – the later the impact, the higher the cost

One assessment that is often ignored is the additional risk that a project brings to an organization. Adding an extra project to an organization that is already running too many projects will increase the risk of failure. There have been several cases of bankruptcy triggered by a company launching too many projects. The collapse of Fortis Bank is one of the most notorious.

Example

Risk management is also about having a plan B. What if at D-Day one of the risks impacts the project, or what if something unforeseen happens just before launch? A typical example is an outdoor event: what is the alternative if it rains?

It is well known that, during the launch of the first iPhone, the new gadget was not fully ready. Yet, the demo in January 2007 at the Apple Convention looked seamless to the audience. The project team at Apple were aware of the risks with the iPhone and mitigated them through detailed risk management. They designed a plan to use several iPhones, one for each key feature (e.g. making a call, surfing the internet) throughout the demo. The team rehearsed several times to ensure that there were no last-minute surprises. Despite the challenges, thanks to the detailed risk management, they were able to successfully introduce the iPhone.

Key questions to ask:

- *How risky is the project and can the organization cope with it?*
- *Have major risks been identified and mitigated?*

Tools to use

Risk matrix: The risk matrix is the most commonly used tool for assessing the risks that might impact a project. Perform a brainstorming session with the key project stakeholders to

²² “French Railway Operator SNCF Orders Hundreds of New Trains that are Too Big” (The Guardian), last modified 21 May 2014, <https://www.theguardian.com/world/2014/may/21/french-railway-operator-sncf-orders-trains-too-big>.

identify risks that could impact, or even terminate, the project. Define the importance of each risk by considering the probability or likelihood of the risk occurring and the severity of the impact. This is not a scientific approach, rather a simple mechanism to increase visibility and control of the major risks and take mitigating actions whenever management of the project feel it is appropriate.

Figure 12 is an example of a risk matrix that you can use as a basis to identify and manage the risks in your project. For each risk, identify where it falls on the grid.

		IMPACT				
		Trivial	Minor	Moderate	Major	Severe
PROBABILITY	Almost Certain	Medium	High	High	Extreme	Extreme
	Likely	Medium	Medium	High	High	Extreme
	Possible	Low	Medium	Medium	High	Extreme
	Unlikely	Low	Medium	Medium	Medium	High
	Rare	Low	Low	Medium	Medium	High

Figure 12: Project risk assessment matrix

What to do to ensure project success

Involve experts, stakeholders and past project team members in early discussions to identify the key risks of the project. Also, assess the risks for the organization of not doing the project. And don't forget to gauge the additional risk that the organization will bear by investing in the project.

Some projects will have thousands of risks, so you don't want to make the risk management process too bureaucratic. Even if it is important to start broadly with the identification of risks, the focus should be on the most likely and most severe risks.

Procurement

Most people think that procurement has nothing to do with projects and project management. Yet, it is one of the main reasons why so many projects fail. In the case of the activities needed to run an organization, the employees have the knowledge and experience required to perform the activities efficiently and effectively. By contrast, projects tend to have a novelty component; therefore, the need to hire external capabilities to deliver the project is much higher. Consulting companies provide advice and resources to organizations carrying out projects. As projects are temporary assignments, it is cheaper to engage external capacity during the project than to hire internal resources. Important projects, such as mergers and acquisitions, require significant involvement of consultants and third parties, often reaching up to 30–40% of the total resources in the acquisition project.

In the public sector, the importance of procurement is well known. Projects carried out by governments rely fully on external resources, contractors, consultants, experts and so on, reaching close to 100% of the resources dedicated to the project. Projects frequently take the form of public–private partnerships, which entail a collaborative approach to executing public sector projects. Therefore, public organizations need very advanced procurement practices. From the selection process to the execution of the project, public procurement plays an instrumental role. The challenges of procurement in the public sector include a heavy burden of procedures that need to be applied (affecting agility) and low fees (which tend to lead to less experienced consultants being hired).

Example

The public sector often struggles with large-scale projects. Many administrations simply lack the experts to manage complex construction projects. The Elbphilharmonie Hamburg reached a level of complexity that was apparently too much for the state to handle. In 2007, the construction was scheduled to be finished by 2010 with an estimated cost of €77 million. Construction work officially ended on 31 October 2016 at a cost of €789 million.

Slimmed-down administrations are barely capable of efficiently controlling construction projects, and supervisory boards staffed according to the proportions of power held by political parties fail when it comes to monitoring projects. Power and decision-making end up in the hands of the vendors of the project, who are able to draw significantly more benefits than what was initially planned, at the cost of public funds.

Key questions to ask:

- *How many subcontractors does the project have?*
- *Does the organization have a project structure to manage the vendors?*
- *Do the vendors have incentives and penalties in place to deliver the project successfully?*

Tools to use

Procurement management process: Procuring goods and services from external suppliers is critical in many projects. Their performance can reflect on the performance of the overall project. It is therefore crucial to establish a procurement management process to help administer the purchases of services and products from external suppliers needed to carry out the project. The process will enable:

- identifying the best suppliers
- negotiating the best terms
- reviewing supplier performance
- identifying and resolving supplier performance issues
- communicating the status to the project steering committee.

What to do to ensure project success

Failing to coordinate external resources can lead to project failure, especially in the public sector, which heavily relies on vendors, consultants and contractors. Failed IT projects, such as the Healthcare.gov example (see the section above on cost), often result from poor management of external resources. The larger the amount or the higher the dependency on

external resources, the more attention the project manager needs to pay to procurement. It is not an area that they should excel at, but it does require a good initial assessment of needs, effective vendor selection and constant monitoring throughout the lifecycle of the project.

The number of subcontractors should be determined by the specific competencies needed to deliver the project. In some instances, there will be several hundred, but the key is to ensure that they feel part of the team and are overseen by the project team.

It is essential to define clear roles and responsibilities and ensure that the project leadership remains within the organization. It is also recommended to find ways to incentivize external parties to stay committed and engaged to deliver according to the specifications of the project within budget.

Human resources

Today, project managers need to be project leaders too, especially for the more complex and cross-functional projects. These require pulling resources across the organization and changing the old status quo. In fact, we can argue that the best project managers are leaders but also entrepreneurs – they are the CEOs of their projects.

Marshall Goldsmith, the world's number one executive coach, told me:

Executives tend to see project managers as technical experts: very tactical people, focused on the detail challenges of the project. Modern leadership is moving into facilitation. The best CEO's I have coached are great facilitators. Therefore, the project managers of the future will have to become project leaders, strong in facilitation, rather than technical experts.²³

Over the past decades, we have seen the focus shifting from the original areas of project management, also known as hard skills (scope, planning, scheduling and estimation), to soft skills (leadership, stakeholder management and communication). A good project manager can navigate the organization, motivate the team, sell the project's benefits to the key stakeholders, and deliver on scope, on time and within budget. Other skills required by successful project manager are:

- understanding the strategic and business aspects of the project
- influencing and persuading stakeholders at all levels
- leading in a matrix organization
- creating a high-performing team from a group of individuals
- providing feedback and motivating the project team
- monitoring the progress of the project work.

Unfortunately, good project managers are scarce. And, because companies have many strategic projects, such projects are often led by managers who do not have all of the necessary qualifications.

Selecting the right project manager with the right skills and experience is a critical success factor. Yet, many organizations don't reflect too much on this step, or the process is not transparent. Another recurrent issue is that very often projects are seen as a development opportunity for high-potential managers. They take the lead of a large strategic project for two years to get exposure with top management. At the same time, they build complementary skills not required in a line function. The problem is that they don't see projects as a long-

²³ Personal conversation.

term career, thus they are not interested in learning about project management in more depth. So, they struggle as they are not aware of the tools and techniques that will make the project a success.

Another aspect to consider is project staffing. Projects need people to be carried out. Ensuring that the organization has available resources, with the right skills, expertise and experience to implement the project, is an essential responsibility of senior management. Yet, it is surprising to see how many organizations launch projects without doing a capacity check prior to confirming the initiative.

If the right resources and competencies are not available within the organization, they can either be developed through training or acquired externally. Often, the best and most experienced staff (e.g. developers) are booked on other tasks and projects. If their contribution is not suitably planned, the project is going to suffer. Lack of availability of required resources leads to delays and frequently to project failure.

Besides availability, a key aspect of project success is team commitment. As mentioned earlier, project resources tend to have other responsibilities besides their contribution to the project. Commitment to the project is never a given, especially because employees are often asked to join in such a way that it is difficult for them to refuse (we've all received an email that asks us to "kindly" agree to something but where in reality we don't have much choice). They are ready to contribute, often for free and/or giving up some of their private time, only because they want to be part of an amazing experience.

Often project managers are asked to complete extensive and often time-consuming reports to inform senior management about the progress of a project. Yet, a quick and easy way to assess the health of a project is by asking the project manager two questions:

1. How much time do you dedicate to this project?
2. How committed are you to the project?

Ideally, the answer to both should be 100%, which increases the chances of success. However, often project managers are not fully dedicated to one single project. Depending on the project, 50% is still acceptable, but below that will increase the risk of failure due to potentially feeble oversight and weak management.

Example

"We're starting a new project. It's so secret, I can't even tell you what the new project is. I cannot tell you who you will work for. What I can tell you is that if you choose to accept this role, you're going to work harder than you ever have in your entire life. You're going to have to give up nights and weekends probably for a couple of years as we make this product"²⁴ – so Scott Forstall, head of the iPhone software division, might have explained to his potential team members.

The project team was one of the most talented groups of individuals in recent history. The best engineers, the best programmers and the best designers were selected to join the team. And not part time, one or half a day a week, which is most companies' standard approach with their strategic projects. The chosen people were fully discharged from all their duties

²⁴ "The secret origin story of the iPhone" (The Verge), Brian Merchant, last update 13 Jun 2017, <https://www.theverge.com/2017/6/13/15782200/one-device-secret-history-iphone-brian-merchant-book-excerpt>

and were assigned full time to the project effective immediately. Project Purple became their life.

Forstall later explained that Steve Jobs had told him he could have anyone in the company on his team.²⁵ And the high quality of the team didn't stop with the technicians. Jobs decided to include the best leadership team too, starting with Jonny Ive, the designer of the iPod and MacBook, who was put in charge of the look of the handset.

Key questions to ask:

- *Has a professional project manager being appointed to lead the project?*
- *Does the organization have sufficient capacity and the required skills to run the project successfully?*

Tools to use

Ask the project leader two questions to help assess whether the project is in good hands:

- **How much of your time do you dedicate to this project?** Strategic projects require 100% dedication. Anything below that can lead to distraction and to a reduction in the pressure on the project. Often project managers are asked to lead several projects simultaneously. In my experience, it is hard to lead more than three important projects at the same time, and it is also hard to manage an important project while having a full-time position in the day-to-day activities of the organization.
- **How committed are you to the success of the project?** Knowing that the project will face challenges, if the project manager and resources are not committed, the project will most likely be a total failure. A great example of this positive thinking is Alan Mulally, the project manager in charge of building the Boeing 777, a massive undertaking, in the worst circumstances, after the terrorist attacks of 11 September 2001 and with Boeing struggling to survive. Yet, his strong commitment and full-time dedication drove a project of 10,000 team members to create one of the most advanced aircraft in the world.

Lack of conviction in a project can quickly spread to the rest of the team. When the conviction and morale drops significantly, the sponsor should intervene and find ways to restore confidence, either by taking corrective actions or, eventually, by replacing the project manager.

What to do to ensure project success

At the beginning of a project, senior management needs to assess and confirm the capacity to work on the project. They need to ensure the resources and the skills required to develop the solution are there. It is necessary to anticipate potential bottlenecks by freeing up resources or engaging external capacity and expertise.

Establish a standard process to appoint the best-prepared project manager to lead the project. They should have technical knowledge of project management and the required leadership competencies.

²⁵ Brian Merchant, *The One Device: The Secret History of the iPhone* (London: Bantam Press, 2017).

The organization should recognize project management as a task for professional project managers. Develop a project management competency framework and an official career path to help project managers grow in the role.

Stakeholders

Stakeholders are individuals and groups (entities, organizations, etc.) that are impacted by, are involved in or have an interest in the outcome of a project. The larger the project, the more stakeholders there will likely be. The more stakeholders, the more efforts required in terms of communication and change management activities.

Most humans need stability to feel at ease. Yet many projects bring changes to the status quo. Therefore, resistance to the project should always be assumed, especially in projects introducing significant changes into the organization. The larger the number of people against the project, the more difficult it will be to achieve. The same is true for powerful persons who are against the project. In the project world, the following aphorism is well known: “There is always someone who will be happy if your project fails. Find them and understand why.” On the other hand, identifying those stakeholders that are most powerful and convincing them of the value of the project for the organization can help to accelerate and gain executive support for a struggling project.

Example

In the case of Berlin Brandenburg International Willy Brandt Airport (see chapter one for details), the stakeholders were the state of Brandenburg, the German federal government, the city mayor, the airlines, the passengers, the workers, the citizens of Berlin and the two other Berlin airports. In contrast, we could assume that some of the key stakeholders at Berlin’s Tegel and Schönefeld airports didn’t mind the massive delays that the Brandenburg project has experienced (and continues to experience).

The more stakeholders, the more complex the project and the more effort required in communication and change management matters. Also, projects that challenge the status quo will often face quite some resistance.

In this case, an upfront identification of the key stakeholders would have helped the project team to understand the stakeholders’ needs and interests in the project. In any project, if the resistance is too strong, it is likely that the rationale for the project is not clear enough. To be compelling, it has to address the needs of the groups and people impacted by the project. In certain instances, if there is not enough buy-in from key players, it is better to postpone or not to start the project. Berlin Brandenburg Airport is a good example of a project that should not have started until full engagement from key parties was secured.

Key questions to ask:

- *How many stakeholders does the project have?*
- *Can you identify any major resistance that might bring the project down?*

Tools to use

Stakeholder analysis matrix: This matrix is the most frequently used for weighing and balancing the interests of those who are impacted by or involved in the changes a project will bring about. Whenever possible, address their needs to meet the project’s objectives. As opposed to the risk appraisal, which should be carried out with a larger group, stakeholder

analysis should be performed in a smaller group, as some of the discussions can be quite sensitive.

The initial assessment is usually performed during the preparation phase by the project leader with the project sponsor. After the major stakeholders have been identified, each one is categorized according to two dimensions. The first is the level of interest (positive or negative) in the project or its outcome. The second is the level of influence (positive or negative) that the stakeholder could have on the project. Usually this dimension is linked to the power of the individual or group in the organization. The third is using the colour coding RAG (red, amber and green) to indicate the stakeholder’s current position towards the project.

The analysis can be done on a regular basis to track the changes in stakeholders’ attitudes over time. Figure 13 is an example of a stakeholder matrix that you can use as a basis to identify and address the stakeholders impacted by and involved in your project.

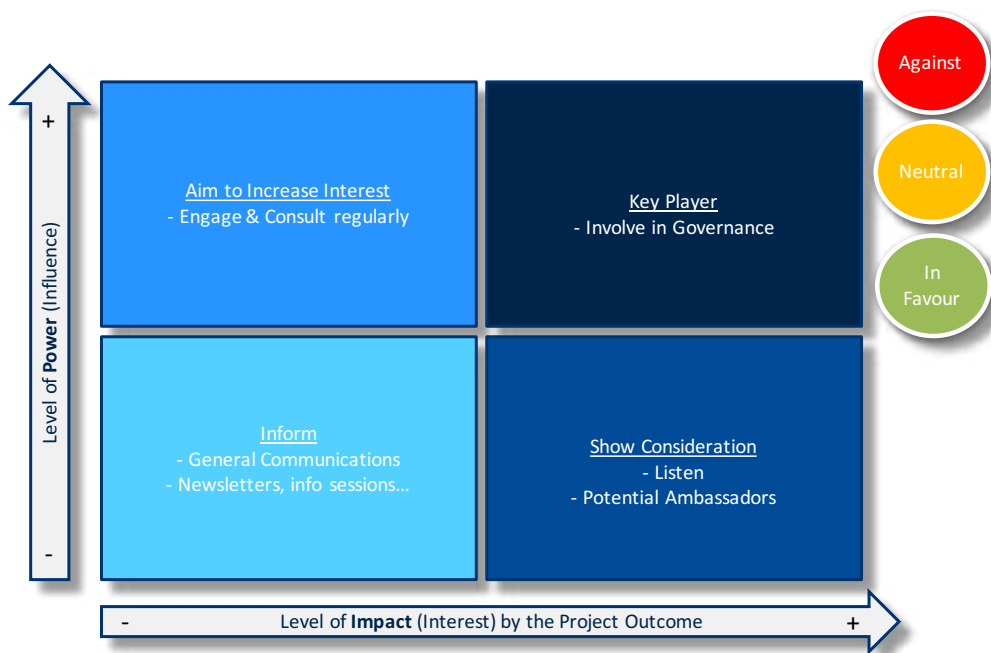


Figure 13: Project stakeholder analysis matrix

What to do to ensure project success

The shift from hard project management skills to soft and the increase in the complexity of projects have made stakeholder management one of the areas that requires the most attention. Understanding the needs of the key stakeholders, identifying win-wins and aligning stakeholders to actively support the project are key for project success but can be daunting tasks. The project manager needs to engage the executive sponsor, who plays a major role in stakeholder management.

Change Management

Change management is about ensuring that the organization and its employees are ready to embrace the changes introduced by a project. Communication is one of the most important aspects. Based on the stakeholder analysis, the project manager needs to define the types of information that will be delivered, who will receive it, the format for communicating it, and the timing of its release and distribution. According to PMI’s Guide to the Project

Management Body of Knowledge, about 75-90 percent of a project manager's time is spent formally or informally communicating during the implementation phase of a project²⁶.

According to the PMI's *Pulse of the Profession* report (an annual global survey about trends in project management), highly effective communicators are more likely to deliver projects on time and within budget.²⁷

To advance a project, it is important that everybody gets the right messages at the right times. The first step is to find out what kind of information and/or intervention each stakeholder group needs to embrace the changes introduced by the project. It is often about informing them about the reality and the status of the project, not about painting a rosy picture of the future. Communications to stakeholders may consist of either good news or bad news.

Nowadays, technology has a major impact on how people are kept in the loop. Methods of change management can take many forms, such as written updates, newsletters, face-to-face meetings, presentations, town halls, training sessions, a project website, and so on and so on.

The main challenge is not to bury stakeholders in too much information, but you do want to give them enough so that they're informed and can make appropriate decisions.

Example

One of the best examples I remember of change management happened during the introduction of the euro. On 1 January 1999, the EU introduced its new currency, the euro. Originally, the euro was an overarching currency used for exchange between countries within the union, while each nation continued to use its own currency. Within three years, however, the euro was established as an everyday currency and had replaced the domestic currencies of the member states of the Eurozone. During the years prior to the introduction, as well as during the transition, almost all European citizens knew about the project and were fully prepared for the change. Their backgrounds, nationalities, ages and other characteristics didn't matter – they knew the key dates and the benefits the euro would bring to them, and they even knew the conversion rate between their existing currency and the euro.

The project had two key success factors. First, getting the population of Europe ready for the change and communication were top priorities for the European leaders. Second, the project was done in an extremely simple way, so that every single citizen, no matter their education and culture, would understand the purpose, benefits, implications and timing of the euro conversion project.

Key questions to ask:

- *Does the project have a communication and change management plan that highlights the expected benefits for the stakeholders?*
- *Have sufficient communication and change management activities been planned to support the organization or country with the new reality?*

Tools to use

²⁶ PMBOK® Guide – Sixth Edition (2017), <https://www.pmi.org/pmbok-guide-standards/foundational/pmbok>

²⁷ *Pulse of the Profession* (Project Management Institute, 2016), accessed 6 October 2018, <https://www.pmi.org/learning/thought-leadership/pulse/pulse-of-the-profession-2016>.

The European Commission (EC) developed a detailed change management plan, in every language of the EU, which included information packs, visuals, commercials, toolkits and so on. Here are some examples that you can use as a basis for your transformation projects:

- *Preparing the Introduction of the Euro: A Short Handbook*²⁸
- *Communication Toolkit*.²⁹

In addition, the EC created a comprehensive website that included all relevant information. Most of the communication material has been used every time new member states have joined the euro.

What to do to ensure project success

All projects require a sound change management plan, but not all projects will have the same types of activities or the same methods for distributing and communicating the information. The project plan should document the types of information and change needs the stakeholders have, when the information should be distributed or needs addressed, and how the interventions will be delivered.

It is necessary to prioritize the change and communication activities and convey the right amount of information. Too much communication can be overwhelming, leading to important information getting lost. On the other hand, too little communication might not provide a clear enough picture to allow team members to complete the work that needs to be done. Project managers who understand how to send the right amount of information to the right people at the right time will be able to keep things moving smoothly, resulting in a successful project.

Domain 4: Where

The **Where** domain covers the external elements that can have a positive or negative impact on the project. These areas are often outside the control of the project leader, yet there are ways that the leader can influence the project favourably. The executive sponsor plays an important role in influencing the organization too.

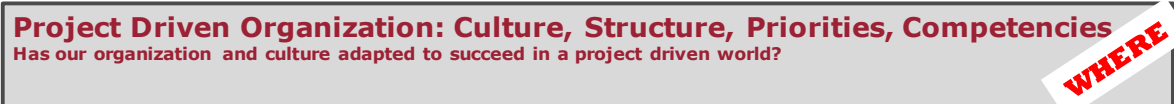


Figure 14: Project Canvas Domain 4: Where

Project-driven organization

Most Western companies have a hierarchical, functional structure, which is ideal for running their daily business activities. Budgets, resources, key performance indicators and decision power are ‘owned’ by the heads of business units, departments and functions.

However, the largest and most critical projects – the strategic ones – are cross-functional and cross-hierarchical by nature: they cut across the organization. This means that a strategic project, such as expanding the business into another country, requires resources and input

²⁸ *Preparing the Introduction of the Euro: A Short Handbook* (European Commission, 2008), accessed 6 October 2018, http://ec.europa.eu/economy_finance/publications/pages/publication12436_en.pdf.

²⁹ “Communication Toolkit” (European Commission), accessed 6 October 2018, <https://ec.europa.eu/easme/en/communication-toolkit>.

from a number of different departments and functions. Facilities experts find the location, lawyers handle the legal documents, HR experts recruit the people, salespeople develop a commercial plan and so forth. Without the contributions of all these departments, the project will not succeed.

A key element of a project-driven organization

Within the traditional hierarchical organizational structure, quick project execution is not possible. The most successful organizations today have adjusted their structure to facilitate and support the execution of projects. They have become project driven: resources, budgets and decision-making power have partially shifted to the project activities, often driven by the implementation of a corporate project management office (PMO).

The initial purpose of a PMO was to support the project leader and the project team in the administrative tasks of the projects, such as tracking timesheets, maintaining issue logs and chasing information in order to provide progress reports. The role evolved towards an office in charge of the development and implementation of policies and standards on project management. This strong focus on ‘administrative tasks’ created a negative perception of the value of these PMOs, which commonly led to them being dismantled.

The new version of the PMO has a stronger focus on value creation. They are now linked to the executive team. Their role has evolved and now includes promoting and establishing best practices, building competencies, supporting the top levels of management in prioritizing projects, and executing the most strategic projects. The most advanced PMOs have a series of project managers, often the best in the company, who are in charge of leading the most complex and transversal (company-wide) initiatives. Often the office reports to the CEO, so it is sometimes called a CEO office. Most of the large organizations today have a CEO office.

A great example of the power of the PMO comes from a leading Swiss biotech company. The CEO’s goal was to grow revenues by €1 billion by 2022. He established a transformation PMO and selected one of the brightest people in the management team to lead it. She reported to the CEO. The executive team, with the support of the PMO head, selected 13 strategic initiatives. They appointed the most talented people, who received extensive executive training. Nine out of the 13 initiatives are on track and starting to deliver some benefits, and the company is on course to deliver the CEO’s target.

Prioritization

Projects that are top priority for an organization or country always have a better chance of being delivered successfully. For example, projects relating to the introduction of the GDPR in 2018, which had a fixed deadline and mandatory adherence, were high priority in most organizations. The regulation aims to give control of their personal data to EU citizens. Companies knew they needed to comply to avoid punishment, so managers readily committed resources to the project.

Prioritizing increases the success rates of strategic projects, increases the alignment and focus of senior management teams around strategic goals, clears all doubts for the operational teams when faced with decisions, and, most importantly, builds an execution mindset and culture.

Despite the importance of having a prioritized list of projects, the reality is that most organizations and governments struggle to prioritize. Many don’t even have a list of all the projects they are carrying out. Prioritization means saying “no” to many potential ideas, or

cancelling projects previously started. Most successful companies clearly know what are their top projects and are extremely disciplined in those projects' execution.

One of the most challenging aspects of prioritization is that often all of the potential projects and ideas do make sense, yet there are constraints regarding resources and budgets. Even more importantly, the more projects there are, the harder it is to deliver them successfully.

Most companies only prioritize when they enter a crisis and are on the brink of collapse. Famous examples are Apple, LEGO, the Ford Motor Company, Boeing, Philips and Unilever. Only when the executive teams put pressure on these companies were they able to scrap hundreds of projects and products, and focus on the ones that were essential – often the ones that had made the company successful.

To explain the strategic relevance of prioritization and assist executives in the process, I developed a model called the Hierarchy of Purpose,³⁰ which is explained in detail in chapter eight.

Capabilities

Consistently excelling in project execution requires strong project management capabilities. Resources dedicated to leading projects have to be trained and certified, with the role considered as a profession. A career path and a training development programme are also musts.

Being a successful project manager today does not only require strong project management capabilities. **Technical** skills, such as planning, scoping and risk management, are a given but are not enough. Due to the increase in the complexity in organizations, project managers need to develop all of the following:

- solid **leadership** capabilities, such as communication, persuasion, an executive mindset and negotiation skills
- a good understanding of the **business and the environment** the organization is operating within; the strategy of the firm, the competition, the products and/or services, operations and technology – all are important elements that the project manager should be aware of. Basically, project managers are becoming project and business leaders.

The Swiss biotech company I referred to earlier engaged one of the leading executive education schools to design a tailor-made development programme for its most talented soon-to-be project leaders. The programme's backbone was project management, but it also included leadership, finance, team development and communication sessions. Additionally, it incorporated several sessions on the biotech's own business (e.g. new products in the pipeline) and about the technological future. It required strong commitment from the participants, as it was run over three sets of four day-sessions held over the course of a year. It was a huge investment for the company but a great development opportunity. It clearly showed the CEO's firm commitment to investing in talent to deliver his ambition through project excellence.

³⁰ "How to Prioritize Your Company's Projects" (Harvard Business Review), last modified 13 December 2016, <https://hbr.org/2016/12/how-to-prioritize-your-companys-projects>.

Key questions to ask:

- *Does the organization have a PMO that strategically supports the execution of projects?*
- *Is the project a priority for the company?*
- *Does the organization have a career path and development programme to groom project leaders and build project execution capabilities?*

What to do to ensure project success

It is important that the organization's structure is adapted to support the execution of projects. Power and resources have to be shifted, with the organization moving from the hierarchical model to the project model. The PMO should be established at corporate level and be empowered by the CEO. Shifting the structure also means creating a career path and development program for project managers.

How to apply the Project Canvas in your projects and in your organization

Fundamental transformations, such as changing a company's values and culture, always require a big investment of time, money and effort, and their benefits are very difficult to quantify. Often, the benefits are of the so-called soft – or intangible – variety, such as an improvement in motivation or the creation of an entrepreneurial mindset. The hard benefits, such as cost savings or revenue increases, are frequently not concrete. In addition, gains are generally achieved in the medium to long term, usually after three to five years of hard work.

Because CEOs and top management receive substantial pressure from shareholders and the stock markets to quickly and regularly show positive returns on their investments, they tend to be reluctant to embark on these types of initiative. Instead, they prefer to invest in acquisitions or downsizing projects, which pay off much more quickly and have a tangible impact on the bottom line.

Introducing the Project Canvas in your organization should not be as complicated as a transformation project, but it does require some radical changes in the way projects are proposed, selected, prioritized, defined, planned and executed.

A simple and agile approach I like to use to start moving towards a project-driven organization is increasing project consistency by following these **seven implementation steps**:

1. Develop a standard set of terms and definitions relating to projects.
2. Develop a common project guideline based on the Project Canvas.
3. Develop training for executive sponsors.
4. Develop training for project leaders.
5. Select the most qualified and enthusiastic people to be project ambassadors.
6. Assign them the most relevant and/or strategic projects.
7. Strive to become a project-driven organization.

In addition, apply the following **golden rules** at any time to assess your and/or your organization's project capabilities:

- Push back on ideas until they are mature enough to launch a full-scale project.

- Senior executives should dedicate at least 20% of their time to supporting a project they are sponsoring.
- Projects should have an ambitious SMART goal with a clear fixed deadline.
- The best resources should be allocated to the best projects. They should be taken out of their full-time job and allowed to dedicate 100% of their time to the project.
- Quality – testing, iterations – of the end product or solution should be an obsession.