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Pillar #1: Strategic Delivery Capability

1.0 Setting the Stage

The profession of project management has been changing and fast. This is a different world than the one that has driven the early days of the birth of this discipline. When the authors first came up with the idea behind this book, their driver was to think about and illustrate the next iteration of this profession, which could take us through the remainder of the decade. The more closely we reviewed this ambition and worked with many of the companies around the globe to pulse their views of the future of work, the more we realized that project management is truly at an inflection point and that it is finally ready to be tackled from a wider ecosystem that encompasses the culture, business value, and the sharper focus on co-creating solutions with customers and other stakeholders. The 10 pillars we selected as the foundation for this book cover this wider ecosystem. They allow us to look at where projects are strategically poised to create a distinct way of working into the future.

As we start tackling the 10 pillars, we are reminded that predicting the next generation of project management is a complex topic. Strategy is hard and to find the patterns that connect the pillars to how organizations excel in working in the future is not an exact science anymore. The chaos that the world encounters that combines a multitude of attributes of uncertainty is immense. It is finally resting upon the project managers of the future to take on the leading role of change making that we had been predicting over the past years. The system-wide mindset that these future leaders will bring has reached the right moment of being highly valued. It is our hope that this book and its pillars serve as a critical guidepost that the organizations of the future would follow in driving their focus, investing in the right skills, in recreating how their work is done, and deciding on what data truly matters.

With the increasing vast demands for complex infrastructure programs, green energy, and the number of organizations that are committing to ambitious goals on their journey to climate neutrality, and to possibly achieving net zero emissions by 2050 while they hit some intermediate targets by 2030, the role of strategic projects that are effectively delivered will only multiply. Based on industry trends, the authors' experiences, and the multiple studies that still indicate the large gap between envisioned goals and the executed outcomes, this book is focusing on the excellence practices that will enhance the opportunities for this world to see what project management principles could help us achieve.

Before getting into some of the background and barriers behind the first pillar that sets the tone for the set of critical shifts we see into the next generation of project management, namely project management being a true strategic competency, let us start with one of the *Excellence in Action* sections that support the move in that direction. Throughout the book, we will demonstrate the next generation trending we see around the selected guiding 10 pillars with examples of world class organizations that have managed to show great evidence of excellence in their operations, nicely coupled with the maturing of the principles of project management.

In this first one, a dedicated professional to driving and changing the project management profession has gone through a clear maturity path in her leading strategic work with the Mayo Clinic. As a certified Portfolio Management Professional by the Project Management Institute (PMI), she has tackled the critical transformation objectives required to get project management to a strategic competency via orchestrating a set of interconnected change initiatives as part of her portfolio responsibility.

Excellence in Action: Strategy Management Services, Mayo Clinic¹

One thing that is certain in all aspects of our lives is that “things will change.” Regardless of how much planning, preparation, and project management we do; change will continue to occur in both expected and often very unexpected ways. While this is evident in our professional and personal lives, it’s also very relevant to the project management profession as well.

Past, Present, and Future

Many of us who have been involved in project management for many years, or many decades as in my case, may remember the days when project management wasn’t really “a thing” and it definitely was not a career to be aspired to. People typically got assigned to “get something done” and would use whatever means they could to get people together, figure it out, and use “project heroics” to accomplish it. These early days of basic project management techniques had several successes, but more than likely ended in failures with long project timelines, the need for additional resources, and a variety of unanticipated surprises.

Fortunately, some really smart people figured that there had to be better ways of doing projects and created a series of methodologies, standards, and tools and templates. This began the era of formalized project management when organizations, such as the Project Management Institute (PMI), became known for sharing their knowledge, providing education, certifying practitioners, and establishing the project management profession.

This was particularly important as projects were becoming larger, more complex, and more costly. Project management gained worldwide recognition and adoption as the rate of project success increased and organizations realized the necessity and value of project management. During this time, hundreds of thousands of people became certified Project Management Offices (PMOs) were formed, and the term *project management* became part of standard business terminology.

¹ Material in this section was provided by Terri Knudson, *Senior Director, Strategy Management Services, Mayo Clinic*. She has a diverse background having served in leadership roles in Finance, Operations, Audit, Strategic Planning, Business Management, and Project Portfolio Management for one of the largest non-profits, integrated healthcare organization in the world. All rights reserved. Reproduced with permission. *The information and opinions shared in this article are those of the author based on her expertise and should not be attributed to the Mayo Clinic.*

As the years passed by and things continue to change there is a need for project management to adapt again as we enter “The Next Generation.” This iteration has an increase in technology, business agility, and accelerated deliverables that is requiring project management approaches to pivot and adapt to meet the new needs and challenges for our organizations more quickly than ever before. As Dr. Kerzner has noted, “More project managers are expected to manage strategic projects rather than just traditional or operational projects.” With this occurring over the past few years, it was time to introduce this next generation within my organization and move forward in establishing “Strategy Management Services” (SMS) (Figure 1-1).

After establishing and leading the Enterprise Portfolio Management (EPMO) at my organization for 10 years, it was time to move onto the next level, and fortunately I had the opportunity to pursue my SMS vision by taking a new position within a large, innovative department in my organization. In this role, I’ve been empowered to create the next generation of project management with an established PMO team that was needing a new direction. While it took a few months to formulate, reorganize, and introduce the new approaches; after only two years we are now a well-established high-performing team, have strong business partnerships, and are fully recognized as SMS.

Spectrum of Strategy Management Services

The vision of SMS began with the desire to move beyond the historical perspectives related to project management and a PMO by fully recognizing the critical importance of focusing on Strategic Execution and Value Delivery. While many of the services provided by SMS are based on

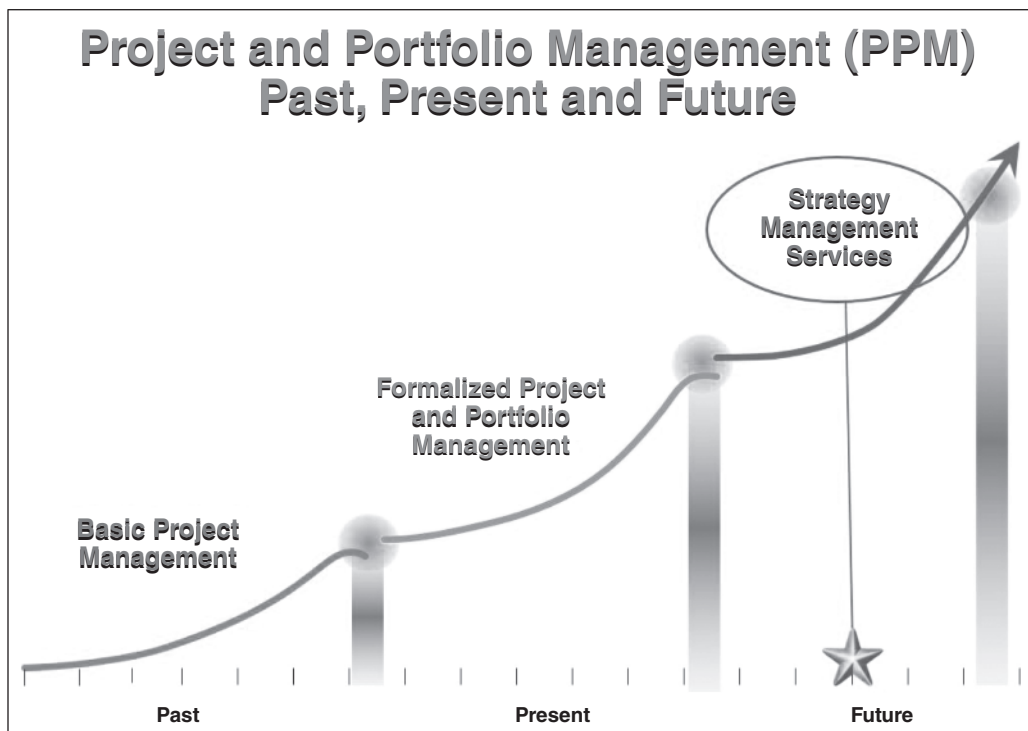


Figure 1-1 PPM Past, Present, and Future

Spectrum of Strategy Management Services



Figure 1-2 Strategy Management Services

the foundation provided by project management, business analysis, change management, and other standards, SMS recognizes that the ultimate goal is to deliver the value directed by the strategic vision of the organization.

Although there are dozens of books on strategic planning and execution, very few actually bring all the pieces together. Most of us fully realize that all the best strategic planning in the world gets you nowhere if you can't execute it successfully. The SMS "full spectrum of strategic services" is focused on using a logical approach, recognizing the interrelationships across the roles, and beginning with strategy and ending with successful results. This model allows all project stakeholders to recognize their specific roles and clearly understand how all phases need to work together to get the desired outcomes.

The stages of the SMS model are defined as follows (Figure 1-2):

01 – Develop Strategy. Partner with business areas to develop approaches to deliver the strategic goals and objectives.

02 – Architect Changes. Assess business and system capabilities to determine competencies, weaknesses, and gaps to highlight changes needed.

03 – Plan Initiatives. Create plans to address business needs by indicating project goals, leaders, resources, costs, schedule, metrics, and other attributes.

04 – Execute Solutions. Successfully deliver business solutions through a multi-disciplinary team comprised of skilled resources committed to achieving business needs.

05 – Measure Success. Provide tangible and visible measures of progress toward meeting business goals and objectives.

Project management has typically focused heavily on the model's stages 3 and 4. Providing this full spectrum of services emphasizes the need for the SMS team to be engaged in all stages – both "upstream" and "downstream." Developing abilities in these other stages occurs naturally over time, as SMS staff become viewed as business partners in strategic delivery and recognized for the skills they bring to development of the strategy, architecting changes, and delivering results.

SMS Evolution

Transitioning to strategic management services requires executive-level support, experienced leadership, and an engaged team willing to adapt to this next generation. Just like the last generation and our transition into project and portfolio management, SMS is a journey with a various steps and phases that evolve over time. To be successful, it is beneficial to have a

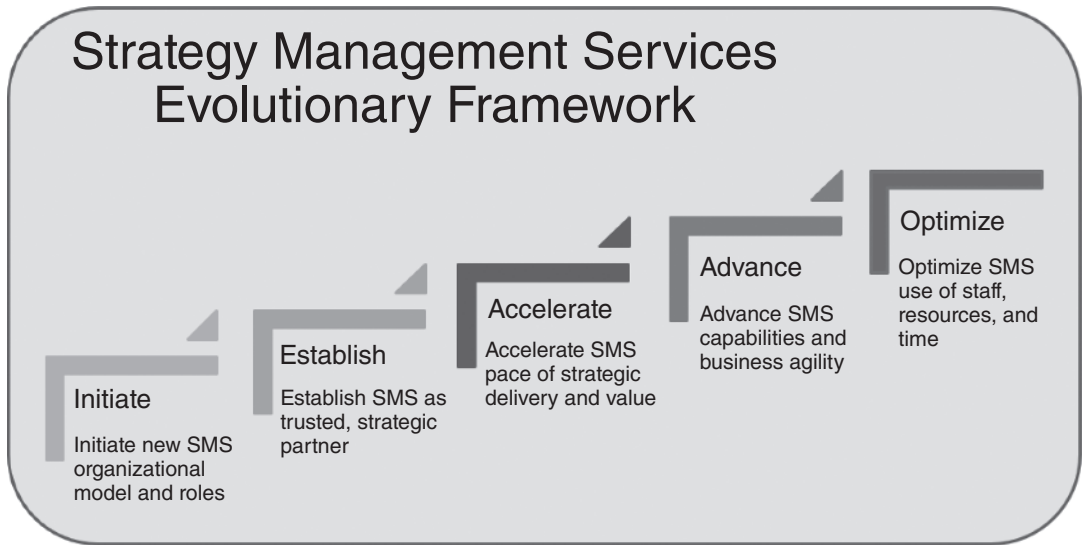


Figure 1-3 Services Evolutionary Framework

plan that outlines an intentional path and the development stages along the way (Figure 1-3). The following are the five stages created by our SMS leadership team based on a typical maturity model:

- 1) **Initiate.** The transition begins with the “Initiate” phase by introducing the new strategy management concepts to leaders, the team, and stakeholders. This includes educating the staff on new approaches, along with infusing some of the basics of PPM to emphasize its ongoing importance. Another major component of this phase is the need for organizational alignment to the strategy to ensure clear business relationships with each of the strategic pillars.
- 2) **Establish.** Once organizationally aligned, the next phase is for the leaders and members of each team to create strong and trusting relationships with their strategic business partners. This provides full engagement and involvement with the business leaders and teams as an active and accountable member that is fully available to assist, support, and respond to business needs.
- 3) **Accelerate.** With a solid business partnership and a high-performing team in place, you are ready for the level stage by building the ability of your team to respond and adapt quickly to changing business needs. This includes being involved in strategic ideation discussions, providing business analysis, assessing options for decision-making, and planning and execution.
- 4) **Advance.** Continual improvement and advancement is an integral part of any high-performing team and is the next phase of evolution as the SMS staff continues to develop new skills, build business capabilities, utilize new tools and technologies, and create innovative solutions across the SMS spectrum.
- 5) **Optimize.** The pinnacle of success is reaching the level of optimization where the SMS team are fully engaged in all aspects of strategic management, are valued members of the business team, and are consistently successful in delivering on strategic and business needs.

Next-Generation Roadmap

Once you decide to begin your journey toward strategy management services, a detailed roadmap is beneficial in highlighting some of the twists and turns along the way. This isn't an easy journey, and everyone's experiences are different along the way – depending on the organization, the leadership support, the team, and you. You as a leader in this journey are critically important as you bring a high level of knowledge, a wide range of experiences, your credibility as a strategic leader, and your unwavering commitment to lead the way to the next generation of project management.

The journey begins with the basics of project and portfolio management that many of us have obtained over the years through our education and experiences (Figure 1-4). The intermediate level is the next one that most mature organizations have used in recent years and focuses on robust resource and capacity management practices.

As the journey continues, the “climb” gets more difficult and complex as you enter the advanced phase with strategic alignment, capability models, business agility, and executive dashboards. Once you've achieved these levels, you have what you need to take the next big step and optimize your strategic management practices with modeling, roadmaps, portfolio balancing, and full benefit realization.

The ultimate “prize” for achieving this final level is one that is shared by your organization, by your business stakeholders, and by your SMS team. This is the strategic value from the results you and your team have delivered, the lessons learned and relationships built along the way, and the satisfaction that you have accomplished the full spectrum of strategic services. Best wishes on your journey!

Let us now start introducing the journey that this project management revolutionary move toward a strategic competency has taken and then we will follow with a few more diverse and concrete examples of excellence stories that contribute to the practices across the 10 pillars.

1.1 Background

Project managers are now managing strategic as well as operational or traditional projects. Executive management appears to recognize and appreciate the contributions that the project managers are making to the growth of the business. This has increased the recognition that effective project management practices can bring to a company.

The benefits of effective project management have been known for some time. Some of the benefits include:

- Performing more work in less time and with fewer resources
- An increase in profitability and customer satisfaction
- An increase in organizational effectiveness and efficiency
- An increase in competitiveness
- Improvements in quality
- Better control of scope changes and scope creep
- Application to all business units and all types of projects
- Better approach to problem-solving and decision-making
- Decision-making in the best interest of the company rather than its business units
- Delivering solutions to customers rather than just products and deliverables

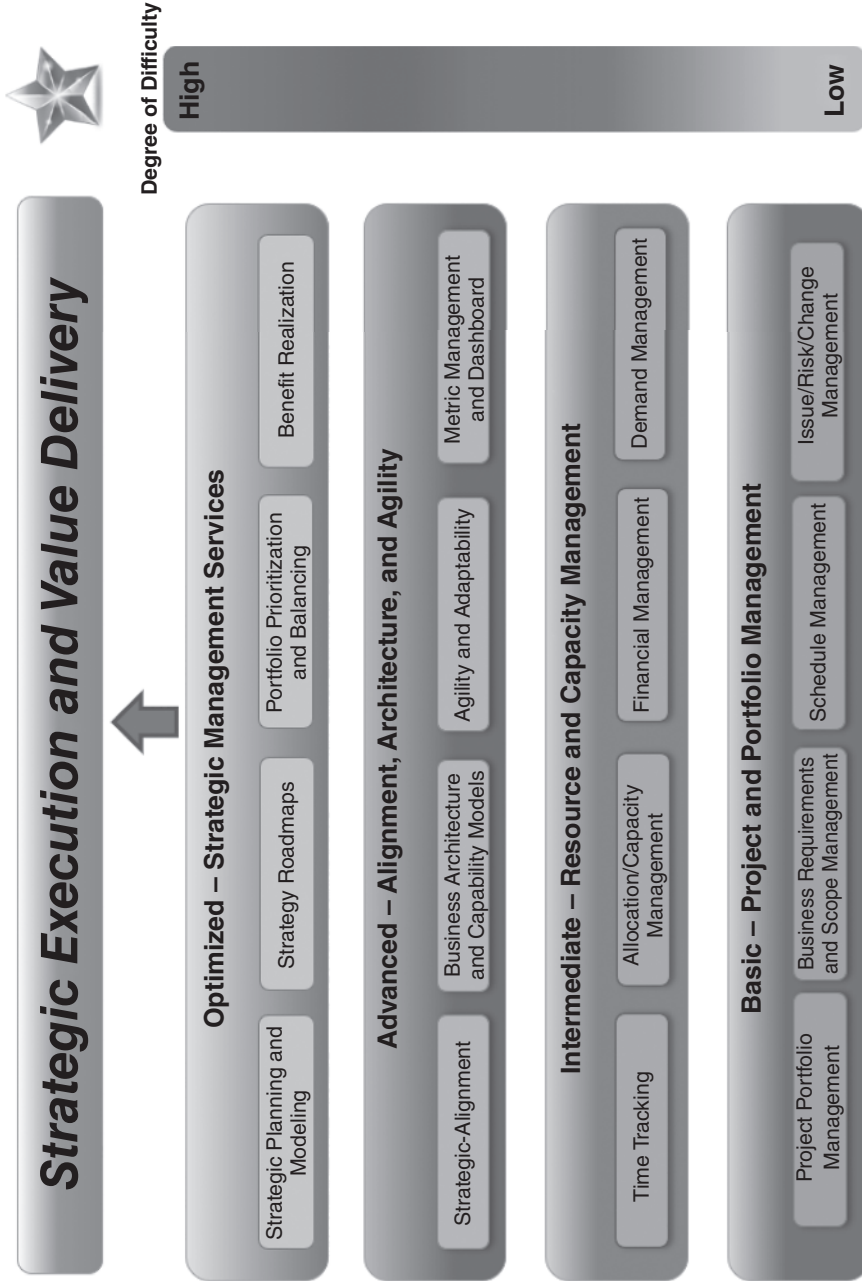


Figure 1-4 Next-Gen Roadmap

As more organizations recognize the benefits, project managers are now seen as managing part of a business rather than just projects. The challenge facing companies is in determining the best way that the company can scale and expand the required diverse project management skills.

1.2 Line-of-Sight

Trust in asking project managers to manage strategic projects has resulted in the establishment of a line-of-sight from project teams to senior management such that the teams are kept informed about strategic business objectives to ensure that strategic projects are aligned correctly. Line-of-sight not only creates the correct decision-making mindset for the workers but also provides the workers with more knowledge about the organization, thus reducing the chance for ineffective behavior. Line-of-sight can also make it easier to develop the proper risk management mindset. The notion that “information is power” is disappearing in the project management landscape as strategic information is widely shared.

1.3 Sustainable Competitive Advantage

Companies that thrive on competitive bidding for a large portion of their revenue stream, such as with project-driven organizations, promote their delivery system as well as the outcomes or deliverables. Companies are recognizing that excellence in project management can lead to a sustainable competitive advantage. Achieving excellence is not that difficult, but maintaining and continuously improving for excellence is a challenge. Maintaining excellence is a never-ending journey.

All too often, organizations that have reached some degree of excellence in project management become complacent, and then they realize too late that they have lost their competitive advantage. This occurs when organizations fail to recognize the importance of continuous improvement to maintain the competitive advantage.

Figure 1-5 illustrates the risk and why there is a need for continuous improvement. As companies begin to mature in project management and reach some degree of excellence, they achieve a competitive advantage. The competitive advantage might very well be the single most important strategic objective of the firm if it chooses to exploit this advantage.

Unfortunately, competitive advantage is usually short-lived. The competition does not sit by, idly watching you exploit your competitive advantage. As the competition begins to counterattack, you

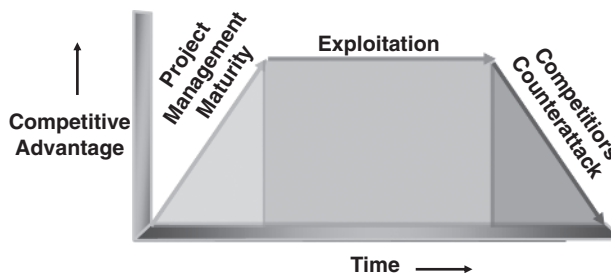


Figure 1-5 Risk with Maintaining the Competitive Advantage

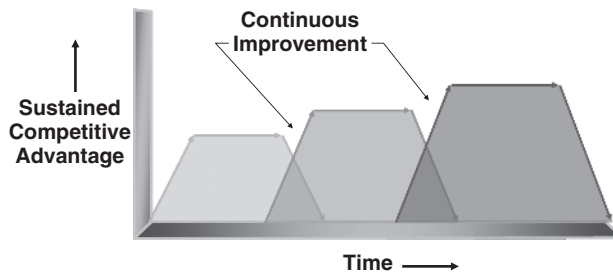


Figure 1-6 The Need for Continuous Improvement

may lose a large portion, if not all, of your competitive advantage. To remain effective and competitive, the organization must recognize the need for continuous improvement in project management, as shown in Figure 1-6. Continuous improvement allows a firm to maintain its competitive advantage even when the competitors counterattack. It is through continuous improvement efforts that the competitive advantage becomes sustainable.

1.4 High-Performance Teams

When discussing continuous project management improvement efforts, companies usually look at enhancements to the processes, tools, and techniques. What is often bypassed is the need for high-performance teams that include enhancements to people skills. Not all companies need high-performance teams, and the definition of **high performance** can change within each company. But by providing proper education and training with an emphasis on people skills and leadership, high-performance teams can contribute significantly to a firm's sustainable competitive advantage and frequently outperform similar teams.

There does not exist a clearly defined list of characteristics of high-performance teams. Academia and researchers focus on specific industries and types of projects. Warrick (2014) identified the following characteristics of high-performance teams:

- Effective leadership
- Team members that are competent, compatible, and committed to the success of the team
- Strong commitment by the leader and the team members to excellence
- Clearly understood mission and goals that team members are committed to achieving
- Clearly understood member roles and responsibilities
- Effective planning procedures
- Effective follow-up procedures and control
- Flexibility to respond quickly to needed change

Other characteristics that are often identified include effective collaboration, high levels of trust among team members, and rapid response to environmental changes.

1.5 High-Performance Organizations

What companies are now realizing is that the strategic focus should be on creating a high-performance organization (HPO) rather than just high-performance teams. The rationalization is as

follows: If we believe that we are managing our entire business by projects, then the organization rather than individual teams should be driven to high-performance outcomes. This will then lead to a potential sustainable competitive advantage.

HPOs can eliminate barriers that may hinder the achievement of strategic goals by responding and adjusting quickly to environmental changes. High levels of mutual trust and clear and open communications exist, allowing for cross-functional collaboration and the flattening of organizational hierarchies.

HPOs have cultures that focus on knowledge, collaboration, shared visions, and the right worker skillsets. Workers are empowered, asked for their opinions, and willingly accept responsibility and accountability. They are provided with the necessary information to meet customer and stakeholder needs to ensure business success.

There's no universally accepted definition of a high-performance organization. Akdemir et al. (2010) identified 26 characteristics of HPOs, as shown in Column 1 in Table 1-1. Column 2 shows typical project management practices that help support the high-performance organization characteristics. Column 3 identifies project management pillars discussed in this book that will also support the HPO characteristics.

Table 1-1 How project management supports the HPO

HPO Characteristic	Project Management Contribution to an HPO	Pillar #
Well-understood vision and values	Executives provide a clear vision and goals to project teams by establishing a line-of-sight	1
Proper use of discipline	A nonthreatening environment where teams can speak their mind without punishment and acceptance that some projects may fail due to the risks	3
Clear set of specific goals	Line-of-sight provides goals and strategic objectives to project teams	1
Strong communication	Effective social leadership and a cooperative culture promote clear and open communications	3
Trust and confidence	Effective social leadership and a cooperative culture is promoted; empowerment leads to high levels of mutual trust between team members	6
Fun	Effective servant and social leadership allow the team members to see the fruits of their efforts and make the work challenging and enjoyable	6
Decision-making at the lowest level	Effective social leadership and empowerment allows team members, even at the lowest levels, to participate in decisions	5
Effective training	The company is committed to life-long project management education	2
Performance feedback	Company believes in capturing lessons learned and best practices from performance feedback	10
Customer focus	Fosters high levels of customer and stakeholder collaboration and interaction	
Measurement techniques	Continuous exploration of new tangible and intangible metrics for performance measurement	10

Table 1.1 (Continued)

HPO Characteristic	Project Management Contribution to an HPO	Pillar #
Strategic change management	Clearly understands and supports the need for change management when necessary	
Encourage innovation	Encourages team members to use brainstorming techniques, design thinking and creative problem solving	4
Team-based effort	Effective social leadership practices reinforce the team concept and establishes high levels of collaboration and cooperation; roles and responsibilities are clearly defined and understood	8
Participative leadership	Social leadership techniques encourage team members to participate in idea generation and decision-making; emphasis is on participative rather than individual leadership	8
Incentives and recognition	Team members are recognized and rewarded for contributions to a successful outcome	3
Recruiting and hiring best talent	Recognizing the contribution of project teams to the company's success helps create a pipeline for attracting talented project management personnel	9
Work-life balance	Effective social leadership encourages an understanding of the work-life balance	9
Managing diversity	The globalization of project management fosters a better understanding of how to manage and control diversity on project teams	2
Motivation	Effective social leadership focuses on motivation through empowerment	6
Compensation and performance appraisal	360° performance appraisal techniques are used, and rewards are provided either through compensation or recognition	6
Knowledge management	Company maintains a knowledge management system	4
Meaningful job	Social leadership and empowerment encourage recognition of a meaningful job	3
Effective succession planning	Project team members are usually qualified to fill more than just one critical position on a project team	7
Effective planning	The organization maintains several frameworks that support effective planning practices including ways to eliminate barriers in achieving strategic goals	8
Maintain ethical standards	Effective social leadership is based on high ethical standards	6

1.6 Strategic Competency

Column 2 in Table 1-1 clearly indicates that project management practices have a significant impact in helping companies become a high-performance organization. As shown in Figure 1-7, project management knowledge and expertise are now a critical competency in companies.

Many companies today conduct a study every year or two to identify the four or five strategic career paths in the company that must be cultivated so that the growth of the firm is sustainable. Project management makes the short list of these four or five career path slots. As such, project

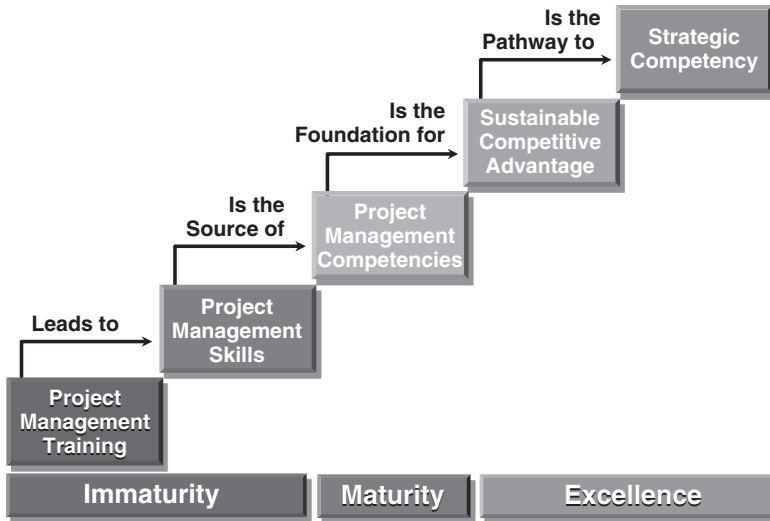


Figure 1-7 Project Management Becomes a Strategic Competency

management is now treated as a “strategic competency,” rather just another career path position for the workers.

Part of this is evident by looking at to whom project managers now report project status and make presentations. Historically, PMs conducted briefings for the project sponsors and occasionally senior management. Now, with the responsibility to manage strategic projects that may impact the future of the firm, project managers may be conducting briefings for all senior management, and even the board of directors.

By understanding and identifying the barriers prior to implementation, the chances of successful implementation will improve as with the recognition as a strategic competency.

1.7 Background to Barriers²

The Project Management Institute (PMI) recently celebrated its fiftieth anniversary. Even though most of the core concepts of project management have been recognized and used successfully for decades, there is still resistance in the form of barriers that can prevent successful implementation of all or specific components of project management. As new techniques begin being used in the project management environment, such as the impact of digitalization, artificial intelligence, the internet of things (IOT), big data, blockchain, and disruptive project management practices, new barriers are expected to appear. An understanding of the barriers can help us prevent or diminish their impact.

Up until about 10 years ago, there appeared to be limited published research on the identification and impact of these barriers. Part of the problem was that the literature at that time seemed to focus heavily on successes rather than failures because nobody wants to admit to having

² The remainder of this section has been adapted from *Barriers to Implementing Project Management* by Harold Kerzner and J. LeRoy Ward; white paper, 2020. J. LeRoy Ward, PMP, PgMP, PfMP, CSM, CSPO is the President of Ward Associates and the past Executive Vice President for Enterprise Solutions at IIL.

made a mistake. Today, we recognize that we may discover more opportunities for continuous improvement efforts from failures and mistakes rather than from best practices and lessons learned.

In an early paper by Kerzner and Zeitoun (2008), the authors focused heavily on the barriers that existed primarily in emerging markets. The authors stated:

Growth in computer technology and virtual teams has made the world smaller. Developed nations are flocking to emerging market nations to get access to the abundance of highly qualified and relatively inexpensive human capital who want to participate in virtual project management teams.

A multi-national virtual project management team, however, may come with headaches. Because of the growth of project management worldwide, many executives openly provide lip service to its acceptance, yet behind the scenes, they erect meaningful barriers to prevent it from working properly. This creates significant hardships for those portions of the virtual team that must rely upon their team members in emerging market nations for support.

Barriers to effective project management implementation exist worldwide, but in emerging market nations, the barriers are more apparent. To be aware of the possible barriers and their impact on project management implementation allows us proactively to begin to surmount them.

Today, many of the barriers that previously appeared in primarily emerging markets are now quite apparent in developed nations and within areas of companies that may have been using project management for decades. Barriers are no longer restricted just to specific countries or nations. Some barriers may be industry-specific, appear in certain functional disciplines of a company, or occur because of the personal whims of some managers and executives. Barriers can appear anywhere and at any time.

Some industries appear to be more prone to project management implementation barrier than others. The barriers in the IT industry have been discussed in the literature by Johansen & Gillard (2005), Khan et al. (2011), Khan & Keung (2016), Marly Monteiro de Carvalho (2014), Niazi et al. (2010), Polak & Wójcik (2015), and Terlizzi et al. (2016). Research and development barriers have been addressed by Sakellariou et al. (2014), Santos et al. (2012), and Sommer et al. (2014). Recently, there has also been research in public sector barriers, as described by Blixt & Kirytopoulos (2017).

Another industry commonly discussed is the construction industry, as indicated by Arnold & Javernick-Will (2013), Hwang and Tan (2012), Loushine et al. (2006), Moore & Dainty (2001), and Senesi et al. (2015). Some authors focus on barriers in specific countries. As examples, Wenzhe et al. (2007) looked at the Chinese construction industry whereas Hwang et al. (2014) researched small construction projects in Singapore. Magnier-Watanabe & Benton examined barriers facing Japanese engineers.

There has also been research in barriers that can affect certain *PMBOK® Guide* Areas of Knowledge or specific project management processes, tools, and techniques. Kutsch & Hall (2009 & 2010) and Paterson & Andrews (1995) looked at the barriers that impact risk management. Ambekar & Hudnurkar (2017) focused on the use of Six Sigma. Ali & Kidd (2014) examined configuration management activities, and Hwang et al. (2017) investigated barriers affecting sustainability efforts.

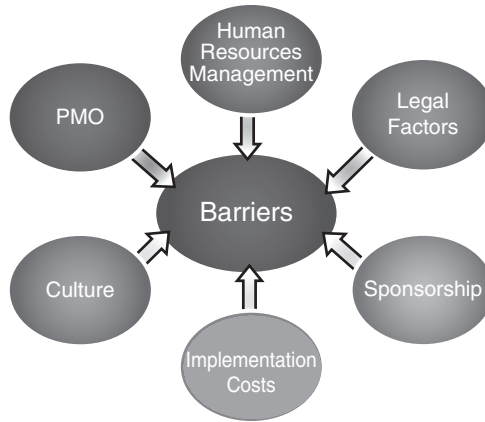


Figure 1-8 Categories of Barriers

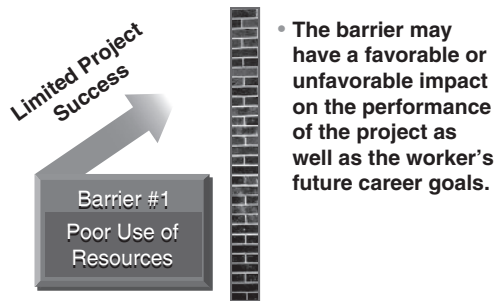


Figure 1-9 Human Resources Management Barrier

There are numerous possibilities for classifying the different barriers affecting project management. This paper briefly discusses some of the more prominent barriers in the categories identified in Figure 1-8.

The authors solicited feedback concerning the barriers from almost all the PMI chapters outside of North America. The authors are indebted to those PMI chapters that took the time and effort to respond to our requests.

Human Resources Barriers

Whenever we change or introduce new management processes, whether it is for project management, Agile, Scrum, Six Sigma, or other practices, we must consider the impact on the wage and salary administration program. Workers expect to be recognized, or even rewarded, for good performance. Unfortunately, we often introduce new programs without considering employee performance review implications until some damage occurs and barriers form to prevent the new processes from being implemented correctly.

Sometimes human resources barriers are created that can cause a conflict between what appears to be in the best interest of the project and the best interest of the worker. It is not uncommon for the project team to fail to realize the impact of the barrier or even that it exists until the project is over. In most cases, as shown in Figure 1-9, the result may be limited project success, or possibly even failure, based on when the barrier is recognized.

Situation 1 (Co-Location Barrier)

A project manager working for a government agency was placed in charge of a two-year project and wanted a co-located team. The PM was fearful that, if the team members were to remain in their functional areas, the functional managers might use the workers frequently on other projects, thus impacting the schedule of his project. During project staffing, the PM also demanded the best resources, knowing full well that many of the workers would be overqualified for the tasks and therefore underutilized. Although the demand for the best resources benefited this project manager's assignment, other projects that required workers with these specific skills were short-handed and struggled. The project manager's decision may have benefited the project but not necessarily the entire company.

The project manager found a vacant floor in a government building and all the workers were relocated to this location on a full-time basis, even though the assignment did not necessarily mandate full-time workers. However, even though the workers were removed from their functional organizations, their functional managers were still responsible for their performance reviews.

At the end of the two years, the project was deemed as a success. However, many of the workers were quite upset because:

- Most of the workers were given mediocre performance reviews during the two-year period because their functional managers were unaware of their performance.
- When given the choice of who deserved a promotion during the two-year period, the functional managers promoted those workers first who resided in the functional area and benefited from a multitude of functional area projects.
- Some of the workers discovered that their functional managers filled their vacated position with other workers and that these now-displaced team members had to find positions elsewhere, and possibly lose some seniority.

In Situation 1, which occurred in a developed nation, the project was a success and the project manager received a promotion. Unfortunately, the workers did not see any benefits to their career goals by working on this project and stated that they had no desire to work for this PM again. The organization had to rethink the benefits of using a co-located team approach. Barriers can exist anywhere.

Situation 2 (Prolonged Employment Barrier)

A government-run utility in an emerging market nation embarked on a three-year project to build a new power generation plant. To minimize the cost of the project and support the local economy, the decision was made to use local and country-wide labor rather than hiring more expensive contractors external to their country. This would have the additional benefit of providing employment for many local workers.

The workers were happy with the opportunity for employment but were fearful of what might happen when the project came to an end. To guarantee long-term employment, and possibly retirement benefits, the workers began slowing down the project and began making mistakes, to the point where the schedule was now stretched out to 10 years. Project management implementation was blamed as the barrier for the schedule delays.

Situation 3 (Building an Empire Barrier)

This situation has some of the characteristics of Situation 2. In some countries, your salary, power, and authority are based on the size of the empire you control. In such a case, hiring three

below-average workers to do the same work as two average workers is better for empire building. Additionally, even though finding adequate human resources may be difficult, sometimes companies simply do not put forth a good search effort; friends and family members may be hired first, regardless of their qualifications. In this situation, the project's schedule is usually elongated so that the empire that is built will last as long as possible.

Situation 4 (Overtime Barrier)

Overtime is usually needed when pressure is placed on the team to maintain a schedule. However, in some cultures, overtime is used as a reward system to give workers the opportunity to earn additional income. This can occur even if the overtime is not necessary.

Some countries put restrictions on overtime and may require that the government must authorize the overtime especially if it is paid overtime. This occurs when the country is fearful that the overtime, if prolonged, may create a new class of citizens. There is also the danger that mistakes may be made intentionally on a great many projects to justify the use of extended overtime.

Situation 5 (Career Path Barrier)

A government agency discovered that as they began outsourcing more work to national and non-national contractors, their ability to evaluate project management performance was becoming difficult because each contractor would report status differently. Some contractors appeared to be performing at a higher level of project management than others by using *PMBOK® Guide* processes, but the government was unable to compare contractors' performance for awarding future contracts. The government then encouraged all contractors to use project management according to the *PMBOK® Guide* and highly recommended that the individuals managing their contracts become certified as PMP®s.

While the government recognized the value in promoting project management professionalism in the contractors' organizations, the government could not see the benefits of professionalism in project management in the public sector. Public sector project managers were treated more so as project monitors than project managers. The Office of Personnel Management in the government was unable to write job descriptions for government project managers because their duties, authority, responsibility, and decision-making capability did not fit in the standard "mold" use for other job descriptions. As such, an assignment as a government project manager was viewed as a non-promotable position that could impact your career.

Situation 6 (Certification Barrier)

An emerging market nation recognized the benefits of project management implementation and encouraged both government contractors as well as government agencies to support training programs that lead to individuals becoming PMP®s. Training programs were put in place by private firms as well as universities. In most cases, the company or government agency paid for the training of the workers.

Once the individuals became PMP®s, they began asking their company for a salary increase. The company argued that the cost that the company invested in their education should be viewed as a near-term salary increase and that other financial benefits would occur in the future. The workers were unhappy with the response and had expected immediate financial benefits when becoming certified. As such, the employees found employment in other companies and other countries that would provide them with salary increases. The companies stopped paying for project management training, no longer supported certification efforts, and in many cases discontinued the encouragement to follow the *PMBOK® Guide*.

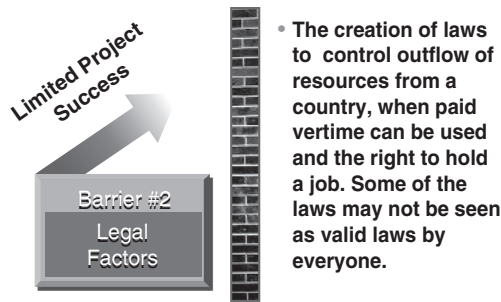


Figure 1-10 Legal Barriers

Situation 7 (Educational Barrier)

A company that recognized the need for project management implementation sent their workers to training programs. The employees returned to work with the expectation that they would be able to implement the tools and techniques they learned in the training. When the employees discovered that their company was reluctant to implement many of the tools and techniques they had learned, the employees sought employment elsewhere.

Legal Barriers

Some countries establish laws that provide limitations on how much, if any, of the financial resources that the country possesses can leave the country. This creates the barriers shown in Figure 1-10. The country can put limitations on procurement activities that leave the country. There can also be laws on paid overtime for workers.

Companies that wish to do business within these countries must abide by these laws even if the laws seem improper. An example might be the worker's right to hold a job even if the worker's performance is substandard. Some laws may even foster corruption possibilities by making it clear that bribes and "gifts" may be appropriate under certain circumstances during competitive bidding activities.

Situation 8 (Procurement Barrier)

The government in an emerging market nation wanted to limit the procurement of goods and services from outside the country. During competitive bidding, companies were asked to prepare for the government's approval a list of qualified vendors from within the country. Project managers were pressured to use contractors from within the country even if external contractors provided higher quality goods and services. To make matters worse, additional pressure was imposed to select contractors in cities that had the greatest unemployment rates regardless of the capabilities of the vendors.

Situation 9 (Unemployment Barrier)

A project manager was pressured into awarding a procurement contract to a vendor in a city that had significant unemployment. As the project progressed, the project manager realized she could accelerate the schedule by using overtime. Unfortunately, government permission was required for authorization of overtime pay. The project manager soon discovered that not only would the government not authorize the overtime, but it was also reluctant to allow the project to finish early and with fewer resources, which could increase the unemployment level and poverty in the community.

Situation 10 (Rigid Policies Barrier)

A company was awarded a contract for a government agency in a country that utilized rigid official public procurement processes, rules, and laws. The legal environment created a great deal of inflexibility and many of the traditional processes in the *PMBOK® Guide*, such as with change management activities, were not in line with the government's requirements. To adhere to the inflexibility, the project's budget was increased, and the schedule had to be elongated.

Situation 11 (Restrictions Barrier)

Some countries have government policies that may restrict who a contractor will be allowed to work with, both in the government agency's country and possibly in other countries due to political concerns or competitive factors. Some policies can also dictate who the prime contractor must hire as subcontractors even if the subcontractor's interest in and importance of the project are different than that of the prime contractor.

Even though a customer or government agency follows the processes and principles within the *PMBOK® Guide*, there can still exist laws or policies related to the criteria for decision-making, the time to make the decision and the parties involved in making the decision. Every government agency can have their own interpretation for the acceptance/rejection criteria for project deliverables, the evaluation of quality and decisions related to required permits. Some of the differences that can exist between countries include:

- The definition of the level of customer requirements, technical specifications and quality required since the differences are observed when the client and the contractor are from different countries.
- Timing and requirements for the process of obtaining permits and construction licenses, in accordance with the applicable regulations and laws of the country.
- Interpretation or agreement of requirements or conditions of acceptance of the project and its deliverables.
- Involvement of areas of the organization when negotiating with the client, in terms of scope changes in the project.
- Definition of norms, laws, international treaties, and rules that must be complied with.
- Process of management, administration, and negotiation of leases of machinery and equipment with third parties, when dealing with other countries.
- Be at the forefront in terms of performance and productivity of machinery, equipment, and software existing in the market in other countries and manage to bring them to your project.
- Definition and adequate management of the change control system, through authorized change requests, analysis of impact on risks, time, and project resources.
- Generation of the PMO's value in the organization, which monitors the governance of projects and establishes a common framework of methodologies, processes, policies, and information systems.

Project Sponsorship Barriers

We assign sponsors or governance committees to projects to provide project teams with a line of sight to senior management for strategic information, assistance for decisions that cannot be made entirely by the project team, coordination of large stakeholder groups and resolution of problems that can be resolved more effectively by the sponsors. It is not uncommon for individuals to be asked to serve as sponsors without understanding project management, or their role and

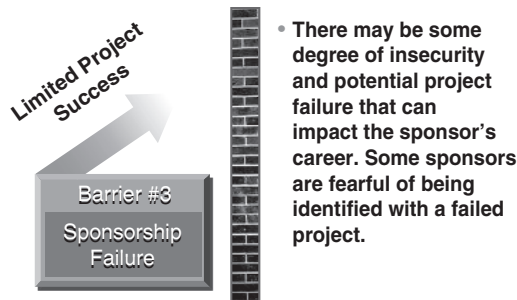


Figure 1-11 Sponsorship Barriers

responsibility as a sponsor, and the fact that project governance is not the same as functional governance. There is also the risk that the individual may abuse the position. In any event, barriers as seen in Figure 1-11 can be created that prevent the implementation of effective project management.

Situation 12 (Centralization of Authority Barrier)³

Many countries maintain a culture in which very few people have the authority to make decisions. Decision-making serves as a source of vast power in both privately held companies and governmental organizations. Project management advocates decentralization of authority and decision-making. In such countries, the executive level will never surrender its authority and decision-making power to project managers. Project managers may then function as puppets and are unable to effectively manage the projects.

Situation 13 (Lack of Executive Sponsorship Barrier)

Project sponsorship may exist somewhere in the company but often not at the executive level, for two reasons: First, executives may recognize that they have no knowledge useful to the project. Therefore, they could make blunders that would become visible to the people that put them in power. Second, and possibly most important, acting as a sponsor on a project that fails could end the executive's career, politically. Therefore, sponsorship, if it exists at all, is often at a low level in the organizational hierarchy, a level at which workers are expendable. The result is that sponsors cannot or will not make decisions or help project managers in times of trouble. We then have invisible sponsorship.

Situation 14 (Organizational Hierarchy Barrier)

In traditional project management practices, we tend to believe that problems are resolved at the project sponsor level. But in nations in which organizational hierarchy is sacred, following the chain of command can elongate the project management process to a point at which schedules become irrelevant. Also, the infrastructure to support project management may exist only to filter bad news from the executive levels and to justify the existence of functional managers. Some decisions and news may go as high as government ministers. Simply stated, project managers may not know where and when a decision will be made and cannot be sure where project information will end up. There may exist excessive bureaucracy that is not visible at the project management level.

³ Situations 12–16 and 19–22 have been adapted from Kerzner and Zeitoun (2008).

Situation 15 (Insecurity at Executive Levels Barrier)

Executives may feel insecure about performing as a sponsor because their positions are the result of political appointments. Additionally, project managers may be viewed as the stars of the future and, as such, are a threat to executives. Project management implementation could force the loss of an executive's status, and status is often accompanied by fringe benefits and other privileges. Before executives consider throwing their support behind a new approach, such as project management implementation or a project, they worry about its effect on their power, authority, and chance for advancement.

Situation 16 (Social Obligations Barrier)

In emerging markets, social obligations due to religious beliefs and politics are a way for executives to maintain alliances with those people who put them in power. As such, project managers may not be allowed to interact socially with certain groups that may possess critical information. Unlike traditional project management practices where PMs may have the right to communication with everyone, it may not be possible without going through the project sponsor.

Situation 17 (Lack of Education Barrier)

Not all sponsors understand project management or have a desire to attend courses on project management. Being unsure about their role as a sponsor, they focus mainly on how to deliver the results faster and at a lower cost regardless of the quality, risks, or the best way to achieve the results. Sometimes, sponsors will make promises to customers for rework or additional testing at no cost to the customer. This creates havoc for project teams.

Situation 18 (Project Charter Barrier)

Without at least a cursory knowledge of project management, sponsors are reluctant to prepare and sign a project charter for fear that the costs and schedule are not well estimated. This then forces some team members and even stakeholders to begin to perform some of the tasks without prior authorization.

Cost of Implementation Barriers

Most organizations today understand the benefits that can be forthcoming from effective project management implementation but are unsure about the costs associated with obtaining the strategic benefits. As such, there may be apprehension or even fear in a commitment and the creation of a barrier as shown in Figure 1-12 will occur.

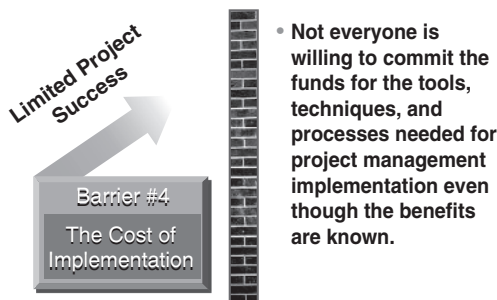


Figure 1-12 Implementation Barriers

The fear is that readers of the 756-page 6th edition *PMBOK® Guide* will believe that all the processes, inputs, outputs, tools, and techniques must be implemented for the strategic benefits to be recognized. This is not the case. There are extensions to the *PMBOK® Guide* where it can be down-sized for specific needs. This could be the reason why the 18-page *SCRUM Guide* has become popular, or the shift to principles focus in the 7th edition *PMBOK® Guide* became useful.

Situation 19 (The Cost of Implementation Barrier)

The costs associated with the implementation of project management include purchasing hardware and software, creating a project management methodology, and developing project performance reporting techniques. Costs such as these require a significant financial expenditure that the company may not be able to afford. They also require tying up significant resources in implementation for an extended time. With limited resources and the better human resources – which are required for implementation – removed from ongoing work, companies may avoid project management even when they recognize its benefits.

Situation 20 (Risk of Failure Barrier)

Even if a company is willing to invest the time and money for project management implementation, there is a significant risk that implementation will fail. And even if implementation is successful but a project begins to fail, for any number of reasons, blame may be placed on faulty implementation. Executives who must then explain the time and money expended for no real results may find that their position in the hierarchy is now insecure. Therefore, some executives refuse to either accept or visibly support project management.

Situation 21 (Costs of Training Barrier)

Project management implementation is difficult without training the workers. This includes project managers, team members, and sponsors. The need for training can create additional problems. First, how much money must be allocated for training? Second, who will provide the training and what are the credentials of the trainers? Third, can people be released from their current project work to attend training classes? It is time-consuming and expensive to train people in project management. Adding together the cost of implementation and the cost of training may frighten executives away from accepting project management.

Situation 22 (Need for Sophistication Barrier)

Project management requires sophistication, not only in the technology but also in the ability of people to work together. In emerging market countries, employees may not have been trained in teamwork and may not be rewarded for their teamwork contributions. Communication skills may be weak, including report writing. People may see teamwork as a medium through which others are able to recognize their lack of competencies and mistakes.

Culture Barriers

Sustainable strategic project management success requires a cooperative culture where team members work together and make decisions in the best interest of the firm. This is most often accomplished without considering authority, power, or pay grade. Cooperative cultures often determine the type of organizational structure to be used for projects. As an example, the matrix structure seems to work best with cooperative cultures. Yet even within cooperative cultures, barriers, as shown in Figure 1-13, can be erected if the employees feel threatened or have hidden agendas.

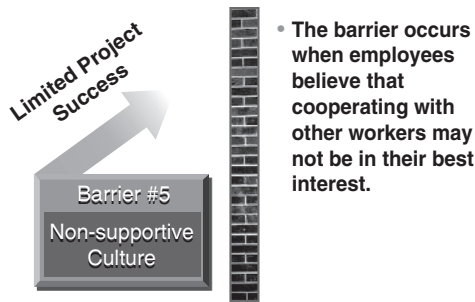


Figure 1-13 Cultural Barriers

Situation 23 (Planning Barrier)

If an organization lacks standards or commitment for project management, then the planning process may struggle with poor estimates for work effort, duration, and cost. The planning barrier can occur if the organization fails to support the use of a methodology. The result can be ambiguous scope and requirements. Poor planning usually translates into plans that change too often, unrealistic milestones, and a lack of faith at all levels of management that project management can succeed. If there are risks that the plans may fail, workers may create barriers and find excuses as to why they cannot participate in planning activities.

Situation 24 (Paperwork Nightmare Barrier)

When looking at the number of activities in the *PMBOK® Guide*, there is apprehension that an excessive amount of unproductive time may be spent completing all the paperwork required. A barrier can then be created with a multitude of reasons why certain reports and paperwork is not necessary. The barrier can be significant if any organization believes in the philosophy that “what is not on paper has not been said.”

Situation 25 (Project Completion Barrier)

As projects begin to wind down, workers begin to worry about their next assignment. If they are unsure about their next assignment, they may elongate the project closure process. They may also leave their current project before the work is finished to guarantee employment elsewhere. This may create a hardship for the remaining team members.

Sometimes, there exists a lack of dedication to project closure. Employees are often afraid to be attached to the project at closure when lessons learned and best practices are captured. Lessons learned and best practices can be based on what was done well and what was done poorly. Employees may not want anything in writing that indicates that best practices were discovered through their mistakes.

Situation 26 (Management Reserve Barrier)

Cooperative cultures tend to find ways to protect themselves and their colleagues from some risks, rework, poor estimating, and other such situations. The management reserve is one such way. However, a barrier can be created when the customer believes that the management reserve is created solely for the benefit of the contractor rather than the customer as well.

Situation 27 (PMP® Barrier)

Not all organizations encourage their people to become certified as project management professionals. One of the benefits of certification is that it becomes easier to understand each person’s

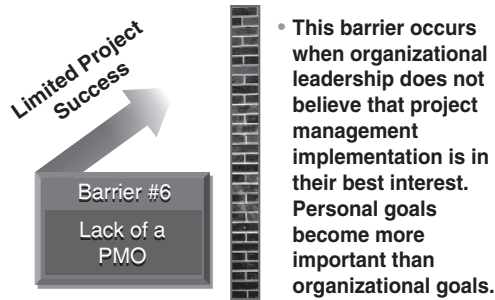


Figure 1-14 The PMO Barrier

role and responsibility, thus providing a good foundation for a cooperative culture. In noncooperative cultures, the role of the project manager becomes that of a firefighter.

Project Management Office (PMO) Barriers

Even though there are several types of PMOs, the existence of a PMO usually implies that there exists an organization dedication to continuous improvements in project management. Unfortunately, executives may view the PMO as a threat if the executives are happy with the status quo and their position in the firm, and do not want to see any changes take place. This barrier is shown in Figure 1-14.

PMOs can be used not only to promote effective project management practices, but also to capture and share best practices and lessons learned. They can also assist senior management in the monitoring of enterprise environmental factors that can impact decision-making. This is important in countries that struggle with hyperinflation and must control the country's scarce resources rapidly.

Situation 28 ("Information Is Power" Barrier)

When managers believe that information is power, they create barriers that may prevent the formation of organizations that gather and disseminate information. Sometimes, several functional PMOs are created to centralize functional information and control its release. Infighting can occur in functional units as to who controls each PMO if the information is seen as a source of power.

Situation 29 (PMO Financing Barrier)

All PMOs require human and nonhuman resources to be effective. Resources require capital expenditures. Managers that believe information is power will always create barriers that justify not financing a PMO. Barriers can be established by either staffing the PMO with nonqualified individuals or limiting the tools provided to the PMO for monitoring and controlling projects.

Conclusion

All countries, including emerging market nations, have an abundance of talent that has yet to be fully harvested. Barriers can appear in any organization for a multitude of reasons as identified in the situations presented here. Virtual project management teams as well as a recognition of the strategic benefits of project management may be the starting point for the full implementation of project management.

As project management grows, executives will recognize and accept the benefits of project management and see their business base increase. Partnerships and joint ventures may become more prevalent. The barriers that impede successful project management implementation will still exist, but we will begin to excel in how to live and work within the barriers and constraints imposed.

Corporate executives worldwide are beginning to see more of the value of project management and have taken steps to expand its use. Executives in some of the rapidly developing nations appear today to be much more aggressive in providing the support needed for breaking through many of the barriers. As more success stories emerge, we will see the various economies strengthening and becoming more connected, and executives will start to implement project management more fully.

In the next section, as we review the Medtronic project management journey, we find that the company has approached the growth journey of implementing project management practices holistically. The prioritization of this journey was tackled globally with a high degree of focus on enabling the success of spreading project management across all key business areas. Careful strategic thought was exercised to build the executive sponsorship needed and creating the right educating and community.

1.8 Excellence in Action: Medtronic⁴

I have seen many changes in project management over my last 35 years. From starting in the project management profession and not feeling confident in knowing what I was doing, to advancing to a formal project management professional membership and professional project management certification(s), I have seen the industry significantly evolve. Today, there are many new aspects and training opportunities for project management in soft skills, online learning, Agile, hybrid and many, many more.

Our organization has benefited from some grass roots efforts in project management, called *Project Management Rigor for Innovation*, in which we are continuously working to improve the overall footprint of project management. PMRI is focused on project management, which has been identified by technical leaders as a core competency for our global research, development, innovation, and cross functional community involved in product and services development and documentation to demonstrate best-in-class innovation. We also have another grassroots effort at our organization called *Program Management Leader Community* PMLC. This grass root effort is building a community of practice that serves to provide opportunities to our program managers to enhance their program management leadership skills, accelerate career development and expand their work.

Both efforts focus on training, networking / communication, and career development. They are voluntary and optional initiatives and focus on building an enterprise-wide community of project and program leaders. It is for individuals in project and program management roles leading initiatives that span operating units, regions and corporate. The focus is for new and existing project and program managers who are aspiring to expand their related skills and ultimately, into leadership roles. It is also a community for curating best practices. These efforts align with our mission (tenet 5) to “recognize the personal worth of all employees by providing an employment

4 Material in this section has been provided by Michael O'Connor, Ph.D., MS, MBA, PMP®, PgMP®, IPMA-B, CPD, CSM, CSPO, DASM, Director Strategy and Project Management, Medtronic, 710 Medtronic Parkway, Minneapolis, MN 55432, 763-526-0203. ©2021 by Medtronic. All rights reserved. Reproduced with permission.

framework that allows personal satisfaction in work accomplishes, security, advancement opportunity, and means to share in the company's success.”

These programs are not new, mandatory, corporate led, or a formal training program to teach basics. They are also not a governing body to mandate tools or standards or certifications. Instead, the overall goal of these programs is to build future project / program managers based on the specific needs and requirements of leadership and project managers in operating units, regions and corporate.

The PMI Pulse of the profession has been a good resource for our team to review, help us guide and best determine a course of action. We read the PMI Pulse every year and utilize the information to update our project management PMRI strategy. We find the information and research very useful, and it ultimately helps us plan for the future of project management at our organization.

It is critical that we prove to senior leadership how important the roles of project / program management are to the organization. Recently, our organization has undergone a major restructuring plan that has put us in a position to be more agile, while also playing small and playing big.

These changes have moved us into the new future of our organization and has shifted our focus to needing to add Agile to our project management training and definitions. The question now is how do we roll out Agile with a few different options? There are the Scrum Alliance, Scrum Org., and the Project Management Institute and Disciplined Agile (DA). I have been trained as a Scrum Master and Scrum product owner through the Scrum Alliance, and as a PMI DA Scrum Master. Both have their pros and cons but overall, I think we will lean toward the PMI DA process as it is a toolbox of methodologies like Scrum, Lean, and Kanban. I also believe that Agile provides a more up to date and consistent method to create dashboards that provide necessary updates to executives. I need to be able to work with one methodology, to make sure a large organization like ours has a preferred method and keeps consistent vernacular and definitions. This is, of course, just one very small area to increase focus, awareness, and training.

At my organization we have undertaken a very large structural change to be more flexible, adapt to change quickly and keep things simple. The Agile philosophy will work very well for how we have made changes in our organization. I see this as an opportunity to change the way we work from, at least Waterfall to a hybrid, and in some cases, more Agile methodologies. I believe the PMI DA Agile methodology will give us the necessary tools to adapt to projects and situations as they evolve. The utilization of metrics will also need to increase and provide measures of success for projects. This is not always easy, but you won't know if you do not measure. Of course, all of this will take people, leadership, and a commitment to training to create a more productive organization.

I would also like to incorporate this type of Agile and hybrid training to add to our project managers toolbox, while also creating a more consistent set of training and techniques, making it possible for project managers in research and development to move to clinical, marketing regulatory, quality, and other areas of the organization. We have currently three large buckets in our organization for careers, including: People Management, Technical Leadership, and Project Management. This is very important to every stage of careers in an organization as it sets itself up for success. Project Management has been an area in which we created something called the *Project Management Knowledge Pathways*. This currently includes areas for career development, as well as opportunities to engage, and collaborate, leverage expertise, recognize and reward, discover external knowledge and innovate. This has proven to be a solid collection of subjects that any person in the organization can explore and learn. I am also planning to explore AI and project management knowledge pathways and better understand how they can be defined, communicated, and change the culture of our organization.

We are a global organization, and we have many cultures around the world. It is important for us to create and implement these grass roots efforts by ensuring we are inclusive. Currently, I am happy to say that we have representation from the United States, Europe, India, and China.

In order for true innovation to be successful, it's critical that we look around the globe, and within our organization, to create true innovation at record speed. Since we are in a regulated industry, we rely on these regulations to drive our work. I am also working toward trying to simplify this process, making it easier to navigate but regardless, we still must meet standards. Again, this is where having Agile in the toolbox would be extremely beneficial and to help change the focus of the project when needed to many iterations. These sprints will be more valuable than the Waterfall methodology. Even a hybrid approach will become very useful soon as I plan to offer more training on both Agile and hybrid methods.

Currently the grassroots Project Management Rigor for innovation offers internal and external training, roundtables, office hours, articles, knowledge pathways, project management community and transferrable skills across the organization. Every one of these items create stronger career pathways, exposure to senior leaders, coaching and mentorship and best in class resources and training.

I believe in our organization, with its large size and global footprint, that we need a project management toolbox, including many different items. This will depend on the education, experience, and passion that each person needs to bring to the job. In my opinion, every person needs to be treated differently, and they should have the ability to pick and choose the best items they need to perform the work. We are entering a new phase of the organization led by a new CEO, who would like to play small and play big. To do this, we will need serve our customers in a more flexible and Agile focus.

Our organization is on a journey to create more efficiency and productivity, while also making work easier. This is not an easy task, and it will take time to develop and create success. It is my journey and passion to create improved tools, training, and communication in project management. This will require change that may not be popular at first. However, to be successful, we must create new ways of working and think "BIG" to stay competitive as a market leader. We need to remain focused on delivering a strong innovation strategy and financial performance as an organization. Project management can create the change that is needed to drive this continued success. Overall, project management, and all the tools associated with it, can empower the organization to meet its mission of alleviating pain, restore health, and extend life.

1.9 Strategically Improving

Projects are becoming clear strategic change and transformation vehicles. The old world of project management used language like final and finite mindset. In many instances we were stuck in following specific rules and structures. Even today many of the world organizations are very short term in their strategic planning and the associated running the business practices. As we shift to the focus on continuously improving, we want to see this improvement guided by a difference enhanced language, around adaptive, collaborative, context driven, and inclusive. The new generations demand it, the world needs it, and the possibilities for the discipline applied right are immense.

The big *Ah-ha!* in transforming originations happens when personal ownership of a changed way of continuously improving the way of working is widespread. As we demonstrate the practices to achieving organizational excellence, many of the organizations contributing material to

this book discuss just one or two pillars. Some companies have implemented many of the pillars. It is our hope that these contributions provide good starting points for experimentation and improvement that you can consider in the context of your own organization.

Innovation is one form of a strategic project. Repsol contribution, which appears in Section 1.10, is an example of how strategic innovation can introduce companies to many of the pillars of project management. The journey the organization has taken shows how their achieved new way of working was an integrated destination that combined the critical elements of vision, the right-fitting organization, the enabled digital workplace, and the adaptive methodologies and mindset.

1.10 Innovation in Action: Repsol⁵

Repsol is a global and integrated company in the energy sector. We operate across 37 countries with a team comprising over 25,000 people who work on building a sustainable future. Our vision is to be a global, energy company based on innovation, efficiency, and respect creating value sustainably to promote progress in society.

Innovation is an important leverage in our vision and is also one of our company values, together with transparency, responsibility, results orientation, and collaboration. At Repsol, we believe that the key to our competitiveness and development resides in our ability to generate new ideas and put them into practice in a spirit of cooperation and continuous collective learning. It has been a long and arduous journey to get innovation as part of our DNA and there are still many challenges to be overcome.

The following is how we are building the culture and capabilities for being the global and integrated energy company that we want to be and keep sustainably in the market.

First Phase: Acquiring Knowledge (2011–2012)

Until 2011, innovation at Repsol was focused on R&D activity. In 2011, the Innovation Program was launched to response to the Strategic Plan (2011–2014) about the quality control and knowledge management functions. The Program was sponsored by Upper Management that decided to incorporate innovation as one of the corporate values since 2012. The main objective was to embed the innovation in our culture and day-to-day activities.

In addition, an organizational structure was created to support and encourage the Innovation Program. The Corporate Innovation Unit, Business Innovation Units and the Innovation Committee were the organizational units in this structure. An innovation network was created including entrepreneurs, innovation teams and facilitators.

Second Phase: Strengthening the Organization: Building the Capabilities and Measuring the Progress (2013–2015)

In 2013, the focus was to build the capacity for the organization. The first edition of the Facilitators Training Program was held to support continuous improvement processes with lean-based methodologies.

Besides that, another pilot within the Chemical Business started. This pilot is a successful case in our company, and it has become the Lean Transformation program for this business, other businesses, and corporate areas where it has been deployed according to their needs.

The aim was to promote a culture of innovation in 2014. The Strategic Innovation Reflection (SIR) was held with the participation of all the innovation units generating a company model to

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add more value from Innovation. Meanwhile the first edition of the IN Awards was launched with the participation of +5.000 employees and +500 initiatives. In 2014, the Innovation network continued growing until around 75 innovation and improvement teams.

In 2015, some KPIs were defined and put in place to measure the impact of innovation. A global corporate program called “Go” started with the aim to generate innovative proposals in order to improve the EBITDA. In addition, business units deployed the innovation model through specific roadmaps to leverage their strategic plans.

Figure 1-15 shows actions put in place to support and encourage innovation from the Innovation Units in Corporation and Business areas.

Third Phase: Leverages for Transformation: Innovation in Management and New Ways of Working (2016–2018)

● Management principles:

Since 2016, an evolution of the operating model (processes, structure, policies and management criteria, work dynamic and decision-making, knowledge management, etc.) is accomplished by each business unit in accordance with the new strategic challenges. The Innovation Programs accompanying the new Strategic Update include the identification and prioritization of initiatives by the Business Units committees.

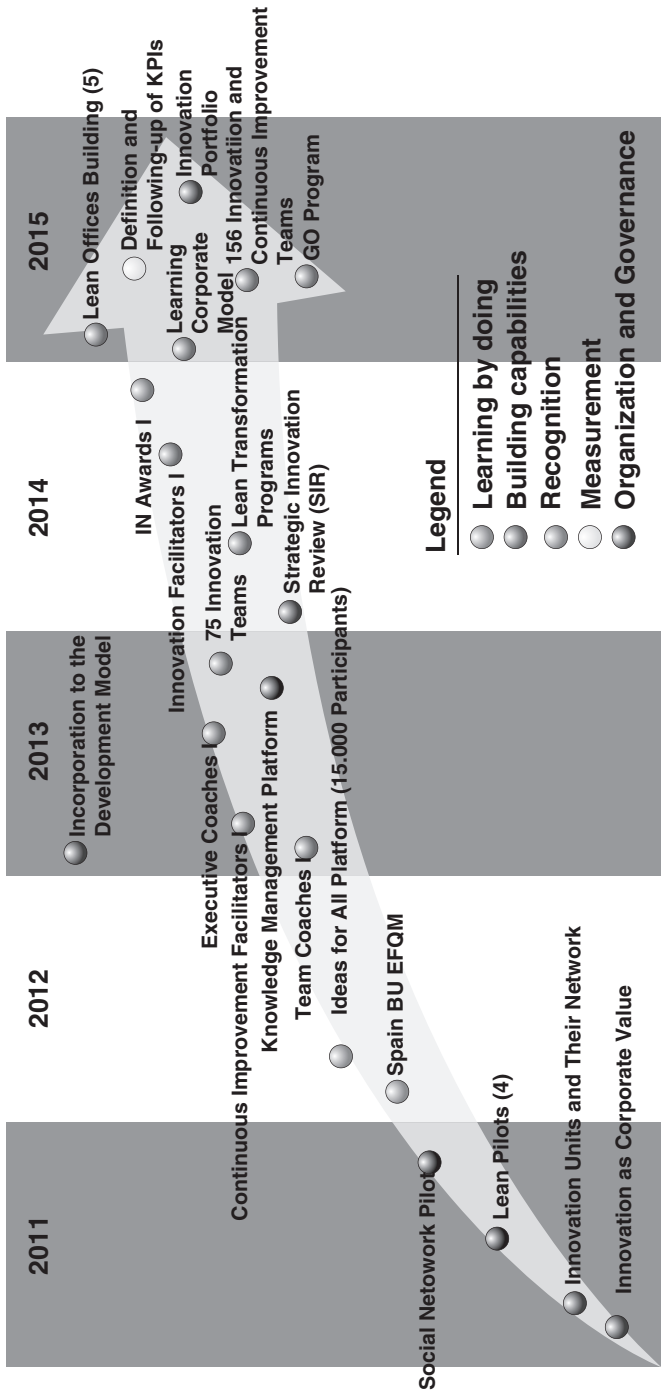
The alignment and mobilization of the organization to attain a shared purpose and vision are essential in this transformation. Besides this, communication is a key element to ensure the final goals.

New models of people and organization management: Agile philosophy is the engine of the change.

Some global initiatives foster a more flexible and efficient corporate environment, taking advantage of the new technologies:

- Develop and implement policies and models to ensure that the culture of innovation is promoted.
- Propose new ways of working to be implemented in the units depending on their own and global needs.
- Promote continuous improvement projects in order to optimize processes (Lean).
- Define and propose the cultural change necessary to achieve a flexible and collaborative organization.
- Develop leaders to ensure behaviors associated with innovation and entrepreneurship.
- Recognize entrepreneurs and innovation teams who develop initiatives.
- Generate and develop capacity in the organization, both in project teams and units.
- Conduct surveillance, validation, and divulgation of new effective and replicable approaches with high potential impact in order to respond to the problems and opportunities of the businesses.

The result, as shown in Figure 1-16, is a cultural transformation based on innovation and new ways of working that have provided Repsol some important leverages of this transformation toward becoming a lean company.



Business units have the accountability to implement the solutions in order to accelerate the delivery of new products, services, or businesses.

Figure 1-15 Details of the Actions Accomplished

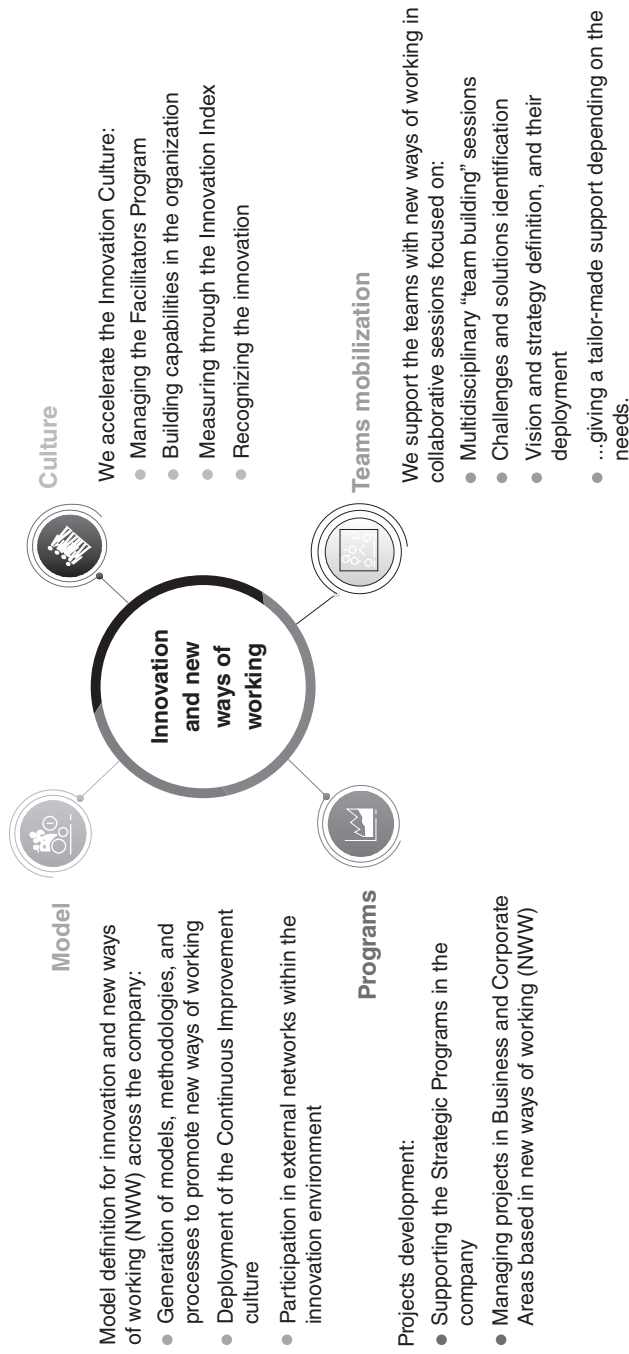


Figure 1-16 The Cultural Transformation: A Lean Company with New Ways of Working

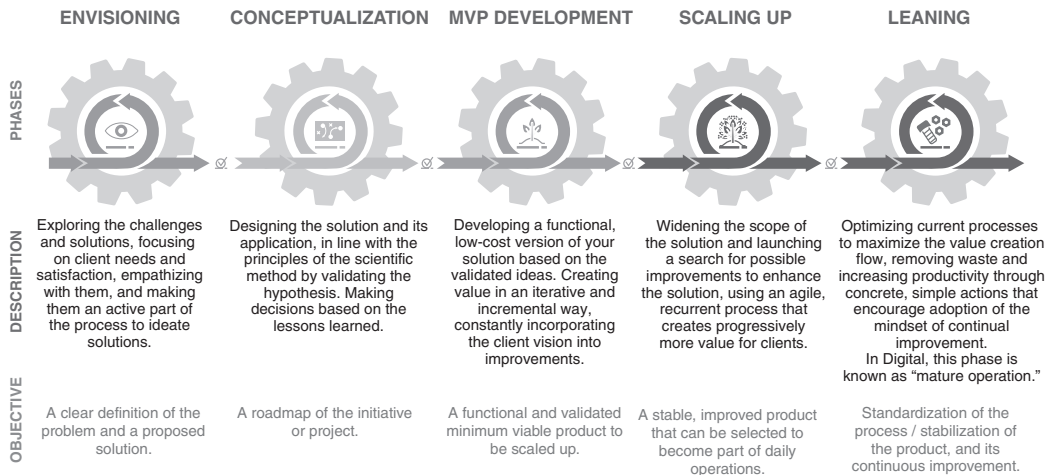


Figure 1-17 Innovation Process Model

Fourth Phase: New Ways of Working as a Transformation Driver (2018–2020)

The previous phase showed that in Repsol was considering both an Agile and a Lean approach. The result was that we created the Agile&Lean Model to deliver value across the entire chain of value as it is shown in Figure 1-17. Repsol Agile&Lean is the management model for a portfolio of initiatives and projects from conception to scaling up and subsequent optimization and continuous improvement. In addition, the acceleration program project generated clear value through the results achieved and actually the main key learnings were adopted widely across the company.

These outcomes enabled Repsol to go a step further to define what a New Ways of Working concept meant in the organization. As far as the organization was facing an environment whose constant are uncertainty, complexity and technological disruption, the whole organization needed and needs a new way of organizing, working, and relating.

New Ways of Working was defined as a set of tools and actions geared to improve and increase collaboration, agility and productivity and it is deployed through five elements shown in Figure 1-18, which are implemented within Operating Model Transformation Processes.

Transformation processes are characterized by a change in the operating model driven by the leadership team and activating five elements. They are enabled through an organizational change that articulates the leader's vision to give clarity to the organization, laying the foundations to generate new dynamics and usually it is split into three different but not isolated phases: To Start, To Adapt, To Adopt.

- **To Start:** The organization knows the purpose of the transformation, understands its need, and is committed to adapting and embracing the transformation.
- **To Adapt:** Define and design the path of transformation based on the needs and maturity of the organization. It involves identifying challenges and generating solutions.
- **To Adopt:** Make the transformation a reality by consolidating the new ways of working. It may involve adjusting the changes that we have adapted in the previous phase, with a vision of continuous improvement.

During the implementation of a transformation process, critical roles (Figure 1-19) are put in practice in the organization, beginning by focusing on the client itself and considering the leader has the accountability on transformation in all its phases. This fact has brought out leadership as

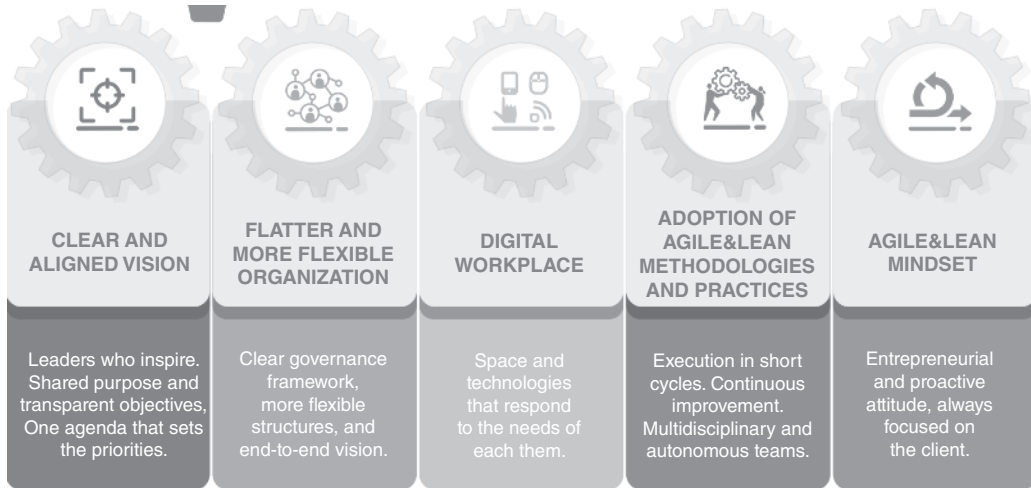


Figure 1-18 Repsol's New Ways of Working Elements

another enabler of the transformation processes and, due to this, leaders are being trained on how to inspire tomorrow and transform today.

In the past several years, Repsol has launched important initiatives: the Lean rollout in Chemical and Refining, the Agile rollout in the Digital department, transformation of departments such as Technology and Corporate Ventures, People and Organization, Auditing, Control and Risks, Finance, and Corporate Strategy. The decision to transform the organization is a strategic decision and requires hard work from people, investment, and time.

The experience at Repsol shows the potential of improvement that these New Ways of Working have brought about in where they were applied (Figure 1-20):

- In the culture survey, significant improvements in the lean index (an average six-point positive difference) and in the percentage of most effective employees (average 14 points positive difference), when comparing divisions that underwent transformation and those that did not.
- Additionally, at the organizational level, the hierarchy has been reduced, increasing the average number of reports to leaders by 75 percent increasing the Span of Control (SoC).

Fifth Phase: Stepping up the Transition (2021–2025)

At the end of 2020, Repsol launched a new Strategic Plan aiming to transform the whole company to achieve the net zero emissions ambition by 2050. This Plan is considering Agile & Lean New Ways of Working all across the value chain driven by a new operating model run by:

- A strategic talent management, by enhancing workforce planning, reskilling, and upskilling to face digitalization, new business and decarbonization; by boosting data driven culture; with a new and adapted professional development framework with diversity and inclusion.
- An organizational agility, by simplifying the organization; by promoting flexibility, productivity, and work-life balance.

THE LEADER

It has the “accountability” on transformation in all its phases: start, adapt, and adopt.

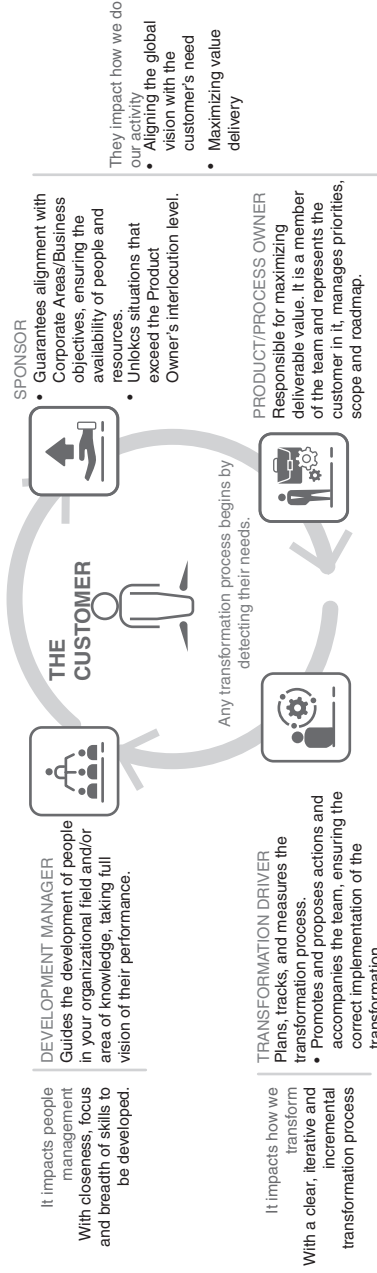


Figure 1-19 Main New Ways of Working Roles in Transformation Processes

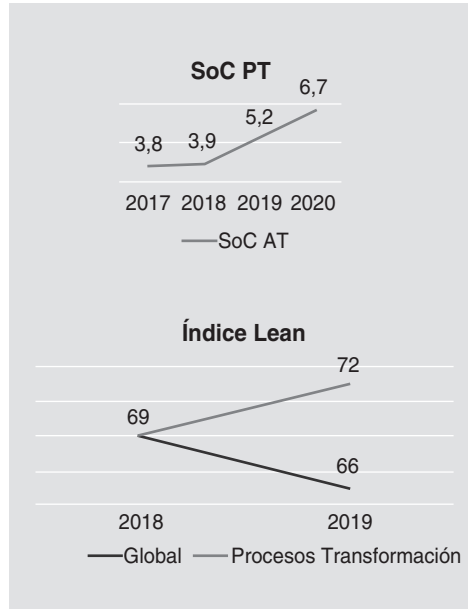


Figure 1-20 Improvements in Span of Control (SoC) and Lean Index

Repsol aims to become a more competitive company, a Repsol that develops new decarbonized businesses, a Repsol that with its actions and investments contributes to a world that still has fewer CO₂ emissions. Repsol will accelerate its transformation for the future they want, with customers at the center of the strategy, moving toward a decarbonized world.

1.11 Strategic Agility

The next three sections cover a multitude of the required dimensions of strategic agility. The multitude of Agile changes in organizations over the last decade indicate that the remainder of this decade and into the next one will witness a continued stretching of the ways of working to accommodate the demands of uncertainty, continual pressures of customers, and the need to inject urgency into our organizational cultures. The customer centricity dimension continues to grow as one of the root causes of the adaptability shift and the solutions co-creation expectations.

Merck KGaA highlights the impact of global complex events on how we adapt and build our resilience. Then, the Cisco section focuses on the customer and employee experience coupled with new forms of governance as the organization goes through a disciplined maturity journey. Following Cisco, the ServiceNow contribution drives home how strategic agility resulted in exploring new roles for the future PMOs. In addition, the dimension of product management is added to the mix to confirm the continual development of products and services that dominate the organizations of the future.

These three sections highlight the important role of the holistic and integrated progressing on a strategic agility path.

1.12 Excellence in Action: Merck Kgaa⁶

The world is evolving quickly. This is not new, but what we have seen during the pandemic in 2020 is a complete disruption of what was known previously. It is just a first taste of what could happen in the coming decade. At the beginning of this pandemic, some companies made the decision to reallocate budget and resources in a short period of time to fight the virus: mask manufacturing, vaccine research, tests manufacturing etc. The outcome was uncertain, pandemic duration also. Thus, making a decision without a lot of data is risky. This is where the project and portfolio management functions could demonstrate its added value: which project to be put on deck in order to free resources and budget? What is the level of risk taken to do this? Is it worth it? What are the expected adjusted values for the new projects coming in the pipeline?

All markets have been impacted and not only pharmaceutical industry and companies like AstraZeneca, Pfizer, Moderna, culture, fashion, automotive, etc. In all areas, decisions have been made to re-align the project portfolios and to stay competitive and to adapt to the new environment. In my point of view, it is just a first sign, and this will become a standard in the upcoming decade: how to move/change fast? If you are not ready to do so, you will be out of the game quickly. The fact that you have a good set of metrics to run your portfolio does not tell you that these metrics will be still relevant in two or three years from now. Let's be prepared to change.

The world is changing quickly, and we had a clear overview of this during the COVID-19 pandemic. In a short period of time, the world faced an unprecedented situation and new solutions accompanied by ways of doing have emerged.

Project management is a key actor of this change. Let's have a look back on what happened. An unknown virus started to infect the population in several countries at the same time and it spread very quickly. All countries, industries, and services were impacted. To fight this pandemic, solutions have been developed How to control the pandemic? How to test the people? How to protect the person not infected yet? How to develop in a short period of time a vaccine? How to ensure the delivery of key food, water etc.? So many questions and all of these included a project management role.

As a project and portfolio manager, we have been heavily involved to deal with this new situation and, on my point of view, it is only a starting point. The world won't be as it was in all dimensions. There was a **BEFORE** and there will be an **AFTER** pandemic.

When I say that project management has been heavily involved to deal with the pandemic, I can provide several examples: in the pharmaceutical industry, resources have been shifted to the research of a vaccine and testing kits which means that portfolio prioritization has been used widely as we cannot drop off everything from the table just by snapping our fingers. In addition, logistic topics were at the heart of the manufacturing activities and is still the case today. Here also, project managers are key.

I could find many examples, but the key message here is that project management importance is growing and so is its impact. The other point is that our methods have evolved and will continue to evolve again and again in the future. We cannot manage our projects today as we did 5 or 10 years ago. I would like to share with you some areas, where we will be challenged in order to be prepared for the future.

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- Project management activities are moving more and more toward strategy. I don't want to say that strategy is going to be defined by a PMO organization as the key axis are and will be defined by the business, but our role is evolving to a strategic component. Portfolio is here to execute the strategy and a clear link between the activities done and the strategy should be developed and available. It is not enough to say "all of our projects are executing the strategy" because at a certain point of time you will need to make crucial decision as we have seen with COVID-19 pandemic.

Operational projects will be continued to be managed by the PMO but more and more we see strategic initiatives also requesting a Professional Project Management leader. This will grow for sure in the coming years. In order to be ready to do so, strategy knowledge, customers and market segment needs should be known by our project managers. We are not requesting them to manage a scope, budget, and timing but we will ask them to have additional knowledge and understanding of the business and its environment. The future project manager will be a real business challenger.

Project managers will be hired for a specific mission for a certain period of time and need to be flexible enough in order to move quickly to another company/business for another mission. This means **ADAPTABILITY** and fast learning curve on business environment. The PM will need to have much broader view than now. Focusing not only on the project but also on the surrounding world to be able to anticipate risk and issues. I am sure you have heard about data lake and all information we can have from there. Project manager skill is to be able to deal with a lot of information and to retain only what is key for the project he/she is managing. In a more and more competitive world,

ROI is key for a project. Even if it is aligned with your strategy, the project prioritization on business impact and value is growing more than ever before. Access to the information is easier with data lake tools and reports available. The more info you have as a PMO, the more you need digest them and to exploit them to provide a clear message to your sponsors – PMO will evolve in this area too: finances, business acumen and understanding of the business will be key to manage a project to a success

- Managing remote teams is starting to be the basis today. We are using so many tools now to manage our meetings and our projects remotely. Our stakeholders, partners, sponsors are used or starting to be used to that. This was not the case some years ago when you had your Core Team around the table to discuss the upcoming activities or to make an update to the top management to make them aware about your portfolio projects' situation. Today, this kind of activities is requiring new skills for a project manager: no possibility to see the body language of the participant, no possibility to use your personal body language to convey the right message. This is not easy to deal with, but this will be the future. How do you manage a remote team with cultural differences and in a different environment? In a traditional PMO with processes well established and using a Waterfall approach, governance in place is not a success factor: human relationship is key! You can have all documents and governance in place, but if you don't develop your human skills you will fail.

One of the key components for a project manager role is the human relationship. Managing people without having a hierarchical link is the most critical skills we need to have. This is coming more and more critical with virtual and remote team members across the globe. Dealing with other people in other location without having the possibility to have regular face to face meeting is a key challenge which needs to be handled in a successful way. If you don't have this, you cannot achieve success without difficulty. How do you engage your team remotely? How do you keep them aware of the situation in an efficient way?

A lot of digital tools are available, and we need to pick the right ones to be successful. The key success factors won't be only to select the right tool but the usage of them. As an example, when you are conducting a project presentation, especially face to face and in one room, it is pretty easy to capture the attention of the audience: tone of your voice, movement on the stage, movement in the room in order to be closer to some people to answer question etc. With a remote presentation you will need to change your presentation methods to ensure everybody is engaged.

This topic has taken more and more importance during the last year and will be a key differentiator for a project manager in the coming decade. During the pandemic, we have tried several ways to manage this situation and I can tell you that one solution is not applicable to all situation and all teams. Each of them has its own dynamic and the role of the project manager is to propose and to define the right setup with the Core Team. This can be virtual coffee once a week/month, virtual game, or just a dedicated channel to discuss and share our thoughts on a regular basis for instance. There is no magic solution, and this is the reason why the role of project management is key! We are here also to define and implement the right setup with our team members. This is part of our job and critical.

We see some skills and competencies emerging from our daily job and work. Our sponsors are requiring more and more empowerment, leadership behavior, engagement and not only from the project manager but from the entire team and the PM is the trigger.

- When we are talking about remote team members, we need to have in mind also our stakeholders and sponsors. It was not easy before the pandemic, but it will be more complex in the future. Mapping the stakeholders, embark them in the project, keep them aware of the situation is key and will be more challenging with remote situations. A good project can be a complete disaster if the stakeholders are not well-managed and the project manager's role on this is key and where he/she can demonstrate the PMO added value to a project.

Do not expect to have one stakeholders' map at the beginning on your project which will be the same at the end. As said before, everything is evolving fast and your job is to ensure to be up to date every day: who are my stakeholders, where are they located? What are their names? And the most important: what do they want to know and when?

- A question which is regularly asked by some stakeholders or partners is: how could we measure the PMO impact on our projects? Unfortunately, there is no key performance indicator for this question. Every project is different and so it is not because you don't have a project manager leading a project that it will fail. You never know what would have happened if you had one! When we started to build our PMO group, we had few project managers, but we built our vision, we made several proposals to our leaders to have better visibility on what was going on, and we built a communication path to them. Several years afterward, the group had grown, and project managers are now requested for each project and for me, this is the PMO impact measure.
- We are entering a digital world more than ever: communication, data management. Everybody is aware of this situation. The question is: are we ready? If we are talking about project management tools and practices, we are at the beginning. Until now, Waterfall process was the main rule we followed, and we see Agile and hybrid methods raising up.

On my point of view, the role of a project manager is not to apply a specific process, but to choose the right one and on top of that to be able to create, and manage several processes mixed together. The future project manager will be creative. Adaptability is key to ensure the most efficient way to develop what is requested by the business: this can be a new organization, new product, new infrastructure. The project manager will come with the toolbox, and it will be up to him/her to choose the right ones to achieve the goal. There won't be a single standard, but

there will be several possible tools and the PMO will be the reference to choose the right one, the most adapted to the situation.

As the world is moving fast, process should be flexible. In any company, we need to define a clear process to ensure a harmonization of all project methodologies but also a comprehensive and accurate reporting system and portfolio management. Even if the processes are set up, the PMO should ensure the adaptability of the process to the current project situation and environment. Project managers are not here to apply the process but to adapt the process to the situation.

Do not expect the business to tell you what process to use in the future; they rely on you to tell them. This is where PMO as an added value: tracking activities base on a defined process vs adapting the process to the required activities to ensure success. The process is a guideline and a check list to be sure not to forget anything. ADAPTABILITY will be key for a SUCCESS.

As you can see, the future project manager will have additional and improved skills and competencies. He/she should be more creative, adaptable, manage remote team and stakeholders, have a huge business knowledge. If we are not able to go that way, we won't be part of the game anymore. The business needs us to be successful. Let's be part of this new world!

1.13 Excellence in Action: Cisco⁷

Cisco Customer Experience – Project Management Role Evolution – Transformation in Action

Cisco Customer Experience (CX)

The industry is in the most demanding competitive environment in history. These tumultuous times are driving dramatic changes. Changes that have already transformed how people around the world live, work, play and learn.

But one thing has not changed at Cisco amidst these demanding times. That's Cisco dedication to customers, who are and always have been at the heart of what Cisco does. The result: bold and continuous customer-focused innovation that in recent years has revolutionized the Cisco Customer Experience (CX). Today it's a companywide mindset.

It's a commitment driving the industry's most trusted Customer Experience (CX) with our extraordinary people and technologies. Cisco enables this through the *Collaborative Intelligence* approach which consists of three customer-centric experiences: *CX Lifecycle Success*, *CX Cloud*, and the *Cisco Success Portfolio*.

CX ensures that our customers receive the best possible experience at every interaction at every single Cisco touchpoint. How is this accomplished? By being customer obsessed. Obsessed about each customer's business; obsessed about each customer's challenges; and obsessed about the problems each and every one of our customers are facing.

At Cisco, CX is a deliberate and holistic company-wide effort. Our teams work in coordination with all parts of the enterprise -- CX, Engineering, Marketing, People and Communities.

Cisco CX is the result of a genuine transformation. One that involves new roles, new platforms and technologies, new processes, and new portfolios. It's an accomplishment that to date has never been replicated at this scale, in a business and portfolio as complex as Cisco's.

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Just as our employees deliver exceptional customer experiences through professional and support services, the Cisco CX journey delivers additional value in digital capabilities, data, portals, APIs and more. Each CX component from our people to our technology is critical in delivering the best comprehensive customer experience at scale.

As the industry transforms, the way customers define value is also changing. They expect value from every step of the life cycle. In many cases, customer experience even surpasses price and product as a key brand differentiator. At Cisco, CX is at the center of ground-breaking innovations.

The Cisco customer life cycle defines the stages of the customer journey through key touch points. If the customer is delighted at one touchpoint, then then transition to and through the next is seamless. Woven together these experiences strengthen customer confidence and are fundamental in building close, meaningful, and enduring relationships across our global ecosystem.

CX – Global Role Communities and Employee Experience

The concept of Role Communities was implemented as part of Cisco’s CX transformation. As already stated, industry transformation now occurs at breakneck speed. As a result, Cisco is evolving at an even faster pace and continues to lead the way forward in this journey.

We’ve learned that continuously elevating the value Cisco brings to our customers requires a laser-focus on driving best-in-class Customer Experience. We’ve also learned that delivering professional growth opportunities for our employees is equally important.

Cisco’s internal “Role Communities” were launched to instill a strong sense of “*belonging*” and a “*commitment*” to role professionalism along with consistency and quality through active and global peer communities. Such affinity is critical to a great culture because truly *great Customer Experience is born from a great Employee Experience*.

Employee Experience is fundamental in building amazing customer experiences, you need to first start with the moments that matter to the employee. Role Communities is a key part of enhancing employee experience by making engagement and culture a priority within the organization. It’s a manifestation of people and culture coming together to drive norms and cultural shift. It’s a deliberate approach in creating the most fulfilling empathy-based employee experience by focusing on the moments that matter. Taking the persona focus to an individual level, as an enriching experience is personal. Every role knows the value of the work they are doing, which creates a culture of empowerment, value, and innovation. Cisco had the biggest endorsement in 2020, by being named **#1** on the “World’s Best Workplaces” list by *Great Places to Work and Fortune Magazine* for the *second year* in a row!

CX Role Communities represent the horizontal lens through which the CX journey is viewed via each core role’s unique perspective. These peer-based perspectives also serve as the change agent for those roles.

Each Role Community represents a single point of contact that owns the role definitions, processes, assets, and evolution for the overarching core CX roles. The vision for role communities is to *build and grow the most highly engaged global community of customer-obsessed professionals that share, innovate and scale learning & best practices to deliver extraordinary customer experience together*. All based on three deeply held values of *Customer Obsession, Trusted Expertise and being Extraordinary Together*.

Role Communities are a key mechanism in the acceleration of organizational transformation. The impact of communities is broad and deep addressing strategic core role evolution,

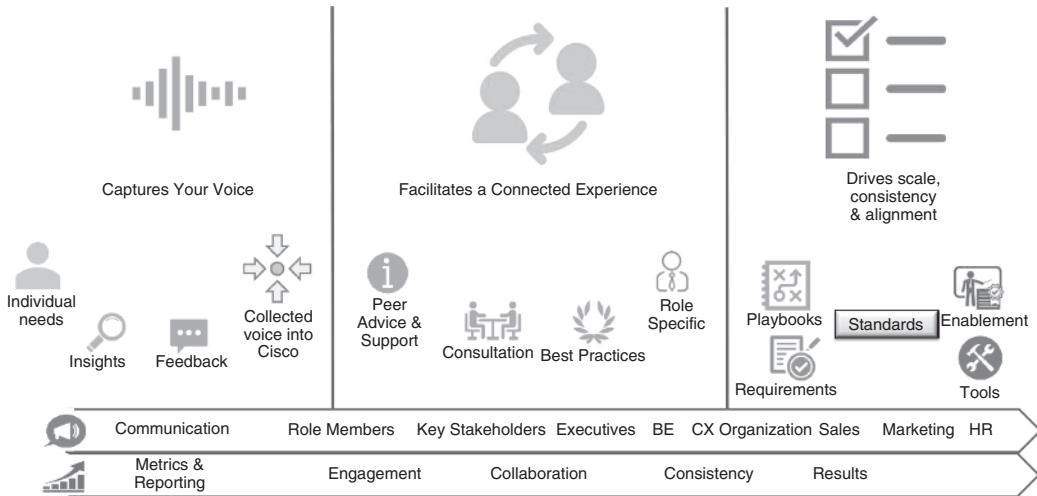


Figure 1-21 What Is Role Community?

functional excellence, and individual performance by making knowledge transparent and easy to access.

Each unique Role Community captures the voice of individual contributors and facilitates a connected experience across the globe, ensuring consistency and alignment to business strategy and objectives.

In summary, Role Communities drive employee experience via role engagement, role-consistency, change-management, and transformation.

Figure 1-21 illustrates the general concept of what a Role Community does.

Global Project Management Role Communities

As illustrated in Figure 1-22, Project Management is as one of the 12 core CX customer facing roles. The Cisco CX global Project Management team comprises over *one thousand* Project and Program managers delivering over *ten thousand* active projects and programs with multiple billions of dollars in revenue.

There are three main customer facing project management delivery roles: *program manager*, *project manager*, and *project specialist*. Program managers successfully manage and lead programs to deliver customer business outcomes for complex, transactional, and multicomponent interdependent programs. Project managers successfully manage and lead projects to deliver business outcomes for our customers. Both roles also provide leadership to the program team and delivery teams to deliver programs and projects on time, within budget and with high quality, driving customer satisfaction. Project specialists support project and program managers through the delivery life cycle.

One of the key areas in implementing the Project Management role community was to create the right governance structures to ensure key constituents within the global Project Management community were represented. This was achieved by the creation of the *Global Project Management Council*, which is made up of the three main regional geographies and underlying business segments plus the CX Centers and key corporate functions. This was to ensure we were able to manage global coordination, scalability, consistency, and transformation. This model accelerated the evolution of the Project Management role in line with CX transformation.

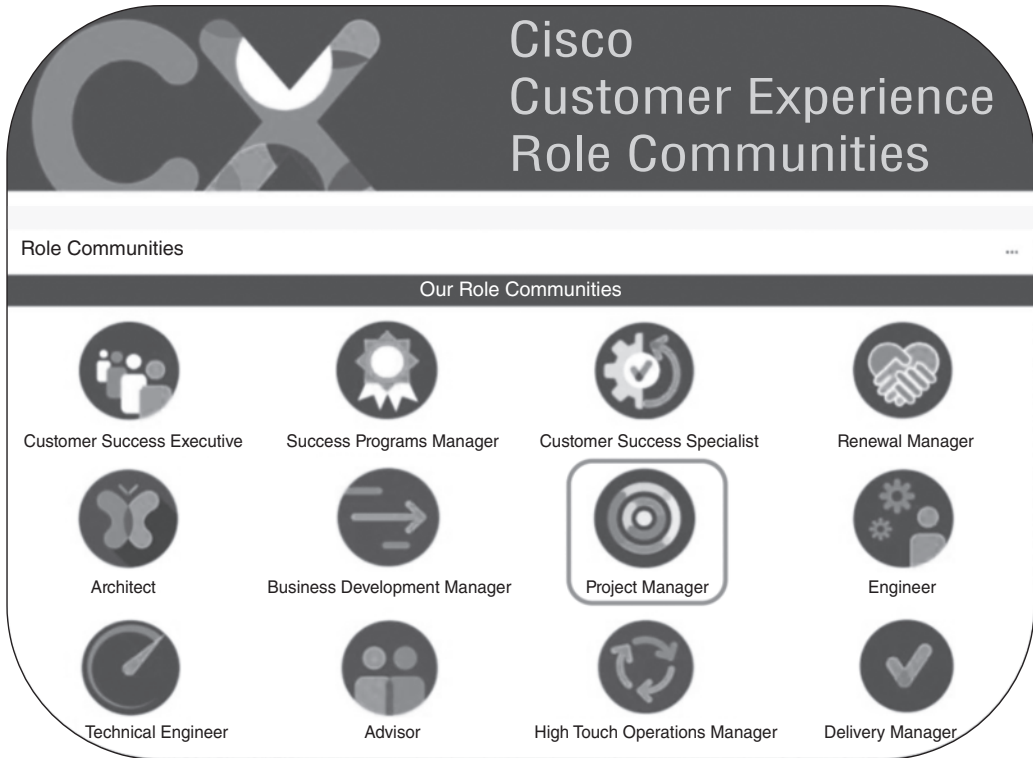


Figure 1-22 Cisco CX Core Customer Facing Roles

Global Project Management Council

Figure 1-23 shows the global and regional structure of the Project Management Councils. The Global Council is made up of 12 seats representing the key parts of the Project Management population. The global and regional council flow information in both directions. To anchor the role of the Global Council, a comprehensive Constitution was introduced to bring clarity to the role of the council.

The Council Constitution

A clear vision statement was created: To Build a BEST-IN-CLASS Project Management community that delivers the HIGHEST LEVEL of VALUE throughout the CUSTOMER JOURNEY.

Alongside the vision a mission statement was defined:

- To identify and respond to employee engagement, adoption, tools, method, and skills needs of the Global Project Management Community.
- To engage with employees, Customers, and other stakeholders to identify current and future skills needs, plan & ensure global execution accordingly.
- To align PM Community talent growth and delivery capabilities to future business/customer demands and stimulate innovation.

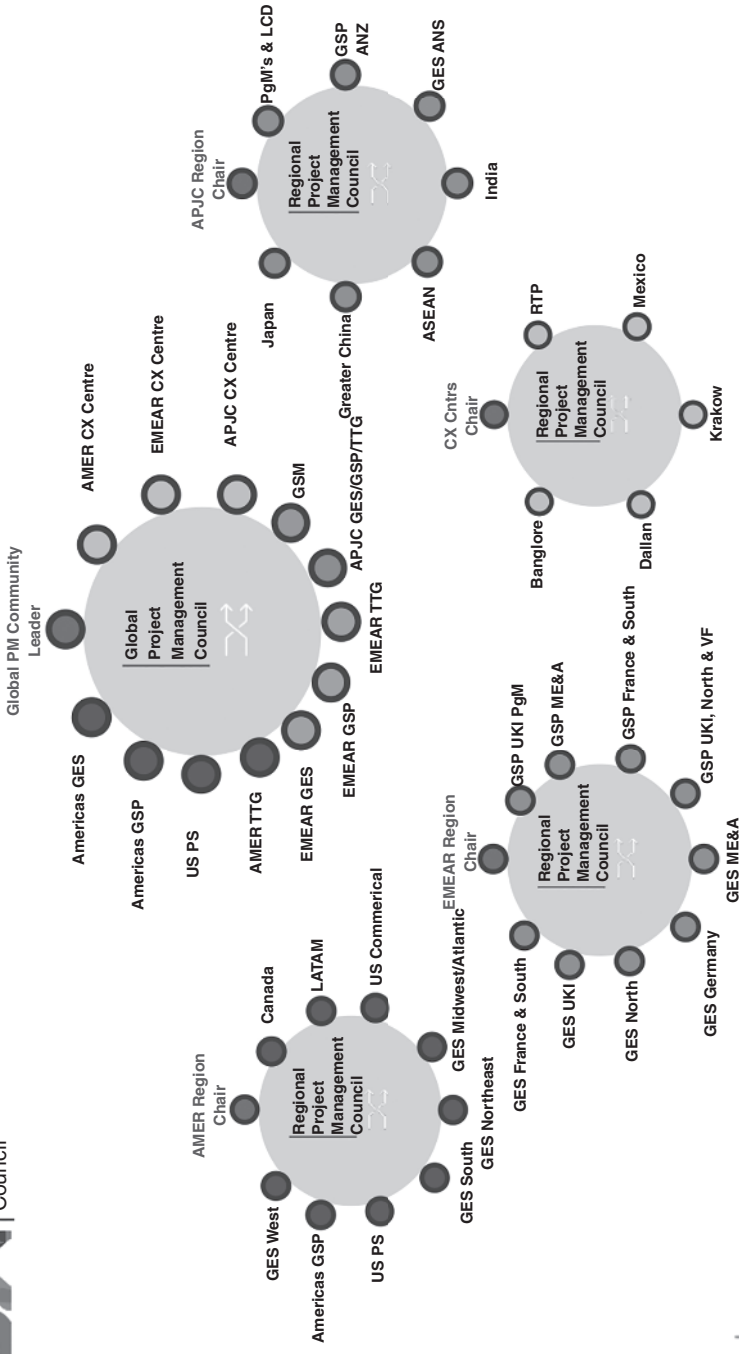


Figure 1-23 Global Project Management Council Structure

- To enable an inclusive community response to Global Project Management and wider Customer Experience Policy and initiatives.
- Provide a central body to drive global consistency with regional nuance to advance the project management capabilities in alignment to the CX strategy.

Plus, the Project Management Council members are required to commit to the following principles:

- **Objectivity:** Members should act for the widest benefit of others.
- **Accountability:** Every Member sits on the PM Council on behalf of the stakeholders they represent, and it is expected that every Member ensures that reasonable arrangements are in place to report back on their work.
- **Openness:** Members should be as open as possible about all their actions as Members of the PM Council. It should be ensured that reasons are given for decisions taken by the PM Council.
- **Confidentiality:** Every Member should respect confidentiality, where that is relevant, and ensure that confidential material is protected and that it is not used without permission from the PM Council.
- **Promoting equality and respect for others:** Every Member should undertake their responsibilities with due regard to the need to promote equal opportunity for all and demonstrate respect and consideration toward others.
- **Non-bias:** Toward decisions made on global standards, regardless of personal views on the topic.

Defining the core principles of a PM Council Member is critical to the success of the Council. Members are expected to work on the basis of mutual support, shared values and a culture of joint working and collaboration. This behavior and maturity of approach is at the heart of everything the PM Council represents.

Global Project Management Community – Governance Model

Figure 1-24 shows the complete Project Management Community governance model. It was created to directly align the *Executive Sponsor* for the Project Management role within CX with the *Global Project Management Council* (as shown in Figure 1-23) and ultimately the global *Project Management Community*. We use the concept of *Create, Approve & Adopt* to implement initiatives across the community.

Global Project Management Community – Transform for Success

To begin the Project Management transformation journey, we first needed to understand our starting point. To establish this, we undertook several assessments to inform our position.

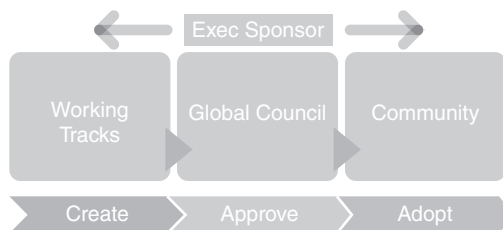


Figure 1-24 Global Project Management Community – Governance Model

The *Leadership Transform for Success* survey was made up of four distinct areas:

- What has “Changed” in 1 year in your PM area/community?
- What PM “Maturity” score would you give your area?
- What are the “Barriers” to Success?
- What is the one thing you would “Change”?

Additionally, a maturity assessment of the PM capabilities using the five levels of the *Capability Maturity Model Integrated* (CMMI) was completed. The Project Management Community individual contributor feedback was captured via direct verbatim comments using the Community Platform and the official quarterly role community survey results. All these data points were consolidated and fed into the key analysis input stage.

Identifying the Focus Areas

Taking the *Transform for success* analysis (shown in Figure 1-25) and using the *Global Project Management governance model* (shown in Figure 1-24) to work on the key analysis to identify and determine a clear set of *Focus Areas* (Figure 1-26) to address on behalf of the Global Project Management community in line with the wider CX transformation.

These focus areas and the wider narrative were taken back to the global Project Management community and tested to ensure that everyone was aligned. Community and leadership feedback at this stage was greatly encouraged. Before moving to the next stage, we captured all ideas until we had a comprehensive list for each of the four focus areas.

Global Project Management – Transformation Map

For the next stage we organized a face-to-face envisioning workshop spread over three days onsite at our Cisco office in Raleigh, North Carolina. In attendance were all representatives from the Global Project Management Council (Figure 1-23), plus selected Project Management subject matter experts (SMEs) and professional facilitators.

Coming out of the intensive envisioning workshop was a comprehensive *Transformation Map* (Figure 1-27) defining all the key initiatives for each focus areas, prioritized into a time horizon

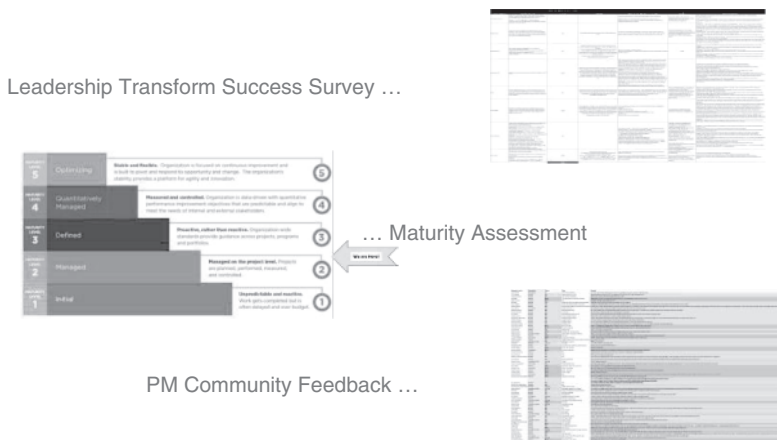


Figure 1-25 Global Project Management – Key Analysis

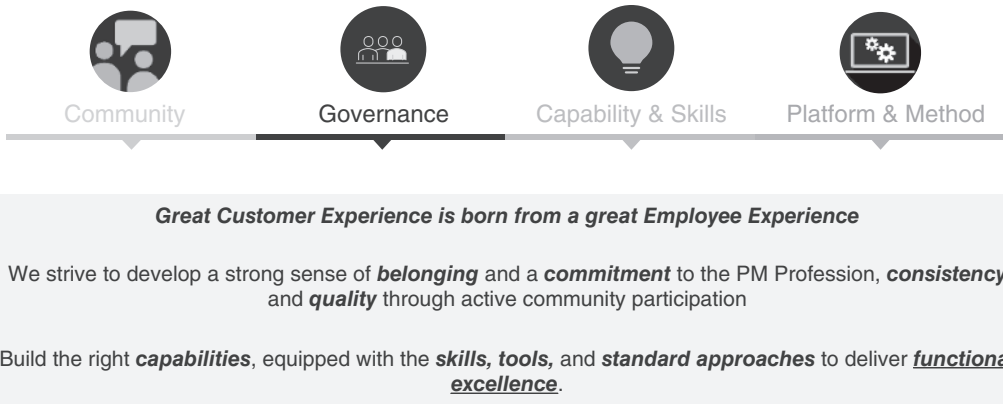


Figure 1-26 Global Project Management Community – Focus Areas

and sequenced. Under each initiative were several deliverable actions that were recorded in a Transformation action log as we moved to execution phase.

As you can see from Figure 1-27, the overriding evolution path for the Global Project Management Community was from “*Deliverable Coordinators*” with a focus on *cost to serve* to ultimately “*Value Orchestrators*” with a drive to *time to value*. Everything in between spread over the various focus areas and time horizons made this evolution possible.

Conclusion

Implementing Role Communities as part of the Cisco Customer Experience transformation was a critical step in creating a powerful employee experience. Role Communities allowed Cisco CX to pivot the core roles into the CX transformation journey. In particular, the Project Management Community allowed the role to evolve at a faster rate by focusing the role evolution on moving from “*Deliverable Coordinators*” with a focus on *cost to serve* to ultimately “*Value Orchestrators*” with a drive to *time to value*. It also allowed us to successfully embed industry-standard Project Management competencies and culture at scale while keeping project managers tightly integrated with the delivery teams providing proximity to customers.

The Project Management Role Community gives each project professional the ability to use their voice to provide direct feedback and play their part in the role journey at every step of the way. It also creates a strong sense of *belonging* and is a primary focal point for all things Project Management. And because it is accessible to all employees, the platform provides a focal point to access resources, advice, and expertise to establish project management as a strategic competency.

This approach supports a clear narrative for mutual understanding and allows all members to participate in the journey. Achieving the right blend of individual feedback, alignment with the business objectives, and converting that into a clear narrative backed up with a set of initiatives that can be measured is a very powerful thing.

“Coming together is a beginning; keeping together is progress; working together is *success*.”

– Henry Ford

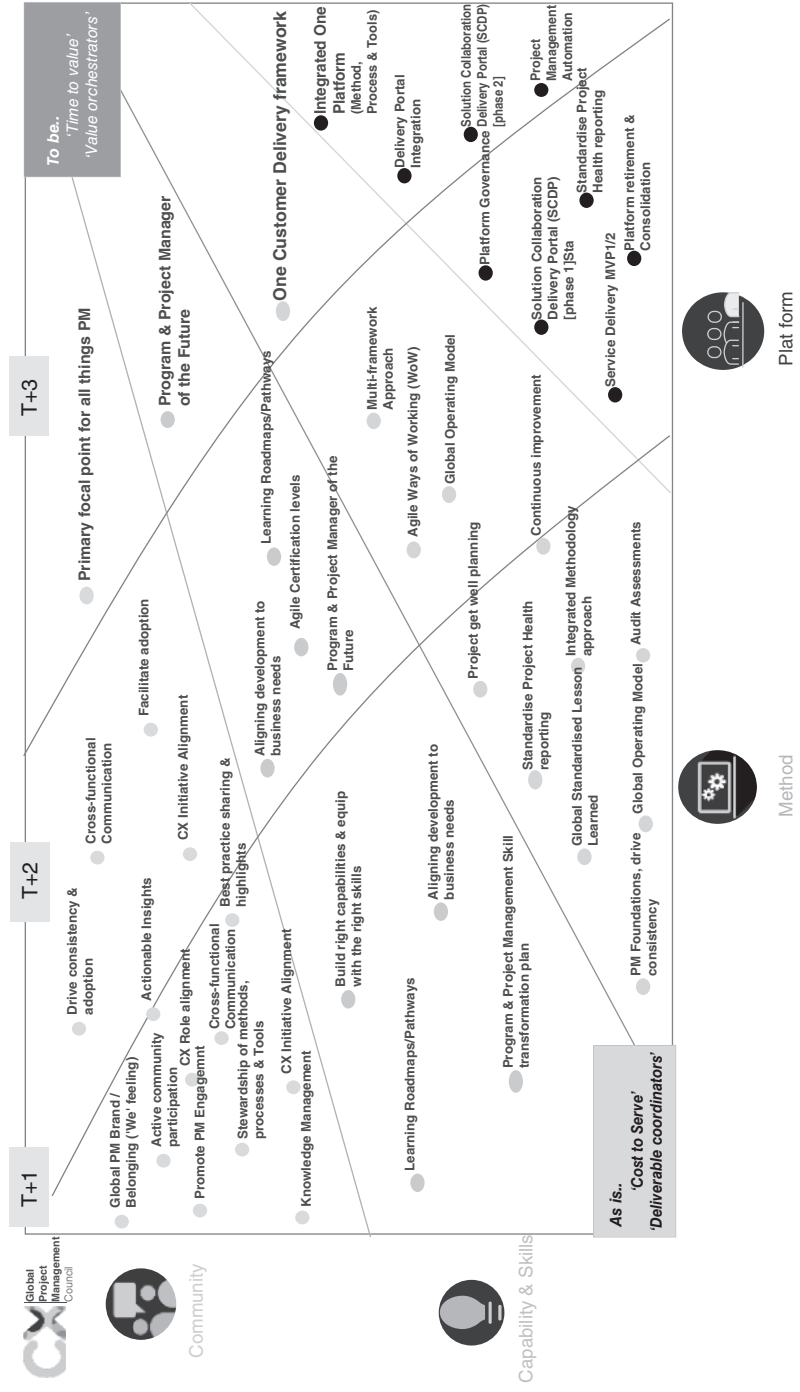


Figure 1-27 Global Project Management – Transformation Map

1.14 Excellence in Action: Servicenow⁸

Uncertainty has always been a characteristic of the modern business environment but was made dominant by the COVID-19 pandemic. For companies adapting to the pandemic, the learning curve to take on new challenges – an ‘all-remote’ workforce, changing revenue streams, and an uncertain economic outlook – was steep as organizations attempted to pivot people, processes, strategies, and technology architectures. As a result, less nimble companies struggled to adapt.

This ability to pivot is the heart of *strategic agility*. Successful companies weather disruption by not only maintaining business continuity, but by quickly adapting to new business challenges and opportunities.

At the start of the pandemic, a global survey conducted by ESI Thought Lab and ServiceNow found that just 10 percent of large enterprises described themselves as *agile*. By the end of 2020, that 10 percent had almost tripled to 28 percent.

Yet even that percentage seems modest, given the increasing velocity of change in the business environment. Companies are scrambling to adapt to massive shifts in customer demand and employee needs. Disruption on both of these fronts has put a new premium on an organization’s ability to respond quickly to changing market conditions.

Corporate digital transformation is key to digital transformation.

Modern companies now realize that to achieve strategic agility, they must digitize manual processes and workflows. This need for digital transformation is driving massive corporate investment in an array of technologies, including automation and machine learning.

According to IDC, companies are expected to invest \$6.8 trillion globally between 2020 and 2023 in digital technology initiatives (Manek 2020).

By focusing on digital transformation efforts, the modern C-suite can achieve its goal of strategic agility in response to business uncertainty.

The Shift for the Project Management Office (PMO)

The modern PMO requires new capability and expertise to advise business leaders on where and how to quickly reallocate resources in response to shifts in business demand and risk. The emphasis is on outcome realization across business lines; the PMO must be positioned to advise and manage the nimble reallocation decisions needed for strategic agility.

Project management has traditionally focused on establishing certainty through risk reduction in areas such as time, scope, and cost management. But controlling risk becomes moot if market demand shifts significantly. Often the traditional approach can deliver a project on time and on budget but not deliver the product or service that’s genuinely needed.

In the post-pandemic world, PMOs have to shift their mindset from risk reduction to strategic agility. In practice, this means a shift in focus to guiding realization of business outcomes. To do this, PMOs have to expand their range of expertise from project management to program and product management.

The challenge: develop the strategic muscle to oversee multiple projects, products, and programs to ensure business outcomes and value realization.

⁸ Authors: Simon Grice (Senior Director, Innovation), Doug Page (Senior Manager, Product Management), Rani Pangam (Senior Director, IT Project Management), Tony Pantaleo (Director, Product Success) Acknowledgement: Used with permission from ServiceNow, Inc.

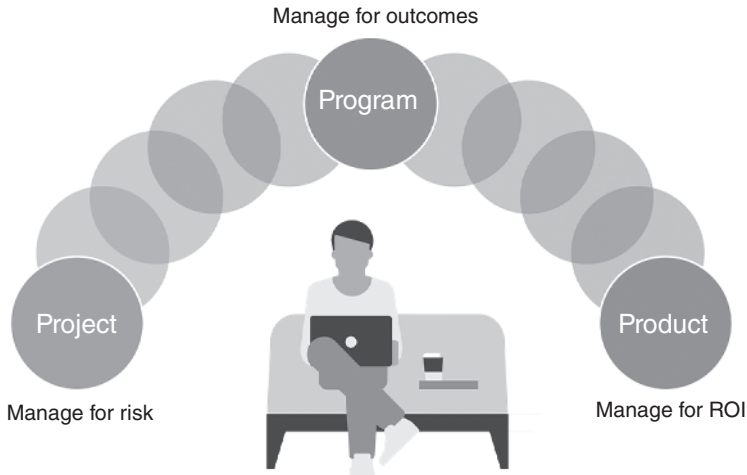


Figure 1-28 Moving the PMO Focus from Risk Reduction to Strategic Agility

Changing the Definition of Project Management

To develop these new competencies, a new definition of project management is emerging (Figure 1-28).

Today's fast-changing world requires major changes in project manager skills and mindsets. Agility, team collaboration, and change management are replacing traditional methods of tactical control and strict governance.

Project management has been typically defined as a set of activities designed to produce a specific deliverable tied to a product or service. The focus has been on governance: managing in terms of time, scope, and cost.

The new definition adds *program* and *product* management to the PMO's approach.

Product management focuses on the development and continuous delivery of a product or service. In this case, success is measured not by effective governance but by user adoption and experience; feedback is then used to drive ongoing improvement. Successful product management practices enable companies to navigate through change to deliver and sustain a competitive product or service.

Program management is the ability to encompass a set of projects and/or products that deliver outcomes linked to a company's strategic goals; these programs become part of a portfolio. An IT portfolio, for example, is a collection of programs and projects that share productivity and operational efficiency goals, which are then linked to corporate objectives.

Program management represents a new operational approach that moves from tactical risk management at the project level to enterprise management of value and outcome realization. This orientation is important in business environments where the value of a project isn't always obvious or results in unintended consequences. This situation is likely to become more common as the proportion of enterprise value derived from the customer and employee experience increases.

A shift toward program management (Figure 1-29) positions the modern PMO to:

- Influence stakeholders around how value and measurable outcomes are defined across enterprise capabilities

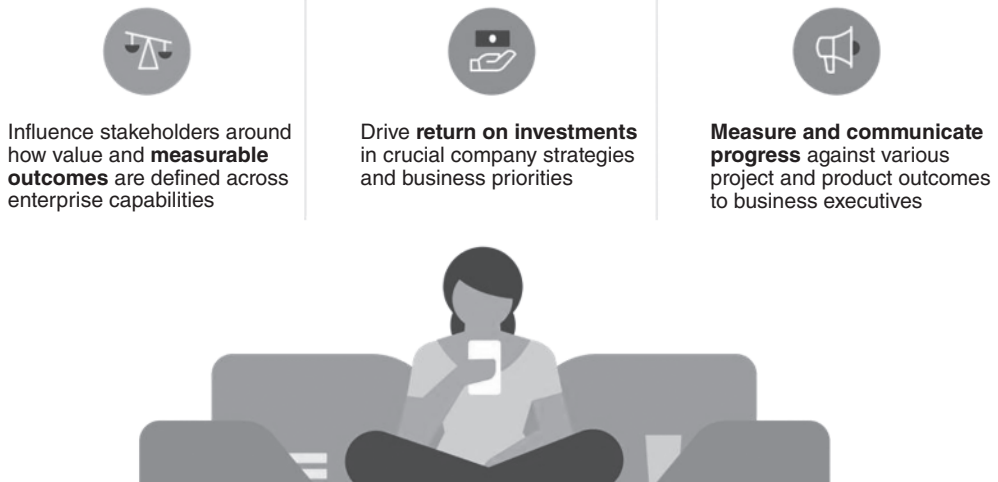


Figure 1-29 Modern PMO Responsibilities

- Drive return on investments in crucial company strategies and business priorities
- Measure and communicate progress against various project and product outcomes to business executives

A modern PMO should be able to quantify outcomes, perform against business priorities, drive a return on investment, and communicate progress to executive leadership.

Drawing upon its experience across projects, products, and programs, the modern PMO develops understanding and insight into the levers that impact customer and employee needs. With this understanding, the PMO can provide consistent reporting and advice to business leaders on how outcomes will be delivered and achieved – and where pivots are needed – to support company goals and priorities.

A good recap of many of the changing practices in the practices of project management is highlighted in the Farm Credit example in the next section.

1.15 Excellence in Action: Farm Credit Mid-America⁹

The Farm Credit System is comprised of over 70 independent financial institutions, referred to as Associations, with a unified goal of securing the future of rural communities and agriculture. Our member-owned cooperative structure ensures our business decisions remained focused on the customers we support. “Our loans and related financial services support farmers and ranchers, farmer-owned cooperatives and other agribusinesses, rural homebuyers and companies exporting U.S. ag products around the world” (Farm Credit 2021).

Farm Credit Mid-America, one of the largest Associations in the Farm Credit System, serves the credit needs of farmers and rural residents across Indiana, Ohio, Kentucky, and Tennessee. We provide a wide range of financial services including real-estate loans for land purchases, operating loans designed to meet the feed, seed, and fuel needs for daily operations, business loans,

⁹ Material in this section has been provided by Dr. Chuck Millhollan and Daro Mott. ©2021 by Chuck Millhollan and Daro Mott. All rights reserved. Reproduced with permission.

equipment financing and crop insurance products. We have approximately 80 retail offices spread throughout rural communities in our four-state area of operations.

In 2012, Farm Credit Mid-America was 19.7 billion earning asset Association (Farm Credit Mid-America 2021 Annual Report 2012). Led by the desire to serve their member-owners, Farm Credit Mid-America stood up their Operations team in early 2012 with the objective of mapping their business processes and identifying opportunities to not only gain efficiencies, but also enhance their customer experiences through an in-depth understanding of their core business processes and how they delivered value to their members. The Operations team, staffed with continuous improvement professionals with backgrounds in Six Sigma and Lean Manufacturing, conducted extensive Voice of the Business workshops to elicit not only a deep understanding of the current state business processes, but also to identify and prioritize needs of our team members related to process stability and enhancement.

The Operations team identified hundreds of process improvement opportunities, and Farm Credit Mid-America senior leadership identified the need for structured approach for not only prioritizing, selecting, and implementing the projects, but also making decisions based on strategic alignment and value. In 2014, Farm Credit Mid-America established the Process Improvement and Execution team with the responsibilities for managing the Association's strategic project portfolio, including the allocation of resources and prioritization of projects to meet organizational strategic imperatives. Due to realized successes founded in the application of portfolio management best practices, the Operational Process Excellence team was established in 2017 and expanded the Process Improvement & Execution team's scope to include providing leadership for the Association's strategic planning processes in collaboration with the executive committee and board of directors, leading business owners for key business processes, provide real-time business process support, and the collection and management of business process-related knowledge management.

As of April 2021, "Farm Credit Mid-America is backed by the strength of more than 80,000 customers and \$28.8 billion in earning assets, both owned and managed" (Farm Credit Mid-America 2021). The following outlines Farm Credit Mid-America's project management and continuous improvement journey from 2012 to 2021, and how we designed our structured approach to strategic planning, strategic project portfolio management, business process ownership, and continuous improvement in a financial services environment based on a combination of practitioner experience and academic research.

Tri-Focal Lens for Project Success

As stated by Kerzner (2021a), "Many executives understand the benefits of project management, but are often at a loss on how to achieve them (p.1)." Project management has matured significantly in the past several decades; however, there remain conflicting findings on which factors result in successful projects. Published research and conceptual papers reflect inconsistencies in definitions about what successful project management is all about and what skills are needed by project managers.

An extensive literature review conducted by Millhollan and Kaarst-Brown (2016) identified the potential conflict in goals and measurement of success from three different perspectives: the process of project management, the project manager, and the project outcomes. Each of these perspectives shifts the focus on not only measurement of "success," but also the project leadership skills necessary to maximize value delivery in an organization (Figure 1-30). In practical application, each perspective of success is defined by various stakeholders at various points in time (Millhollan 2015).

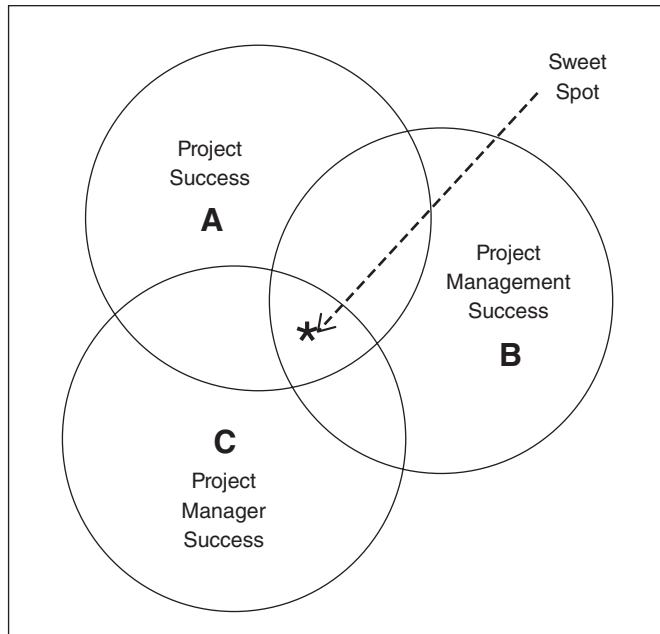


Figure 1-30 Tri-focal Project Success Lens

Paradoxes in Literature on Successful Projects

The challenge of project success comes with balancing differing expectations and perceptions (Judgev & Muller 2005; Shenhar et al. 2001). Perceived success is defined by not only meeting the technical requirements and providing a product, service, or result as defined in the project objectives, but also by achieving high levels of satisfaction from the stakeholder groups (Baker et al. 1988). Analysis of the literature supports that the challenges related to these different sets of project success factors and different categories or groupings are threefold (Millhollan 2015):

- 1) Some of the factors that contribute to project success are realized during a project, such as meeting project related constraints like budget and schedules and creating new products or services.
- 2) Other project success factors might not be realized until long after project completion, such as customer satisfaction or commercial success.
- 3) The factors influencing project success measurements and perceptions are often in conflict. For example, meeting a budgetary or schedule constraint can have a negative impact on satisfying technical or functional requirements.

These points also highlight that a successful project is a function of metrics not usually considered in the literature on project success: effective outcomes associated with stakeholder analysis, decision-making, negotiation, conflict resolution, change management, and politics of change.

Paradoxes in Literature on Project Management Success

Consistent across the literature are arguments that project management has not provided the expected benefits it is common for stakeholders to place blame on project management when projects fail. For this perception to be true, the failure would need to be rooted in the ineffective application of the project management methodology, failure to effectively plan, or a lack of

structure related to managing delivery according to agreed-upon constraints and objectives. Millhollan and Kaarst-Brown (2016) concluded that three paradoxes exist in the literature, aligning with Munns and Bjeirmi (1996), Azim et al. (2010), and Lacerda, Ensslin and Ensslin's (2011) views:

- 1) Effective project management methodology can contribute to project success because it provides a structured approach and standard tools or procedures.
- 2) Effective project management provides a structured approach, but does not ensure success of the project.
- 3) Absence of effective project management methodology contributes to project failure.

What is noticeably absent from the literature on successful project management is the decision-making associated with the selection of tools and techniques. There are skillsets that we say are important and can tie back to various project success metrics, however, there are also gaps in how project management literature and reputable project management standards focus on these. The key paradox in the project management (process) success, there is an implied dependence on skills outside project management methodology.

Paradoxes in Literature on Project Manager Success

There is agreement in the literature that project manager competencies are an essential ingredient for project success, that a project's success or failure is influenced by who manages that project, and that project managers must leverage their soft skills to effectively manage often complex, multi-disciplinary teams (Patanakul 2011; Pinto and Slevin 1988). Given that perceptions of success are heavily dependent upon project outcomes and how the project management tools and techniques are leveraged to assist in producing expected outcomes, it becomes apparent that a project manager's ability to elicit, understand, and manage stakeholder expectations throughout a project life cycle, and often even into the product life cycle, is paramount for project success. The project manager's opportunity to influence perceptions about project success rests in their ability to understand what stakeholders value, manage the real-world factors that influence how the project delivers value, and ensure the reality delivered and expectations are aligned (Millhollan 2008).

Based on the gaps presented in the previous sections and the author's experiences, it appears that application and decision-making around the techniques (hard skills) of project management are the critical skills of the successful project manager. This begins with the following (Millhollan 2015):

- 1) Skills associated with interpersonal interactions to elicit and understand stakeholder expectations related to a specific project so that one can use this information to identify and prioritize factors that will influence their perceptions of success.
- 2) Ensuring aligned expectations between different stakeholder groups through communication, negotiation, and conflict resolution skills, as these expectations could not only be in conflict, but also evolve over time as the project progresses from early planning through execution and delivery.
- 3) Decision-making and negotiation skills to develop strategies to manage not only the project, but also stakeholder expectations about agreed upon end-state goals.

If research indicates a specific set of skills, or range of skills, is necessary to be an effective project manager, why do the professional standards not provide descriptions that are more detailed or provide guidance for procuring and developing these skills? If we know that successful project

Table 1-2 Summary of key paradoxes in literature (Adapted from Millhollan and Kaarst-Brown 2016)

Category of Literature	Paradoxes
Project Success	<ul style="list-style-type: none"> ● Some of the factors that contribute to project success are realized during a project, such as meeting project related constraints like budget and schedules and creating new products or services. ● Other project success factors might not be realized until long after project completion, such as customer satisfaction or commercial success. ● The factors influencing project success measurements and perceptions are often in conflict. For example, meeting a budgetary or schedule constraint can have a negative impact on satisfying technical or functional requirements.
Project Management Success	<ul style="list-style-type: none"> ● Effective project management methodology can contribute to project success because it provides a structured approach and standard tools or procedures. ● Effective project management provides a structured approach, but does not ensure success of the project. ● Absence of effective project management methodology contributes to project failure.
Project Manager Success	<ul style="list-style-type: none"> ● Skills associated with interpersonal interactions to elicit and understand stakeholder expectations related to a specific project so that one can use this information to identify and prioritize factors that will influence their perceptions of success. ● Ensuring aligned expectations between different stakeholder groups through communication, negotiation, and conflict resolution skills, as these expectations could not only be in conflict, but also evolve over time as the project progresses from early planning through execution and delivery. ● Decision-making and negotiation skills to develop strategies to manage not only the project, but also stakeholder expectations about agreed upon end-state goals.

managers need a broader range of skills, why are we not including these skills in basic or advanced project management curriculum? Is it because it is too hard, or because we consider these dispositional skills rather than skills that can be taught? These are important questions to ask. Table 1-2 provides a summary of the key paradoxes related to the tri-focal success lens.

Kerzner (2021b) emphasizes that “project success does not fit into any predefined criteria. There can be a different definition of success in each industry and even in the same industry, the meaning of success can change from project to project and in each life cycle phase (p.1).” Understand this changing definition of success phenomenon as a practitioner, and drawing upon the tri-focal lens, we designed the Operational Process Excellence team and our methodology to allow for a shift in focus on success to the intersection, or sweet spot, of each perspective.

Farm Credit Mid-America's Value-Driven Strategic Portfolio Management

Strategic Imperatives

One of the foundational concepts that we focused on early in our journey was creating a culture of focusing on realized benefits from strategic projects. Establishing a top-down ethos for benefit realization began with the executive committee and the board of directors. Using our strategic imperatives (see Table 1-3), we dedicate time during our annual strategic planning kick-off in July discussing strategic projects and their value proposition through the eyes of our board of directors and executive leaders.

Table 1-3 Farm Credit Mid-America strategic imperatives

Provide an Exceptional Customer Experience	Add value beyond customer expectations so that customers desire to repeat the experience and tell others about it.
Grow Constructively	It is important that the portfolio continues to grow and effectively serve the marketplace in a manner that benefits customers now and in the future.
Maintain Credit Quality and Administration	Doing the right things in the right ways allows us to work with customers as they experience challenges. Make quality new loans, provide solid loan administration, and responsibly service distressed loans.
Maintain Sustainable Financial Operations	Ongoing diligence will help provide financial strength and position the Association for future success despite economic challenges and changes in regulatory and government policy.
Live our Purpose and Values	Our purpose and values are reflected in Our Compass (see Figure 1-31) and everything we do. We work together, care for one another, and coach and grow talent to better serve our customers.



Figure 1-31 Farm Credit Mid-America, Our Compass

Table 1-4 Farm Credit Mid-America value propositions

Increased Productivity	Doing more with the same number of resources. E.g., Increasing the number of loans, a credit analyst can decide. This implies a backlog of loans ready for work (available input).
Cost Reduction	Removing unwarranted expenses (operating or capital) through gained efficiencies. E.g., Eliminating waste in operational processes.
Decreased Turn Time	Reducing the amount of time it takes to complete tasks in the loan origination process. E.g., The average time it takes to decision loans is reduced through automating obvious decisions (approvals & denials).
Enhanced Customer Experience	Measurable increase in volume, margin, or fees. E.g., Creating an experience that incentivizes members to consolidate debt held by competitors.
Enhanced Employee Engagement	Measure of the emotional connection to our Association, workplace relationships and collaboration, commitment to our purpose, and commitment to the success of our organization. E.g., Reduced turnover or higher engagement surveys.
Long-term Business Sustainability	Holistic perspective with the objective of long-term growth, financial strength, and Association stability to sustain operating capabilities through regulatory and financial challenges. E.g., Focus on long-term business impact vs short-term profit, price, or results.

Our Compass

As referenced in our “Live our Purpose and Values” strategic imperative, we leverage Our Compass as a decision-making lens through which we keep our customers, both internal and external customers, at the heart of our business planning and decision-making.

Creating a Culture of Strategic Benefit Management

Using our strategic imperatives to brainstorm metrics as a group, we defined a set of value propositions to lead a discussion related to each strategic project and the expected benefits and benefit realization timelines. Table 1-4 lists the identified value propositions and their definitions.

Our objective was not to estimate with precision and set expectations for specific benefits; however, we did want our board of directors and executive leaders to engage a discussion about the primary and secondary benefits associated with each of our strategic projects and have the context to explain how each aligns with our Strategic Imperatives and contributions to our long-term strategic goals. We defined primary benefits as the intended outcomes directly linked to the business decision or program’s objectives, i.e., benefits accrue from the intended effects of the business decision or program, and these primary benefits are connected to the initiative’s perceived success. We defined secondary benefits as additional benefits that might result from realizing primary benefits; however, secondary benefits are not primary objectives. By nature, the secondary benefits are less important or impactful, smaller in scale, or will not be realized in a typical business cycle.

In the next steps, our board of directors, executive leaders, and senior leaders collaborated in an exercise to identify the primary and secondary benefits for each of the strategic projects in the project portfolio. The project Executive Sponsor presented their projects and explained each of the business objectives, and then small groups would discuss the anticipated benefits. Each group would present and defend their findings and, collectively, the team would come to an agreement and build the “Value Dashboard.” A sample of the Value Dashboard is provided in Figure 1-32.

Primary Benefit(s) Secondary Benefit(s)	Operational Efficiency			Increased Revenue	Enhanced Customer Experience	Enhanced Employee Engagement	Long-term Business Sustainability
	Increased Productivity	Cost Reduction	Decreased Time				
Comprehensive Sales Philosophy	●			●	●	●	●
Customer Selection	●	●	●	●			●
Credit Structure	●	●	●		●	●	●
Retail Structure	●	●	●	●	●	●	●
AgriLytic (Ag Loan Origination)	●	●	●	●	●	●	●
Country Home Loan System	●	●	●	●	●	●	●

Figure 1-32 Strategic Project Value Dashboard

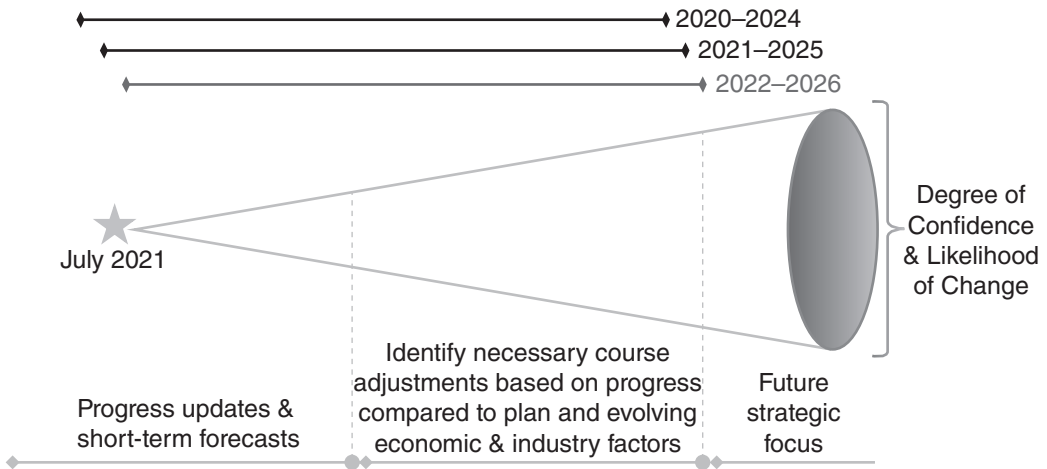


Figure 1-33 Strategic Planning Cone of Uncertainty

This entire process laid the foundation for not only why we select specific strategic projects, but also created an expectation for post-implementation benefit measure.

Strategic Planning Process

Farm Credit Mid-America has a five-year strategic planning cycle that is refreshed each year based on factors that influence our strategic direction and go-to-market strategies. Our annual strategic planning process begins in July of each year with our board of directors in collaboration with the Association’s executive and senior leaders. We begin the process, facilitated by the Senior Vice President Operational Process Excellence, with a progress report on the current year business plan, including current status for our strategic projects and short-term operations forecasts for the remainder of the year. Focus then shifts to future-state strategic planning, taking into consideration progress to date on strategic initiatives and an evaluation of our competitive position and marketplace factors that influence strategic direction. We refer to Figure 1-33 as our “Cone of Uncertainty” that illustrates not only our relative degree of confidence in our strategic direction,

but also emphasizes the importance of revisiting and refreshing our strategic plan on a regular basis. The outcome is clear guidance on not only our short-term focus, but also our future strategic direction as an Association.

The Senior Leadership Team uses this guidance to develop the 5-year strategic roadmap for each individual business segment and for the entire Association. Facilitated by the Vice President Process Improvement and Execution, the Senior Leadership Team evaluates current state as compared to expected future state, and leverages that analysis to identify the potential strategic projects necessary to realize the Association's strategic goals. Members of the Senior Leadership Team also serve as the Executive Sponsors for the strategic projects. This five-year, all-inclusive view of the Association's body of work is then reviewed and refreshed quarterly based on progress and marketplace influences to provide a view into the strategic projects, and operational work, we can anticipate in the coming months.

Including an initiative on the five-year strategic roadmap does not imply guaranteed approval. As projects approach initiation, the executive sponsors identify the business sponsor and business technology sponsor that will, in partnership with an assigned program manager and enterprise business analyst, prepare a formal Strategic Project Request for review and approval by the senior leadership team considering the current project portfolio and resource capacity. Once approved in concept based on the request merit, business case, and alignment with our strategic plan, the strategic project formally approved and prioritized by the executive committee. Projects are prioritized using whole numbers, and numbers are only used once. For example, there is only one number one strategic priority, one number two strategic priority, etc. This prioritization process then informs our resource allocation model. Resource managers allocate resources to strategic projects based on their prioritization, or based on business value and contribution to our strategic goals.

Operational Process Excellence Team

The Operational Process Excellence team is structured to contribute to not only effective project leadership, but also to define and manage value delivery before, during and long after project completion and transfer to operations. Our long-term objective in evolving the team to the current structure (see Figure 1-34) was to both deliver on the Association's strategic plan and to

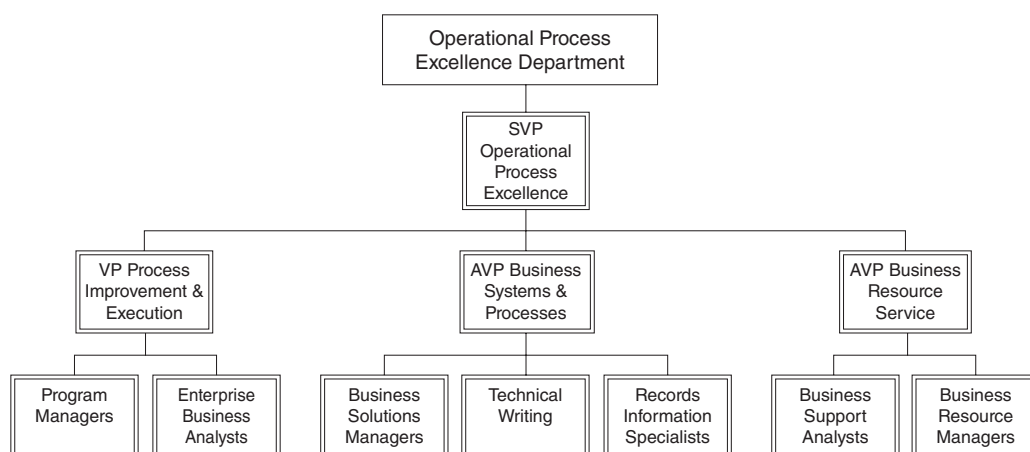


Figure 1-34 Operational Process Excellence Team Structure

proactively manage executing on long-term benefit realization through dedicated business process and product life cycle management.

Process Improvement and Execution Team

The Process Improvement and Execution team is comprised of Program Managers, Six Sigma Black Belts, Lean Practitioners, and Enterprise Business Analysts. The methodological diversity on the team was designed to not only continue with the original Operations Team's focus on continuous process improvement, but also to incorporate a tool set of skills necessary to address to meet organizational needs beyond the standard project management body of knowledge. Many factors influence a project manager's efficacy in applying project management tools and techniques.

As outlined by Danity, Cheng, and Moore (2003), there is a relationship between project success, individual project manager performance, and perceptions about project manager "performance criteria." Given that perceptions play a role in defining project success (Baker, Murphy, & Fisher, 1988), it stands to reason that project managers must possess skills in addition to the project management tools and techniques outlined in a single set of professional standards. If we asked experienced project managers, how many of them would suggest that their depth of knowledge of project management processes, tools and techniques was the key to their success? Likewise, if we went to senior leaders and project sponsors, how many would suggest they needed project managers with a deeper understanding of project management standards (Millhollan 2015)?

"Today, more and more companies believe that they are managing their business as though it is a series of projects. Trust in the abilities of project managers has increased significantly" (Kerzner 2021a, p. 2). With a focus on the future needs related to strategic project management, coupled with experience as practitioners and academic research in this domain, we purposefully built a team with a more comprehensive set of knowledge, skills, and abilities. In addition to the interpersonal skills we seek in team members, covered later in this section, we either hire for, or develop, team members to not only execute of a given scope of work, but also serve the Association as problem solvers, critical thinkers, and trusted advisors to our senior leadership team.

The value that structured business analysis and program management brings to the Association is evidenced in the grade, or salary, ranges for our Process Improvement and Execution team members. Both positions are compensated similar to Association leaders.

Project/Program Managers: The project/program management role with our Association combines knowledge and skills in Program Management, Statistical Process Control (SPC), Lean Six Sigma (LSS), Design for Six Sigma (DFSS), Theory of Constraints (TOC), Information Technology (IT), Agile/Scrum, project management, internal management consulting and group facilitation. Primary responsibilities include:

- 1) Manage all aspects of projects, from inception through project closure, ensuring that project management methodology is applied to all phases of the project life cycle.
- 2) Overseeing an individual portfolio of four to five projects in multiple phases and geographic locations.
- 3) Manage programs with multiple component projects, including providing oversight to support and coordinate project-level activities to ensure program goals are met.
- 4) Directing, negotiating, and managing conflict resolution to ensure that cross-functional team members, often with disparate priorities, remain focused on program and project objectives.
- 5) Assist with the strategy and deployment of Continuous Improvement principles and practices throughout the association.

- 6) Help lead Continuous Improvement Voice of the Business teams in identifying, scoping, and prioritizing opportunities for improvement.
- 7) Lead CI events and projects to successful completion and realization of the value forecasted in the event or project charter.

Enterprise Business Analysts: To fill a critical need for tracing business requirements from project ideation through to delivery and benefit measurement, we added Enterprise Business Analysts to the Process Improvement and Execution team. Primary responsibilities include:

- 1) Leads the business analysis approach for strategic projects.
- 2) Effectively communicates with all stakeholders throughout the life cycle of projects.
- 3) Elicit, document, and manage requirements and related acceptance criteria.
- 4) Ask probing questions to understand user requirements with the ability to provide feedback on possible implications of all requests. Accurately and concisely articulate issues, questions and recommendations to business stakeholders, team members, and management.
- 5) Works with the business owners, program managers, and other stakeholders to manage the expectations for benefits realized after project completion.
- 6) Collaborate with the business owner and other stakeholders by discussing business and technical impacts of and dependencies related to priority decisions.
- 7) Identify, establish, map, improve, and measure association business systems, processes, and value streams.

Business Systems and Process Team

Comprised of Business Solution Managers that own key business processes and serve as business owners for projects, Technical Writing that functions as the editor-in-chief for our process and procedure manuals, and Records Information Specialists that provide centralized loan document preparation, scanning, indexing and quality assurance.

Business Solutions Managers: The geographical dispersed structure of our Association, with 80 retail offices in four different states, led the identified need to have a centralized team of business process subject matter experts to serve as the liaison between our user groups and project teams. Primary responsibilities include:

- 1) Engaging key stakeholders to execute the overall business process vision and deliver solutions that allow the business segments to achieve operational excellence.
- 2) Representing the business and contributing to the achievement of association goals and objectives through strategic projects, critical run the business initiatives and departmental requests.
- 3) Enabling the lending process through business ownership of technical systems. Proactively soliciting feedback from a diverse group of business users on processes, new system development, features and existing system functionality for enhancements and continuous improvement.
- 4) Facilitating the development, documentation, retention, and maintenance of lending and retail office operations process and procedures.
- 5) Managing and prioritizing backlog; working with the business to manage expectations for completion.
- 6) Providing timely, efficient support and service to end-users and leaders through consistent, repeatable work processes and interpretation of policy and procedures.

Technical Writing: The Technical Writing function was established to not only create and manage the taxonomy governance process, but also to engage with our project teams to maintain our process and procedure manuals as business processes and technologies evolve. Primary responsibilities include:

- 1) Manage the organizational process and procedure manuals through the manual change management process.
- 2) Manage all new/change requests, request consolidation, communicate all manual change requests to the change management team and manuals subject matter experts (SMEs).
- 3) Conduct manual content needs assessment, knowledge transfer, and approval sessions with the change requester, manual SMEs.
- 4) Manage the communication process for manuals changes.
- 5) Manage the manual and intranet taxonomy governance process, which includes supporting taxonomy and the creating relevant metadata for content to improve search and find, ensuring the governance policies and procedures are sustained and communicated, and training the association on the importance of taxonomy, as relevant.
- 6) Collaborate with core Manual Change Management Team members and manual SMEs and other stakeholders on manual change management process improvement opportunities, document and manage all team actions plans.

Records Information Specialists: Loan documents are one of the primary outputs of our lending processes and systems. The Records Information Specialist team was established to ensure access to, and easy identification of, loan documents throughout the lending and servicing processes. Primary responsibilities include:

- 1) Index documents by ensuring integrity of documents, electronic images, and/or records metadata within set service level agreements and accuracy guidelines.
- 2) Review batches indexed by other team members for accuracy and completeness.
- 3) Provide technical support to other departments on document imaging issues and assist users in requests for information related to indexed documents.
- 4) Identify, document, and provide input to management related to business processes to improve the quality of records management programs.

Business Resource Service Team

Again, due to the geographically dispersed nature of our business, we identified the need for a centralized team that would support operations and be the first in the line of defense to identify process inefficiencies and system enhancement opportunities.

Business Support Analyst: Business Support Analysts are analogous with a helpdesk for business process. They are subject matter experts on our key business processes and experienced users of our core lending systems. Primary responsibilities include:

- 1) Provide first point of contact for internal business user support on business systems, policies/procedures, and processes.
- 2) Engage in active troubleshooting and problem-solving in regard to systems, credit policies/processes, and retail/consumer operations. This requires an in-depth understanding of Association's internal and external business systems and processes, workflows, products, credit philosophy, policies, and procedures.
- 3) Recommend solutions by asking probing questions, analyzing, and documenting detailed information from business users regarding complex business situations utilizing subject matter experience as well as a network of resources.

- 4) As a project team lead, research and analyze current and historical concerns based on data captured to evaluate best practice solutions or trends.
- 5) Establish, maintain, and share documented processes and solutions for workflows, products, credit philosophy, policies, and procedures to serve as a knowledge resource for the team.
- 6) Provide subject matter knowledge as team lead on project teams and continuous improvement efforts by discussing the identification of trends and business needs and best practices in the area of lending processes and retail/consumer operations and implement proactive risk mitigation practices.

Business Resource Manager: Leveraging the knowledge discovery and creation processes from the Business Support Analysts, Business Resource Managers research, review, and analyze existing documented business knowledge and identify opportunities to design, develop, implement, support, and enhance business process solutions. Primary responsibilities include:

- 1) Manage all aspects of complex or escalated business process concerns raised up from Business Support Analysts regarding business systems, policies/procedures, and processes; serve as a specialized resource that clearly communicates short-term solutions and evaluates and collaborates to determine long-term solutions.
- 2) Oversee concerns regarding systems, credit policies/processes, and retail/consumer operations and create, evaluate, and review appropriate entries into knowledge base.
- 3) Research and advise long-term solutions for complex business situations by asking probing questions, analyzing, utilizing subject matter expertise and a network of resources, and documenting detailed information from business users.
- 4) Evaluate comprehensive lending and operational procedures, manuals, and forms; and serve as subject matter expert influencing updates. Coordinate and cooperate with Operational Process Excellence department resources, business owners and partners.
- 5) Proactively share knowledge with team members through documentation and updates to internal key processes in order to maintain balance between effective processes, and safe and sound lending practices.
- 6) Evaluate and measure trends in business needs and provide regular ongoing feedback to stakeholders regarding best practices in the area of lending processes and ag retail/consumer operations and implement proactive risk mitigation practices. Share and consistently implement best practices with team on credit, retail, and consumer operational matters.

Project Environment

“Over the past two decades, there has been growing empirical research showing that servant leadership enables companies to develop and maintain a competitive advantage. Servant leadership is a philosophy where the main goal of the leader is to serve the team rather than the team working to serve the leader” (Kerzner 2021b, p. 11). This phenomenon, coupled with our academic research and practitioner experiences, led us in designing our project environment and project leadership processes with a focus on servant leadership and trusted advisor philosophies, organizational change management, and adaptive methodologies.

Servant Leadership and Trusted Advisor Philosophies

A trusted advisor is trusted by leaders to solve their biggest challenges (Green & Howe 2012). Becoming a trusted advisor is a coveted and privileged position for anyone who works in the capacity of solving problems on behalf of leaders. The Operational Process Excellence Team recognizes that it must spend the necessary time to cultivate relationships with key leaders within

the organization; once mutually beneficial relationships are developed, the Operational Process Excellence team assigns its most talented and skilled personnel to maintain relationships with teams and influential individuals within the organization. Due to our focus on partnering with, and serving, the business, it is common for Operational Process Excellence team members, i.e., program managers, enterprise business analysts, and business solutions managers, to be embedded within the decision-making, planning, and execution processes with business segment leadership teams.

Organizational Change Management

“These new or strategic projects, which required a strategic project leadership model, focused on creating competitive advantages, change management, and thinking outside of the box” (Kerzner 2021b, p. 8). Organizational change management, as related to strategic projects, is facilitated by the Operational Process Excellence Team. Change management is a comprehensive, cyclic, and structured approach for transitioning individuals, groups, and organizations from a current state to a future state with intended business benefits (PMI 2013, p. 7). Strategic projects represent the Association’s priorities, and those priorities are articulated as officially authorized changes which will best transition Farm Credit Mid America to its desired future state. We designed our processes with the understanding that effective project selection, planning, and implementation is only the beginning of value delivery. The Operational Process Excellence Team partners with Association team members who are deeply interested and play a role in organizational change management, including organizational development, business technology, corporate communications, and other shared services.

The Operational Process Excellence team leads organizational change management in several ways.

- 1) The Senior Vice President (SVP), Operational Process Excellence is the chairperson for the Senior Leadership Team, facilitates the business planning process, and partners with Executive Committee members to address critical business challenges. The Senior Leadership Team is a cross-functional team of business leaders and shared service leaders who sponsor all the projects within the strategic project portfolio.
- 2) The Vice President, Process Improvement and Execution facilitates cross-functional change management and communication meetings. The purpose of those meetings is to improve company-wide communication practices and bring consistency to the process of implementing change.
- 3) The Operational Process Excellence Team, specifically the enterprise business analysts and program managers, work each day to fulfill the business objectives of Farm Credit Mid-America’s prioritized strategic project portfolio.
- 4) The enterprise business analysts, while gathering business requirements from business owners, leaders and contributing subject matter experts, identify potential changes to business processes and the associated knowledge, skills and abilities required for effective project implementation to inform the change management processes.

Hybrid, or Adaptive, Methodologies

“The landscape for project management changes almost every year. Some changes are relatively small or incremental and can be implemented quickly whereas other changes may require significant organizational support before becoming reality” (Kerzner 2021a, p. 1). As we designed the Operational Process Excellence team and our project management processes, we understood the

importance of designing processes that avoid unnecessary rigidity, adapted to evolving business needs, and applied the tools and techniques specific to the business problem.

The Operational Process Excellence Team leads projects that require the practical application of Agile, traditional, and hybrid project delivery methods. Applying the concept of methodological diversity, the Operational Process Excellence Team selects the approach that matches the business need. For example, when developing a new loan origination process for smaller agricultural loans that did not require the detailed underwriting processes necessary for large loans, the team selected an Agile methodology. We did not have a legacy system or process that required dual entry, and the business environment allowed for incremental delivery of value-added functionality. Accordingly, the project management team, partnered with business owners, cross-functional subject matter experts, and business technology to define priority functionality to deliver in phases that provided measurable business value in each release. As another example, the project management team purposefully selected a Waterfall approach when replacing our general ledger system due to the data integrity, business process, and reporting risks associated with using two systems concurrently.

Author Biographies

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Chuck is the Senior Vice President of Operational Process Excellence for Farm Credit Mid-America. He has over 25 years of experience in strategic planning, quality management, and project, program & portfolio management. Past positions include Vice President Process Improvement & Execution for Farm Credit Mid-America, Director of Program Management for Churchill Downs Incorporated and Manager of the Applications Engineering Project Management Office for Humana Inc.

In addition to his work as a practitioner, Chuck develops curriculum and teaches for several accredited universities. He is a member of the International Institute of Business Analysis (IIBA), a senior member of the American Society for Quality (ASQ), and a member of the Project Management Institute (PMI) and Kentuckiana PMI chapter.

Chuck earned a Doctorate of Professional Studies in Information Management from Syracuse University in 2015, a Master of Science in Project Management from the University of Wisconsin in 2003, a Master of Business Administration from the University of Florida in 2000, and a Bachelor of Science in Management in 1993 through Southern Illinois University.

Chuck's certifications include Project Management Professional (PMP), Program Management Professional (PgMP), Agile Certified Practitioner (PMI-ACP), Certified Business Analysis Professional (CBAP), Six Sigma Black Belt, Certified Manager of Quality/Organizational Excellence (CMQ/OE), Certified Software Quality Engineer (CSQE), and Certified Managed Healthcare Professional (MHP).

You can find additional information about Chuck via his online business card at www.milhollan.net.

Daro Mott's personal mission statement is to help family, friends, colleagues, and organizations achieve their strategy. He is a multi-sector leader who applies the core concepts of Good to Great and How to Win Friends and Influence People to his everyday interactions. Daro is passionate about leadership, management, systems, transformation, building cultures of excellence and applying data and evidence-based solutions to achieve strategy. He speaks at more than a dozen venues each year including national and international conferences. He co-authored a book entitled, *Coaching (Six Sigma) Green Belts for Sustainable Success*, which the American Society for

Quality published in May of 2015. He is the author of numerous articles and is a certified Project Management Professional, Six Sigma Black Belt, Lean Leader, Predictive Index Analyst and Baldrige Examiner. He is a board member for the Association of Internal Management Consultants, the Louisville Zoo, and the Susan Polgar Foundation.

Daro has lectured at the University of Louisville, the University of Indiana Southeast, the University of Phoenix and ATA College. He currently teaches in the MBA program at the University of Louisville. Mr. Mott holds an undergraduate degree from Yale University and two graduate degrees from the University of Louisville.

Daro is currently the Vice President of Process Improvement and Execution at Farm Credit Mid-America, and responsible for the effective implementation and benefit realization of the Association's strategic project portfolio.

As we start shifting to addressing the next nine pillars, we will wrap up the strategic positioning of project management for the future with two contributions. The first comes from PM Conference BRIDGE 2021, as the platform that is creating an avenue for collaboration in supporting the future envisioning of project management practices. The second is a letter to future project managers that is intended to motivate professionals and practitioners in tomorrow's organizations to ready themselves for what's ahead.

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1.16 Excellence in Action: Project Management United¹⁰

In the past few years, the pandemic situation, climate crisis, equality movements and other events that affect our lives are sending a message to our society that we have to change in order to survive. The progress of technologies and innovation are key leading factors if we think about the speed of vaccination, sustainable environment creation or human protection. However, transformation does not happen overnight and in most of the cases people feel they are competing with time. Looking across all transformations, we find a human and in the multiple cases the human is a project manager.

If we simply define a standard project management as supervising the three main constraints (time, budget, and scope), in most cases it does not help to overcome the challenges we are facing around the globe. With the greater levels of uncertainty, organizations are becoming more and more complex, mandating projects that require change management. In such organizations, project managers are getting constant pressure not only for standard project management but also for operational efficiency and innovation with reduced resources. All of these requirements cannot be fulfilled without understanding the new reality, keeping up with ongoing innovations, and finding ways to branch out from standard project management.

As a senior project manager working in a company that delivers innovative software to advance the world's infrastructure – sustaining both the global economy and environment – I do believe that in order to implement any change successfully, we have to have a clear vision of what future

¹⁰ Material in this section has been provided by Edita Kemzuraite, PMP – Co-founder | Head of Content at Project Management United, a senior project manager at Bentley Systems with demonstrated history in complex software development and transformation projects that deliver innovative software to advance the world's infrastructure – sustaining both the global economy and environment. Former PMI Lithuania Chapter President (2020–2021). ©2021 by Project Management United. All rights reserved. Reproduced with permission.

project management looks like, what we are doing now and how we as project managers should change if we want to be the New Generation Project Managers.

What Might the Future of Project Management Look Like?

Following the latest trends of project-based organizations, understanding the successful changes and effective project management that happens there, and identifying where standard project management components can be operationalized by adding new technologies and experimenting with the new methods of working is terrific. However, in the beginning these innovations require greater investment, quick learning, and higher levels of risk tolerance to finish without the expected outcomes as technologies might be too complex or teams are not ready for the change.

If we look to the future of project management without the existing constraints and imagine that all technical challenges are in the past, its vision starts with projectized organizations. In general, it means that the project manager has full power in any decision involved to the project. In addition to that, standard project management should be simple. The word “simple” has different meanings in each knowledge area of the traditional project management and these might be potential examples for the simplified standard of project management:

- **Simple planning, no scope creep, and an always updated project plan.** Nowadays, even being Agile or using Kanban boards do not help to be as operationalized as we would love to be – things get chaotic before we even finish one iteration. The common problem that still exists is that when we add something, we forget to remove lower priority tasks from the iteration, and this usually leads to scope creep, overloaded teams and unhappy users who are waiting for quick project delivery. The project managers often have to be the ones who send constant reminders to adjust the backlog, to remove leftovers and focus on priorities. In an ideal way of operating, project managers would not have to be the ones who constantly look at the documents and manually adjust the plans. In the future, project management of these obstacles should be forgotten – machines will be taking the notes and reminding project managers and team members what was discussed, what action items we should be focusing on now and what we plan to do next.

From my perspective, changes to projects happen with almost every new strategic session or stakeholder meeting. When human beings and technologies work hand in hand on projects, project plans will not be created in the beginning and forgotten. Project plans are going to be nothing but an audit trail – a collection of records and adjustment with ability to analyze the important steps we made and highlight the lessons learnt. We will forget the word “outdated,” as “real-time automated updates” will be our new normal. With every step the project team is making, the robots or simulators will be acting as a service for project managers.

- **Eliminate risks easily.** Risk management of every project is different and highly dependent on the industry, sector, or relying parties. In the future vision, even risk management can be simple! Imagine that a project manager does not need to go anywhere while running a construction project: every single detail he needs to analyze, touch or even smell can be simulated with the help of digital twins that would represent the virtual copy of the physical delivery you need to create in virtual reality.
- **Stakeholder management.** According to the latest research, communication and stakeholder management are the common challenges of every initiative or project. In the future, stakeholder management can create convenience using smart technologies. Imagine that based on project requirements, common user personas would be created to help project managers to have reliable RACI models and avoid miscommunications in important project collaborations.

If this future vision becomes attainable, we can imagine that the operational part of projects would be much easier and less or even no human interaction would be required for these tasks. However, after reducing the load of manual operational tasks, future project managers would have more time to be the ones who are setting the tone inside and outside of the project. The complexity of the projects would not go anywhere, we would just be better prepared by predicting the future with reliable techniques that replace the repetitive human work not only for project managers but for all team members. That is why leadership and understanding what role every project plays in the sustainable environment would become critical components of the future project management.

Together with the future vision of project management the role of project managers is leveling up to strategic projects. The new level requires constant collaboration with organizational executives so that organizational success is measured by projects and the impact project results bring for social good. Future project management should seek to improve quality of life by implementing sustainable ideas and ensuring long lasting positive impact.

Major Changes Expected in Project Management in the Upcoming Years

The personal experience and the multiple examples how the world leading companies are breaking the organizational silos inspired me to support this future-oriented thinking in my profession. As a co-founder of an international project management conference BRIDGE 2021 I am a believer of the power of networking. We want to create a platform for next generation project managers to collaborate without the barriers of different PM schools, certification levels or industries. Our projects are unique but the competencies we need to build for the future are all common: organizational ability, communication, speed to deliver, quick learning, technology-oriented management, and adoptability to any uncertain situation. Future Project Management starts NOW. Tomorrow starts NOW.

The good news is that in some industries, the future project management vision is already transforming into reality with the help of advanced technologies. For example, one of the first signs of the application of different project management skills is happening in 2015 ESM Productions (ESM), a local company tasked with event planning for the Pope's visit in Philadelphia, Pennsylvania in the United States. ESM Productions retained AEROMETREX to help engineer the complex logistics for this historic event. Hosting the event required massive planning and coordination with municipal and state agencies, as well as with the US Secret Service. To accommodate the 56,400 temporary structures needed, 33 miles of security barricade perimeter, and the impact of local road closures, while ensuring smooth traffic flow and seamless communication throughout the planning process and the event, ESM needed comprehensive, realistic, and integrated 3D modeling and simulation software.

Reality modelling techniques provided by Bentley Systems redefined the planning and managing of the city infrastructure as well as collaboration with asset and building owners, government agencies, and the public.

The example of the digital city can help the event planners and project managers not only to manage the complexity, but with the help of digital twins it can develop a flood resilience strategy, manage public works projects and support the many things city governance project managers do to provide a high quality of life for the residents (more information about the project: AEROMETREX Designs 3D Map of Philadelphia for 2015 Papal Visit (bentley.com)). As technologies are evolving rapidly, nowadays we have multiple Digital Cities over the world including Dublin's city digital

twin as a result of Bentley Systems and Microsoft partnership (<https://cities-today.com/bentley-systems-and-microsoft-team-up-on-digital-twins/>), Helsinki City and many more.

However, in some industries and smaller countries we should not expect such rapid changes in project management. The technology adoption and usage also require additional skillsets and acceleration in this direction require projects with additional investment. In the next few years we should also expect that the Citizen Development and Citizen Revolution announced by PMI in 2020 (<https://www.pmi.org/citizen-developer>) would help to digitize simpler solutions easier without big investment in IT departments as low code-no code platforms do not require programming skills.

Looking from another side to achieve the future vision, technological progress is not enough. Project managers are already facing additional risks and constraints that must be managed as a part of the project. I selected a couple of key components that have become critical to consider and that might significantly change the scope of every project:

- **Cyber security.** Digital project management can be time and resource saver. However, it can destroy the whole project or even put multiple organizations in jeopardy if it becomes a victim of cyberattacks. Together with digitalization, we should expect that probability and impact of the security related risks will be increasing, and project managers will need to have security champions or experts in the project teams that would make sure the project data is protected in our digital environment and that endpoints and networks are safe.
- **Respect privacy.** Any digital solution that can be implemented in order to make project management more efficient should be also carefully considered. Artificial intelligence (AI) techniques should be centered around interactions that are helpful and effective but not intrusive. Future organizations and project managers have to make sure that every interaction of AI is simple and creates convenience rather than additional complexity and frustration among team members.
- **Choosing trusted technology providers.** The success of future project management will be highly dependent on the data and selected technologies as a part of organizational strategy. For example, digital dashboards that monitor performance of key project performance indicators without any human interaction will be hard to trust for a while. Organizations must choose reliable vendors and technology providers as it will be critical for project managers to get insights and plan next steps based on the trusted information. Reliable data is a critical success factor.

In order to accelerate future project management, we should expect changes in the strategic level of the organizations. The top-level managers, decision makers responsible for investment to the technologies inside organizations should not forget the changing role of project managers. Their role is to empower project managers to lead the projectized strategies by providing the necessary resources and training in order to continuously improve and learn about the future vision.

Unlike the typical functional organization, project managers in a fully projectized organization are not limited to tasks such as decision-making and resource utilization. This change would require standard project managers to adopt new ways of operating. With the additional power to utilize resources, future project managers must ensure they are surrounded by proficient technology experts and other leaders in order to overcome all the technical challenges and realize the future vision of digital project management. With this accountability, we should expect future project managers working closely with human resource managers in order to build stronger teams with the required skillset for each function.

With the acceleration of projectized organizations, we should expect the volume of projects for a single project manager to increase as the operational parts of project management would not be manual anymore. Project managers must adopt the right methods to projects that would highlight the importance of the different project management life cycles and ability to adopt the right one in the unique situations. It would require quick learning and rapid change management in order to keep project management operationalized. In such cases, the future project manager would have enough capacity to jump from one project to another in a significantly short amount of time. However, it is critical to understand how it all fits into the big picture.

Otherwise, if you see a project result as some independent delivery, that “does not fit” anywhere else, it is easy to burn out and lose the passion for projects. Organizations together with project managers should work on the projectized strategies that are resilient and long lasting to avoid those risks.

As we can imagine, change management would be critical in moving to future project management methodologies. Implementing all the necessary innovations will require embracing the change in the whole organization and its culture. There is no way that a project manager can make the difference alone – everyone needs to be playing a part. In transformations like these, it is always helpful to imagine a colony of penguins that are trying to find a creative solution in a life changing situation described in a book “Our Iceberg Is Melting” by John Kotter. In every project you can face situations when a team member or important stakeholder will be complaining: “This is not how we do it here.” However, looking from the other angle, within the same team you will find the persons who will ask: “How can I help.” And this is the beauty of it. If a project manager knows how to approach and unify people with multiple opinions and different personalities to a One Team – it can change the situation significantly. In the future, projects must eliminate the fear of change, help the team to face the future and make related actions achieving common goals. These challenges will require project managers to build power skills such as adoptability and courage.

In addition to change management, it is inevitable for the future project manager to be a person who “always connects the dots.” Either it is an internal situation, when you need to solve a conflict between different groups or an external one in which the project manager needs to send an important message from a customer to a team to fulfil the project requirements. In situations like these, I call a project manager a Connector or a Bridge. From my personal experience, I used to manage a couple of projects that were unique by their definition. The joint projects brought technology experts from two different companies together to create something powerful – digital twins. Surprisingly, the biggest difficulty in the projects was not technical – both companies had strong specialists and experts who were doing their job perfectly.

The cultural difference, variety of different personalities and inability to find a common way of working were our main challenges when I was assigned to manage these projects. What a project manager should do in the situations like these? The answer is to become the bridge connecting the different pieces. It is a complicated task, but active listening, finding painful points and changing team’s mindset from “Two Different Companies” to “One Team” can make the expected difference!

How Do We Plan for the Future?

The future vision of project management is not utopia or illusion. Gradually, the world is moving in that direction by necessity, and we have multiple good examples even in a country as small as Lithuania. Through investment in strategic initiatives, multiple international companies are well-positioned to deliver powerful insights across risk categories trending in the world.

At least two major financial operations companies are leading separate initiatives toward sustainability. Swedbank Lithuania is a main partner of “Sustainable business” as a platform to tell the stories about the new sustainable ideas and a place for other companies to rethink their strategies. In addition to that, SEB Bank has a Corporate Sustainability policy and since 2009 they have been providing a yearly report illustrating how their business is connecting responsibility for environment, people and community through separate projects and initiatives. And behind all those great initiatives we see humans – project managers/project leaders.

“Environmental, Social and Governance (ESG) and climate change considerations are critical to managing risk and seizing opportunities in today’s global capital markets” (<https://esg.moody.io/>) – Moody’s is announcing a family of business partners who are implementing projects and providing solutions for a greener economy and globally sustainable businesses. Moody is one of the international companies that is playing an important role by helping other organizations to rate them based on different levels of interoperability. Sustainability is one of the criteria in the interoperability rating that help to start changing the entire culture with more sustainable assets.

Overall, these are just a few examples of implementing world-changing solutions in big organizations. These big companies are sending message to the smaller ones that could be illustrated by a Hellen Adams Keller’s quote. Hellen Adams Keller was an American author, disability rights advocate, political activist, and lecturer: “Alone we can do so little, together we can do so much.” The aforementioned SEB Bank is announcing that more than 50 percent new companies in Lithuania are including sustainable solutions to their business strategies and it is even more popular among startups and small businesses rather in medium ones. A project manager is playing a critical role in every one of those projects as a leader for strategic implementation.

In order to accelerate the future vision, we should start learning from the existing examples and rewarding the projects that are already following the projectized strategy concept. Personally, I get excited watching Bentley Systems *Year in Infrastructure Awards* (<https://yii.bentley.com/en/awards>) as year after year it highlights the amazing infrastructure projects that are winning in multiple categories. These rewards probably best reveal how the company I work for is committed to sustainability: we are providing the tools and services for industry professionals and organizations to help create or improve quality of life through sustainable project deliveries. Every project nominated to these awards is judged on the positive impact that it will have on the local social, economic, or environmental situation.

In addition to those practical examples, the planning and execution toward the future vision cannot happen without support of education providers and scientific discoveries. The young professionals are the ones who are the proficient users of the technologies, and they might be the ones who can help to accelerate in the digital environment and to find smart solutions for more futuristic project management! In past few years, universities, different PM schools, certification providers and other nonprofit-based associations have started playing a significant role in building the generation project management.

They have the power to spread the word, starting from Young Generation to mature Project Management Professionals who need to think how to adopt their skillset and improve their knowledge toward trending technology and sustainable ideas. And we already have great examples that can help future project managers to change the mindset and build the necessary skillset toward projectized strategies:

- In a Pulse of the Profession 2021 (2021) PMI (Project Management Institute) is announcing a new term for the future-fit organizations called “Gymnastic enterprises” that “are leading the way by empowering their people to master new ways of working, emphasizing the human

element, and understanding the central role that organizational culture plays in enabling all of these capabilities.”

- IPMA (International Project Management Association) is organizing Global Best Practice Week promoting the practical examples on “How to reach and maintain Resilience.”
- Multiple universities and business schools in Lithuania are partnering with PM Schools and international companies to support sustainability and accelerate the sustainable ideas through projects involving students and professionals to the process.

To illustrate that, I could also mention that Bentley Systems was one of the strategic and business partners establishing the Centre of Smart Cities and Infrastructure, which Kaunas University of Technology (KTU) opened in 2019th. The result of this partnership is multiple smart city solutions that are created by students to the local cities. Smart waste collection systems, advanced street lighting, mobile applications informing on the traffic and even more to ensure and accelerate the sustainability.¹¹ Does it illustrate the future of project management? Yes – because, again, all the proposed solutions require implementation, and we need humans – project managers leading these projects to the result.

It is great to see that the world leading organizations are stepping up – acceleration happens through partnerships and openness to innovative ideas. The two popular project management associations – PMI and IPMA – are also highlighting the importance of the young generation. PMI has organized “Young Professional Awards” and is recognizing our top future leaders. Similarly, IPMA has a “Young Crew” as a key component of their organization, supporting and building the network of young professionals for their growth and maturity.

Personally, I believe that young professionals and mature project managers together can create a powerful diversity as they use different practices and methods of operating. The multiple PMI Chapters are also following these initiatives and encouraging to become stronger by creating the joint initiatives together: starting with “Joint Initiatives of the 3 Italy Chapters to Face the Lockdown” in early 2020 and continuing with PMI UK & PMI Chapter “Exchange Webinars on the Future of Work” and others.

To summarize the multiple examples above, I believe that these best practices are worth following. Multiple organizations are already including the impact for social good in their organizational strategies. However, transforming those strategies to projectized organizational structure is not as easy. We are getting there slowly, but my hope is that world’s leading companies will set the tone for multiple industries, and the bright future of next generation project managers will come sooner rather than later.

Conclusions

The vision of future project management has to be in alignment with an organizational strategy of empowering project managers to be in control of projects. According to the future vision, standard project management will be simplified by technologies, but project managers will need to gain better skills for leadership, decision-making and talent management inside their projects. The future project managers should be shifting their focus to a more strategic and pragmatic level.

For the upcoming years, we should expect multiple changes in project management. Spreading the ideas to the world is easier together, but the transformations to future project management

¹¹ based on the article <https://en.ktu.edu/news/five-smart-city-solutions-from-ktu-students-for-kaunas/>

should start from multiple levels: organizational, social, and personal. PM Conference BRIDGE 2021 as a platform for organization leaders and project, program, portfolio managers to collaborate is supporting the future vision of project management.

Multiple examples show that changes toward the future project management vision are already happening. Even starting with small steps, we can have an impact and spread the important message about sustainability to the world through projects, products, or initiatives. Learning from the success and failure stories in the conferences and other available sources can help to strengthen the future vision and accelerate the change.

1.17 Letter to Future Project Manager

Dear Future Project Manager,

Congratulations! This letter is specifically for you as you consider a career in the diverse field of project management.

This career path you have chosen is both exciting and challenging. The field of project management will allow you to explore different industries, and aid in transformational change. To prepare for this journey, take stock of societal trends, organizational practices, and the ever-changing influence of technology. To be the best at what you do, you must continuously hone your talents and skills through every opportunity, no matter how small or large, to lead and manage a project.

And remember, knowing the science around what to do differs vastly from mastering the art of the profession. Expect to operate in an environment where volatility, uncertainty, complexity, and ambiguity (VUCA) will be a reality.¹² Adaptability and learning will be your lead-in for your most fulfilling years in the profession.

As experienced project managers, we hope the following nuggets of advice will resonate with you in your journey to master the art of project management.

1) **Believe in the leader that you are and never stop learning.** The discipline of project management offers project managers the opportunity to lead with delegated authority for a specified period. To advance in your role, you need to embody the qualities akin to that of an ambassador assigned to a nation for a designated time. It is imperative to settle quickly into the environment in which you will work, and spend time immersing yourself in the nuances of the business to build credibility. Be prepared to familiarize yourself with stakeholders' interests and their motivations. You will need to engage with key decision makers and diplomatically use your influence to advance the work.

Influence is your authority as you manage those above you, beside you, your team, and external parties. At all times, communicate value and continually make a business case for a project in various presentations and forums. However, that message will need to be tailored to the audience you address. Producing situational reports will be critical to enable strategic business decisioning.

Taking these actions will prepare you and your stakeholders in the event your project goes in a different direction. Your investment in learning will give you the confidence to handle any

¹² **VUCA** stands for volatility, uncertainty, complexity, and ambiguity. It describes the situation of constant, unpredictable change that is now the norm in certain industries and areas of the business world. **VUCA** demands that you avoid traditional, outdated approaches to management and leadership, and day-to-day working. <https://www.mindtools.com/pages/article/managing-vuca-world.htm>

situation you encounter. It is not enough to be the smartest in your profession – rather, apply your project management leadership skills in the context that best serves the business leaders and customers.

- 2) **Be a champion for achieving organizational goals as much as you are a champion for your project:** While projects are becoming more dynamic you should expect to manage and deliver outcomes without a specific end date. Projects need to pivot quickly to be able to address planned and unplanned conditions. Stay focused on delivering benefits, and the other project variables – such as scope, schedule, and funding – will follow. Learn what benefits are important to your leaders and customers, then navigate with that end-goal in mind throughout the project. Be aware that some projects may benefit the organization when stopped or canceled versus completing.
- 3) **Go beyond the basics when measuring success:** One of the most important activities a project manager performs is collaborating with stakeholders at all levels to define and measure project success. When defining what success should look like, go beyond known and expected performance metrics such as tracking progress on budget, scope, and schedule, and define assessment criteria and metrics that will help you and the stakeholders vigorously evaluate if the resources and investments are delivering on the business strategy and outcomes. Your role is to stress upon business leaders the importance of assessing if there still is business value to continue the work based on point in time conditions.
- 4) **Data rules and analysis reigns.** Most everything we do produces data and leaves a digital footprint. Automation of metrics can transform data into useful information to enable better decision-making. However, metrics alone are not enough to make informed decisions. Rather, metrics, coupled and analyzed with project context, organizational priorities, stakeholder input, and risk tolerance thresholds enable timely decision-making with relevant information.
- 5) **Elevate the value of project management by embracing diverse methodologies.** With expectations to increase time to market for delivering business and customer value, project managers need to recognize the importance of blending diverse practices from other disciplines into a cohesive project management approach. If these practices prove to add greater value than only relying on traditional project management practices, embrace them, scale them, and incorporate them into your project management approach. Further, do not fret. As automation streamlines routine project management tasks, this will free you to focus on maximizing the business value of your project.

Do not be alarmed that this list is short. These nuggets of advice are not meant to be exhaustive nor prescriptive. They reflect simple but powerful lessons learned from both successful and failed projects. If you choose to adopt these principles as guideposts, you will reap the rewards of a successful and gratifying project management career.

Bios

Michelle Brunn has provided project and program management expertise and leadership for over 25 years for both business and technology services. She has specialized in establishing enterprise level functions.

Grace Navas, PMP, has provided project and program management leadership for over 25 years in private sector industries and has dedicated a good portion of her career to public service. Her project management work has encompassed product delivery, implementation of project management functions, and oversight and compliance practices.

Throughout their careers with the Federal Reserve System, Michelle and Grace have collaborated on work that has elevated and recognized project and program management as a professional discipline.

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