Achieving Greater Agility
The people and process drivers
that accelerate results
Throughout 2017 we are studying, analyzing, and reporting on all aspects of agile transformation. Our research includes two *Pulse of the Profession®* in-depth reports and our Thought Leadership Series.

**Pulse of the Profession® In-Depth Reports**

*Achieving Greater Agility: The people and process drivers that accelerate results*

*The Drivers of Agility: Engaging people and building processes to accelerate results*

In this report we asked project management practitioners and leaders about how they are adapting to change. We also asked about the support their organizations have provided. *The Drivers of Agility* goes into detail about specific people and process drivers. In turn, our Thought Leadership Series, to be released later in 2017, focuses on how organizations create and nurture cultures of agility.
PMI's *Pulse of the Profession*® in-depth, commissioned research was conducted online by Forrester Consulting for PMI in March and April 2017 among 1,469 project management practitioners and leaders using predictive (traditional/waterfall) and agile approaches in the United States, Canada, Brazil, the United Kingdom, France, Germany, China, India, Australia, and New Zealand. Forrester Consulting also hosted an online community on behalf of PMI in May 2017 with 54 individuals who use either predictive or agile approaches to gain deeper insights and examples of their experiences as they transitioned to a more agile work environment and project approach.
As the world’s leading professional association for the project, program, and portfolio management profession, we see staunch support for predictive (traditional/waterfall), iterative, incremental, agile, and hybrid approaches. We know that organizations can be successful managing projects with all approaches—or with a combination of them—depending on the specifics of the project and the needs and resources of the organization. The full landscape of project delivery approaches is referenced in our latest *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* – Sixth Edition. We have also partnered with Agile Alliance® to produce the *Agile Practice Guide*. You will read more about the project delivery continuum in our research but, first, we offer this short glossary of terms you will see throughout this report.

**Agility**—often referred to as organizational agility—is the capability to quickly sense and adapt to external and internal changes to deliver relevant results in a productive and cost-effective manner.

**Agile** is a mindset based on a set of key values and principles designed to better enable collaborative work and deliver continuous value through a “people-first” orientation.

**Agile transformation** is an ongoing, dynamic effort to develop an organization’s ability to adapt rapidly within a fast-changing environment and achieve maximum business value by engaging people, improving processes, and enhancing culture.

**Project work** ranges from definable work to high-uncertainty work. Definable work projects are characterized by clear procedures, which have proved successful on similar projects in the past. The production of a car, electrical appliance, or home after the design is complete are examples of definable work. The production domain and processes involved are usually well understood and there are typically low levels of execution uncertainty and risk.

Our current findings focus on the following approaches:

**Predictive (traditional/waterfall)** projects follow a critical path-driven work plan, executed in a serial, sequential manner.

**Agile projects/practices** employ a single agile approach or framework (e.g., only Scrum) or a mixture of different agile approaches (e.g., Scrum and Kanban).

**Hybrid** combines practices from agile and predictive-driven approaches or frameworks (e.g., Scrum and predictive), as dictated by project scope.
WORKING FASTER, SMARTER, BETTER

As organizations face heightened competition and ongoing disruption from new technology, market shifts, and social change, they are forced to set the bar higher in everything they do. Fueled by the desire to be more efficient, effective, and innovative, smart organizations make change part of their organizational DNA.

Rapid and ongoing change means organizations are learning to become more nimble and flexible, both responding to emerging conditions, and proactively creating opportunities for growth. This "agility mindset"—which requires embracing a continuum of program delivery capabilities—is used by the most successful organizations. Remember that all strategic change happens through projects and programs, whatever techniques are used to implement them!

As we began this research, we explored how teams deliver projects in their quest to be more efficient, effective, and innovative, and how organizations support these transformation efforts.

What We Learned

To move forward, successful organizations see transformation as an ongoing, dynamic effort that engages people, improves processes, and enhances culture. The findings in this report address how people and processes are being impacted by a quest for greater speed and flexibility.

In our research, we classified organizations with high agility as those that establish a cross-functional, collaborative environment, foster an innovative attitude, and use a foundational approach to processes. They choose their program delivery approach based on project characteristics and organizational needs, as well as the ability to minimize risks, control costs, and increase value. They also experience higher revenue growth.

Organizations do not need to choose between speed and flexibility, or stability and scale. True agility is a balance—not a battle—of choices. Organizations balance the need to be adaptive, fast, and cost effective with the need for high performance, discipline, and risk management. A transformation mindset includes the sensors and triggers that recognize the need for change while the delivery capability moves the practices and skills forward to meet business objectives.

Read on to see how successful transformation begins.

Mark A. Langley

PMI President and CEO
EXECUTIVE SUMMARY

Organizations deal with constant change, uncertainty, and instability every day. Yet many still only plan for the predictable—and then are caught unprepared for what actually happens. To avoid a potentially disastrous outcome, high-performing organizations build the capability and capacity to change and adapt quickly to shifting market conditions and competitive pressures. They create high levels of organizational agility, which foster innovation and fuel better project outcomes.

The journey is ongoing and dynamic as organizations continually strive to achieve maximum business value. Their transformation is an ongoing, dynamic effort to adapt rapidly and achieve maximum business value by engaging people, improving processes, and enhancing culture.

To better understand how agile transformation drives positive change in business operations and project delivery, Forrester Consulting surveyed 1,469 individuals—a healthy mix of those in predictive (traditional/waterfall) and agile roles (see Figure 1). We asked them about the people and process aspects of agility, and will explore cultural factors more closely in PMI’s 2017 Thought Leadership Series. We also asked them about predictive, agile, and hybrid approaches to project management.

The results of this research support what we have known for some time: an organization’s agility level helps determine the success of its outcomes, including the value projects deliver. And despite the heightened attention to agile approaches to project delivery in recent years, organizations realize those approaches are only one indicator of speed and flexibility—and very project specific.

Figure 1: Healthy mix of respondents in agile and predictive roles

![Figure 1: Healthy mix of respondents in agile and predictive roles]

- 41% are agile practitioners (agilist leaders, scrum master, team lead)
- 31% are predictive practitioners (project managers in predictive/waterfall organizations)
- 18% are agile leaders (in charge of developing the agile process or agile coaching)
- 10% are predictive leaders (leading the project and program management process or coaching)

Base: 1,469 global respondents

An organization’s agility level helps determine the success of its outcomes.
Our research revealed the following:

- **ALL PROJECT MANAGEMENT APPROACHES LEAD TO SUCCESSFUL OUTCOMES:**
  Organizations with high agility report more projects successfully meeting original goals and business intent—whether they use predictive (71%), agile (68%), or hybrid (72%) approaches—than those with low agility using the same approaches (see Figure 2).

![Figure 2: Percentage of projects meeting original goals and business intent by most common approach to projects within the organization](image)

- **PEOPLE AND PROCESSES ARE KEY:**
  Organizations with higher levels of agility place a significant focus on building diverse skill sets and process capabilities (see Figure 3).

![Figure 3: Organizations with high agility focus on the crucial people and process drivers](image)

**People Drivers**
- Employ project professionals who have the skills to utilize a variety of project management approaches
- Incorporate agile skills development in performance plans
- Include program management development in performance plans
- Provide access to program management mentors
- Appoint agile project leaders as a formal role
- Provide internal peer-to-peer training programs

**Process Drivers**
- Have metrics and systems to accommodate fast portfolio changes and continuous reprioritization
- Consistently use customer/market feedback data to revise or modify product roadmaps
- Implement multiple agile approaches
- Review and adjust product roadmaps and plans on a quarterly or even monthly basis
- Routinely incorporate multiple approaches within a project
**REVENUE GROWTH IS GREATER:**
75 percent of organizations with high agility report a minimum of 5 percent year-over-year revenue growth last year, compared to only 29 percent of organizations with low agility (see Figure 4).

**THE PMO COULD BE A BEACON:**
Organizations with high agility recognize the value of having some form of project governing body: 94 percent report having a project management office (PMO), an agile work group, or another type of formal governance board, versus 81 percent of organizations with low agility. (Base: 154 low-agility and 450 high-agility respondents)

These findings reinforce what we have seen in our annual *Pulse of the Profession* research, which charts the major trends in project management globally, that many factors contribute to project success. Project performance is linked to investments in talent management, benefits realization management, executive sponsorship, change management, decision making, knowledge transfer, agile approaches, and organizational agility.

Organizational agility requires more than one way of doing business across all functions—and all approaches to project delivery have a place within highly flexible organizations. These organizations choose their method based on project characteristics and organizational needs, as well as the ability to minimize risks, control costs, and increase value. Those using more than one approach can reconfigure their processes and combine different techniques to cope with their own distinctive challenges. They establish a mindset enabling flexibility and use of the right approach for the right project.

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WHAT DOES AGILITY MEAN?

Organizations are redefining how work gets done to deliver better results faster. Their agile transformation is an ongoing, dynamic effort to develop the ability to adapt within today’s fast-changing environment. The goal is to achieve maximum business value and many feel agility is growth for the long term. We asked leaders at technology services organizations to share their insights on:

What does agility mean to you and your organization?

Huawei has experienced agility at project and version upgrade, we are now in the midst of product agility. Agility enables Huawei to shorten requirement realization, increase change success rate, and brings the development team closer to our end users with our ROADS Concept. ROADS is the new standard to evaluate user experience introduced by Huawei, meaning real-time, on-demand, all-online, DIY, and social. The internet has changed consumers’ buying behaviors, and transformation is needed for organizations to provide products and services in today’s customer-driven market. Organization agility allows us to proactively adjust our strategy to cope with the fast-changing environment and new trends.

Zuwei Yi, EPMO President at Huawei Technologies, Shenzhen, China
Huawei is a leading global information and communications technology (ICT) solutions provider. Driven by a commitment to sound operations, ongoing innovation, and open collaboration, Huawei has established a competitive ICT portfolio of end-to-end solutions in telecom and enterprise networks, devices, and cloud technology and services.

It’s about being adaptive to changes in our environment and being responsive to dynamic business demands. Agility needs to cut across our value chain and manifest in delivery of faster outcomes for our clients and for our organization. It is all about being agile and not just doing agile, which means that having an ‘agile mindset’ is critical to achieving agility and this requires a cultural change in the organization.

Alok Uniyal, VP & Head - Process Consulting, Infosys Ltd., Bangalore, India
Infosys is a global leader in technology services and consulting. From engineering to application development, knowledge management, and business process management, the organization helps clients in more than 50 countries to create and execute digital transformation strategies.

The only constant thing is change. As one of the world’s biggest internet firms, we are facing changes and challenges today more than ever. In response to the changing and unpredictable business environment, our organization must build up the capability to implement an agility strategy systematically.

Yi Su, Senior Expert, Alibaba Group, Hangzhou, China
Alibaba is a leading e-commerce company that provides consumer-to-consumer, business-to-consumer, and business-to-business sales services via web portals. The businesses are comprised of core commerce, cloud computing, digital media and entertainment, innovation initiatives, and others.
Traditional measures of success are no longer sufficient in today’s volatile, disruptive market environment.

Our digitized world—computers, the internet, mobile phones, texting, social networking—demands adaptability and rapid change. The reliance on mobile communications and remaining constantly connected has forced organizations to reevaluate how they execute on their strategic initiatives, opening entirely new ways to deliver products and services, and to interact with customers.
Agility—the capability to quickly sense and adapt to external and internal changes to deliver relevant results in a productive and cost-effective manner—is a major factor in surviving the digital transformation. It’s driving organizations to take a closer look at operations and management practices enterprise-wide, including within the project. In fact, over the last five years, most organizations in our Pulse of the Profession® research indicated greater agility (72%), and cited their top drivers as the desire to innovate, address leadership mandates, and meet changing customer demands (Pulse of the Profession®: Success Rates Rise, PMI, 2017).

Major research studies with similar findings include Forrester’s Global Business Technographics® Priorities and Journey Survey, 2017. That research revealed that 40 percent of business and technology decision makers are adopting new technologies to enable their business model to change, 33 percent are changing the organizational structure of their companies, and 33 percent are updating business processes (e.g., transitioning from predictive to agile to support new business models).

The ability of organizations to respond quickly to marketplace disruptions is redefining success and project delivery—and our latest Pulse research shows positive change (Pulse of the Profession®: Success Rates Rise, PMI, 2017). For the first time in five years, survey participants reported more projects meet original goals and business intent and are completed within budget. At the same time, there has been a significant decline in dollars wasted, an average of 9.7 percent (US$97 million for every US$1 billion invested, due to poor project performance). But this good news is not a stopping point; there is more work to be done as competitive challenges escalate.

Those challenges result from global economic, social, political, and technological forces that continually disrupt commerce and industry and demand regular reassessment of business strategy. As a steady stream of digital start-ups enters the marketplace, established companies scramble for new ways to compete. Consider the dramatic shifts we see today: digital advancements, such as the rise of robotics and artificial intelligence, which are changing how work is done; growth of the less-regulated “share economy,” first popularized by companies such as Airbnb and Uber; and challenging workforce demographics as older workers retire, younger ones take their place, and remote workers become the norm.

Agility is driving organizations to take a closer look at operations and management practices enterprise-wide, including within the project space.
While these shifts create uncertainty for business, they create opportunity for project managers to elevate their value as strategic partners in business success. Organizations look to project leaders—those with the right combination of technical, leadership, and strategic and business management expertise—to drive optimum project performance and demonstrate greater agility.

In this scenario, significant focus will be placed on improving the people and process drivers that contribute to higher agility. Organizations will foster the development of adaptive skill sets among the project management workforce. They will leverage processes such as effective risk management, change management, and standardized project, program, and portfolio processes. They will begin to rely on flexibility, adaptability, and open communications—and they will embrace change and empower their employees to work differently. Experiential learning, rapid decision making, and a strong customer focus are all important, because agility is about being able to question routines and identify opportunities—and having the right skills, tools, and resources to act.

To further understand the characteristics of high agility, we assigned an agility score to each organization in our latest research. Scores were based on the identification and measurement of agility themes and how that information relates to people and process drivers. With these scores, we identified organizations with high agility (the top 31% of responding organizations) and low agility (the bottom 10% of responding organizations; base: 1,469 global respondents). We also learned more about how they tackle digital disruption by focusing on critical people and process drivers on their journey to greater agility.

*The agility score is based on data analysis rooted in a four-part method that: (1) distilled agility statements into themes that reflected similarities using factor analysis, (2) determined the contribution of each theme to agility using linear regression to build the formula behind the score, (3) calculated an organizational agility score for each responding organization, and (4) grouped organizations into one of four clusters using cluster analysis. The results used in this report are based on the organizations in the cluster of highest agility and are compared to organizations in the cluster of lowest agility.*
Successful organizations advance their business and achieve maximum value through a shift in thinking. They manage unexpected roadblocks, risks, and market changes more easily, because “being flexible” becomes part of their philosophy. Flexibility takes precedence throughout all operations and management processes, and is supported by leadership and training. As a result, organizations with high agility can switch priorities quickly without losing momentum. They are prepared to work differently and communicate effectively, especially with employees and customers.

Doing this well requires more than one way of operating across all functions, including project management. This is where multiple approaches to project delivery support greater agility. In fact, we see through our research that the approaches we asked about—predictive, agile, and hybrid—are all used in organizations with high agility: 27 percent most commonly use predictive, 36 percent use agile, and 37 percent use hybrid (see Figure 5).

Organizations with high agility report more of their projects—within each approach—successfully meet original goals and business intent, and they outperform organizations with low agility (see Figure 6):

- **PREDICTIVE**: 71 percent versus 45 percent of those with low agility
- **AGILE**: 68 percent versus 41 percent of those with low agility
- **HYBRID**: 72 percent versus 51 percent of those with low agility

In addition, 86 percent of organizations with high agility say their project staff is expected to adapt their management approach to the unique needs of each project, compared to only 27 percent of organizations with low agility (base: 154 low-agility and 450 high-agility respondents). The goal is to deliver value, adapt to change, and achieve customer centricity—all for continuous improvement and better outcomes.
To thrive in an environment that demands constant change requires not just greater agility, but also effective change management. Our 2012 research on organizational agility identified a three-pronged approach to agility: (1) risk management, (2) change management, and (3) standardized project, program, and portfolio processes (*Pulse of the Profession™ In-Depth Report: Organizational Agility*, PMI, 2012). Our more recent agility research echoed these themes and identified the most important characteristics of an agile organization as flexibility and adaptability, open communication, openness to change, empowered team members, experiential learning, rapid decision making, and a strong customer focus (*Capturing the Value of Project Management Through Organizational Agility*, PMI, 2015).

The agility practices and characteristics emerging from our prior research remain relevant today, as outlined in the following graphic on how to evaluate agility.

**EVALUATING AGILITY**

- Quick responses to strategic opportunities
- Focus on change management
- Focus on risk management
- Integrate the voice of the customer
- Shorter decision/production review cycles
- Use of interactive project management practices
- Eliminate organizational silos
- Leverage technology
- Contingency planning
- Interdisciplinary product teams
- Use of interactive project management practices

**EMBRACING CHANGE**

Embracing and managing change is a means to improving responsiveness. We know organizations that enable change effectively stay ahead of the competition—but the reality is, very few are able to do so. Those that focus on the following factors, as first outlined in our change management research, will be more effective on their journey to greater agility (*Enabling Organizational Change Through Strategic Initiatives*, PMI, 2014):

- Standardized project and program management practices
- Engaged sponsors who actively rally senior management to commit to change
- Managing people through organizational change
Responsive organizations iterate and take stock of lessons learned. They know when, what, and how to change. They know projects deliver business value and the approach used helps to ensure successful outcomes. According to our research, the most influential factors in selecting the project approach are:

- Requirements associated with specific characteristics of the project (57%)
- Requirements associated with project funding/budgeting (46%)
- Requirements associated with the organization’s project methodology (39%)
- Availability of the required skills necessary to deliver the project (36%)

These factors are weighed against the pros and cons of each approach—as they relate to the specific project. For example, certain projects are more conducive to an agile approach that allows teams to deliver projects in small increments and adjust rapidly as needed. Other projects require a predictive approach that calls for the bulk of the planning up front, then operates sequentially. Yet other projects benefit from a hybrid approach that combines various life cycles—both predictive and agile—to achieve goals.

A holistic viewpoint considers the characteristics of the project when choosing how to deliver it. PMI’s newly released *Agile Practice Guide* outlines an effective way to understand how project life cycles vary by putting them into a continuum ranging from predictive cycles on one end to agile cycles on the other end (*see sidebar: The Continuum*).

Our findings support that there is no *one-size-fits-all* approach to project delivery—considering the entire spectrum of project approaches contributes to organizational agility. Projects can be completed successfully with the approach that best fits the project and organizational needs. Notably, whether using agile, hybrid, or predictive approaches, our survey respondents reported almost two-thirds of their projects successfully met original goals and business intent.
Similarly, there is no one-size-fits-all leadership style that will pave the way to success. Flexible leaders will assure that the most appropriate style is used in each situation. When leadership shares a common view of the organization’s strategic goals and develops the proper strategic response with sufficient support, organizations gain greater agility.

\textbf{THE CONTINUUM}

No life cycle is optimal for all projects. Instead, each project finds a spot on the continuum with the most favorable balance of characteristics for its context. It is important to remember that hybrid combines practices from agile and predictive-driven approaches.

- **Predictive** takes advantage of things that are known and proven. This reduced uncertainty and complexity allow teams to segment work into a sequence of predictable groupings.

- **Iterative** allows feedback on partially completed or unfinished work to improve and modify that work.

- **Incremental** provides finished deliverables that the customer may be able to use immediately.

- **Agile** leverages both the aspects of iterative and incremental characteristics. When teams use agile approaches, they iterate over the product to create finished deliverables. The team gains early feedback and provides customer visibility, confidence, and control of the product. Because the team can release earlier, the project may provide an earlier return on investment because the team delivers the highest value work first.

\textbf{PLANNING IS ALWAYS THERE}

A key thing to remember about life cycles is that each shares the element of planning. What differentiates a life cycle is not whether planning is done, but rather how much planning is done and when.

— Source: Agile Practice Guide (PMI and Agile Alliance, 2017)
Our research continues to reinforce that the right talent and processes are essential to achieve high levels of organizational agility and to leverage different approaches to project delivery. These organizations hire and train skilled professionals who can think creatively about how they work, help establish more efficient and effective processes, work well with others, and embrace change. They also utilize a foundational approach to processes that helps shape their success. They build on and adapt what they do well in response to market demands, to sustain momentum and grow.

Our research identifies three themes that separate organizations with high agility from their lower-agility counterparts.

1. **Establish a Cross-Functional, Collaborative Environment**
   - Coordinating the planning and executing of cross-functional initiatives
   - Implementing collaborative planning across the organization
   - Supporting adaptive delivery of projects and services across various departments

2. ** Foster an Innovative Attitude**
   - Getting comfortable with ambiguity
   - Being transparent
   - Supporting decentralized decision making

3. **Utilize a Foundational Approach to Processes**
   - Looking to discipline and data to drive decisions
   - Being detail oriented
   - Employing retrospectives to pursue continual improvement

Organizations overcome many barriers on the journey to greater levels of agility, including unsupportive leadership, poor communications, slow decision making, inflexible culture, and unclear vision or strategy. Critical to surmounting these obstacles is their willingness to empower their people and design effective processes. Both are key drivers of greater agility.
Organizations with high agility know technical skills are not enough to meet the challenges inherent in today’s global marketplace. They advocate training to develop soft skills and business knowledge—competencies that support long-range strategic objectives. And on the technical side, many invest in agile skill development, according to our research, which reveals 80 percent of organizations with high agility make agile skills a priority (base: 450 high-agility respondents). The ideal skill set—depicted in the PMI Talent Triangle—is a combination of technical, leadership, and strategic and business management expertise.

Our research shows that organizations with high agility focus significantly more on key people drivers, including several directly related to broadening the skill sets of project professionals (see Figure 7):

- Employing project professionals with the skills to apply a variety of project management approaches (88% versus 13% of organizations with low agility)
- Incorporating agile skills development in performance plans (80% versus 3% of organizations with low agility)
- Including program management development in performance plans (78% versus 6% of organizations with low agility, see text box Agility and Program Management)
- Providing access to project management mentors (77% versus 8% of organizations with low agility)
- Establishing agile project leader as a formal role (77% versus 13% of organizations with low agility)
- Providing internal peer-to-peer training programs (82% versus 5% of organizations with low agility)

**Figure 7: Organizations with high agility are dramatically more likely to execute on critical people drivers**

<table>
<thead>
<tr>
<th>People Driver</th>
<th>High Agility</th>
<th>Low Agility</th>
</tr>
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<tbody>
<tr>
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<td>My organization incorporates agile skills development in performance plans</td>
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<tr>
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<td>6%</td>
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<td>82%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Base: 154 low-agility and 450 high-agility respondents
AGILITY AND PROGRAM MANAGEMENT

The fact that our research surfaced program management capabilities and mentoring as people drivers likely reflects what we see as the role growing to support higher levels of organizational agility. Program managers are in a unique position to weave agile approaches into the project environment. They understand the business, can represent the voice of the customer, and have the authority to monitor and redirect activities if a project is in jeopardy.

Program management can also define certain projects narrowly to shorten delivery cycles and avoid some of the traditional front-end planning and documentation.

Program managers typically have the attention of executive leadership, as well. They can influence other investments necessary to adopt more agile practices. But, even before that happens, they can blend the best approaches and help facilitate greater agility in the project space. In doing so, they introduce agile to the organization and can advocate its use to deliver certain projects.

These people drivers listed above make sense. They reflect a desire of organizations to expand their approaches to project delivery, with a focus on adding approaches to their toolkits. In addition to the key people drivers in Figure 7, our research indicates that organizations with high agility:

- Establish project management as a formal role
- Expect project teams to have the ability to adapt their management approach to the unique needs of each project
- Provide access to internal training for project management
- Support the ongoing training and development of project staff in new project management approaches
- Recruit project professionals with diverse project management skills
- Fund external, face-to-face training opportunities
- Support individual pursuit of program or project management certifications
- Provide access to internal training for agile practices
- Offer financial support for external, virtual training opportunities
- Support individual pursuit of agile-specific certifications
- Supply books, publications, and other materials
- Afford access to agile coaches

THE EVOLVING ROLE OF THE PROJECT MANAGER

Many wonder about the role of the project manager on an agile project. Some agile practitioners feel a project manager is not needed, due to self-organizing teams taking on the former responsibilities of the project manager. However, pragmatic agile practitioners and organizations realize project managers add significant value in many situations. The key difference is that the role and its responsibilities look different.

In high-change projects, there’s more complexity than one person can manage. Instead, cross-functional teams coordinate their own work, collaborating with the business representative (the product owner).

To serve an agile project, project managers shift from being the center to serving the team and management. They are “servant leaders,” changing their emphasis to coaching people who want help, fostering greater collaboration in the team, and aligning stakeholder needs. Servant leaders encourage distributing responsibility to the team—those people who have the knowledge to get work done.

As the PMBOK® Guide states, the role of the project manager does not change based on managing projects using a predictive development life cycle or managing projects in adaptive environments. However, to be successful in using adaptive approaches, the project manager will need to be familiar with the tools and techniques to understand how to apply them effectively.

With the growth of complex projects and the ever-increasing pace of change, organizations recognize that to focus their hiring and development on technical project management skills only is no longer sufficient. Organizations need project managers who can deal with ambiguity and can lead strategic initiatives that drive change in their organization.

– Source: Agile Practice Guide (PMI and Agile Alliance, 2017)
We also see the need to cross-train project professionals, since organizations have a limited number of professionals for assignments but want to expand their options for how projects are managed. That means individual project professionals need flexible technical skills in addition to the soft skills that strengthen their command of business.

Many soft skills are also essential for high levels of organizational agility, according to extensive literature. And considering that our research indicates that organizational agility is a bigger factor in project success rates than the specific project approach, an investment in soft-skill development would seem wise.

Pinpointing these skills is organization-specific. High-performing organizations evaluate their talent needs for both hiring and training against their business strategy and goals. Some organizations segment their talent and identify unique skill sets based on the roles and responsibilities of those within the segment or by current versus future skill sets. These companies work closely with human resources to determine whether the requisite skills must be hired, or can be acquired via training, mentoring, and coaching.

The approach to training project professionals in multiple techniques is the same as teaching any new skill. Organizations benefit by providing different learning channels, including peer training and experiential learning. Their investment to ensure they have the right talent to execute their strategic initiatives—their projects and programs—is a critical capability that gives them a competitive advantage, according to our past talent management research. In fact, our joint research with the Economist Intelligence Unit confirmed that talent management can help or hinder an organization and that talent deficiencies hamper strategy implementation efforts 40 percent of the time (Rally the Talent to Win, PMI, 2014).
ACHIEVING GREATER AGILITY

Organizations with high agility create a strong foundation of key processes. These are usually processes at which organizations excel and can explicitly standardize. They are also hard for competitors to replicate, so they deliver an advantage.

Well-designed processes mitigate factors that could sabotage success or the ability to leverage new opportunities. They ensure consistency in project delivery and more effective monitoring and measures of success. They also represent a starting point for process improvement efforts, as the need arises.

> CASE STUDY

Blue Cross Blue Shield of Nebraska Mixes Agile with Predictive

When patient-reporting rules changed, Blue Cross Blue Shield of Nebraska (BCBSNE) mixed agile with predictive practices—and emerged fitter than ever. A brittle legacy system had ably handled insurance claims processing, membership services, and financials, but it was time for an upgrade. To deliver, the team decided it was best to move to a vendor-provided solution. First, BCBSNE formed a joint venture with Blue Cross Blue Shield of North Dakota. That neighboring company’s system, rebuilt only a few years earlier, was already nimble enough to handle the changes required by the government mandate. The two organizations joined forces to create a healthcare technology company called CoreLink Administrative Solutions, based in Fargo, North Dakota, USA.

For the massive project to work, BCBSNE had large-scale infrastructure and integration challenges to address, including reworking its data warehouse to accept new data from CoreLink. The dynamic created a tricky project management dilemma: CoreLink was a predictive shop and BCBSNE was strictly agile. To sync the two approaches to managing projects, the team developed a system they called fanning. Using CoreLink’s predictive deliverables time line as a baseline, the teams wrote hundreds of themes and features for BCBSNE and aligned them with CoreLink’s schedule. The two organizations then determined dependencies and risks, and coordinated what had to be accomplished across the enterprise for both CoreLink and BCBSNE. From there, any themes and features that could be accomplished independent of CoreLink’s deliverables were assigned to a BCBSNE project team’s backlog and scheduled into iterations using an agile planning approach.


Our research reveals that organizations with high agility focus significantly more on several key process drivers (see Figure 8 on the following page), including:

- Having metrics and systems to accommodate fast portfolio changes and continuous reprioritization (79% versus 3% of organizations with low agility)
- Using customer/market feedback data to revise or modify product road maps (80% versus 8% of organizations with low agility; see text box Agility and the Customer)
- Implementing multiple agile approaches (72% versus 7% of organizations with low agility)
- Reviewing and adjusting product road maps and plans on a quarterly or even monthly basis (80% versus 9% of organizations with low agility)
- Organizing resources into standing product teams to support product releases (81% versus 10% of organizations with low agility)
- Incorporating multiple approaches within a project routinely (81% versus 10% of organizations with low agility)
Figure 8: Organizations with high agility are dramatically more likely to execute on critical process drivers

<table>
<thead>
<tr>
<th>Process Description</th>
<th>High Agility (%)</th>
<th>Low Agility (%)</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have metrics and systems to accommodate fast portfolio changes and continuous reprioritization</td>
<td>79</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>We consistently use customer/market feedback data to revise or modify our product roadmaps</td>
<td>80</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>We have implemented multiple agile approaches</td>
<td>72</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>We review and adjust our product roadmaps and plans on a quarterly or even monthly basis</td>
<td>80</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>We have organized resources into standing product teams to support product releases</td>
<td>81</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>We routinely incorporate multiple approaches within a project</td>
<td>81</td>
<td>10</td>
<td></td>
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</tbody>
</table>

In addition to executing the key process drivers listed above, our research indicates that organizations with high agility do the following:

- Select the planning and delivery approach based on market requirements and/or regulatory constraints
- Have a product-oriented organizational structure, focused on product domains
- Prioritize maintaining thorough project documentation
- Plan and fund practices focused on portfolios that receive a share of the yearly budget to invest in projects
- Rank backlogs based on customer/market feedback
- Select the planning and delivery approach based on project risk, budget, and/or available skills
- Implement serial, sequential planning combined with single and/or multiple agile approaches

These processes are consistent with the principles of benefits realization management as well, which helps align projects, programs, and portfolios to the company’s overarching strategy. Regardless of the approach they use, project teams continually evaluate whether they will deliver expected benefits. If not, they exercise agility and adjust their processes and practices accordingly.

The goal for organizations, regardless of where they focus, is to design processes that are dynamic and nimble. This approach will assure those who associate “process” with being cumbersome and rigid. Well-crafted processes streamline work, eliminate duplication of effort, identify critical decision points, and provide options to accommodate different business scenarios. The best processes support quality standards and change readiness, and identify continuous process improvements in support of greater agility.

AGILITY AND THE CUSTOMER

Greater levels of agility can also be achieved with a deeper understanding of the customer. Organizations with high agility are more customer-centric and focused on expected outcomes for the customer—84 percent consistently include customers in their product planning and delivery practices (versus 7 percent in organizations with low agility; base: 154 low-agility and 450 high-agility respondents). Organizations can find ways to understand their customers and collect information that reflects needs and expectations as accurately as possible by:

- Applying contextualized approaches that allow for planned adaptability
- Reacting quickly to changing needs
- Providing adequate governance to ensure accountability for results
THE EVOLVING ROLE OF THE PMO

In a more responsive environment where project approaches vary and agile transformation is underway, many organizations are looking at the structure, capability, and purpose of the project management office (PMO). Questions are often asked about how the PMO can help an organization be more customer focused and competitive. This thinking emphasizes the role of projects in delivering customer value or the expected benefits. The PMO, especially as it evolves into a stronger driver of strategy, can be a beacon for other functions impacted by new approaches to managing projects.

That is especially true for core business services (shared services), such as finance, legal, procurement, and human resources. These functions support project delivery either directly or indirectly; as project approaches change, so must the ways these areas of the business work. This includes how they manage budget cycles, talent, risks, and procurement. Because PMO leaders have perhaps the best insight into the necessary changes, they can be powerful advocates and change agents for agile transformation. Their role is to help other functions identify new processes and procedures that will contribute to project success, regardless of approach.

Importantly, PMO leaders play an essential role in communicating across the enterprise about organizational agility in relation to projects and programs. They establish transparency into the change factors and process implications, which encourages constructive governance and oversight.

Organizations with high agility recognize the value of having some form of project governing body, according to our research. Among those surveyed, 94 percent of organizations with high agility versus 81 percent of organizations with low agility reported having a PMO, an agile work group, or another type of formal governance board (base: 154 low-agility and 450 high-agility respondents). These organizations also value training and development, community, and mentoring—all factors a PMO supports. Other people and process drivers of agility that organizations with PMOs are more likely to prioritize—and that PMO leaders can play an instrumental role in helping their organizations achieve—include agile skill development, program management effectiveness, mentoring, and peer learning (see Figures 9 and 10 on the next page).

Because PMO leaders have perhaps the best insight into the necessary changes, they can be powerful advocates and change agents for agile transformation.
Our project professionals have the skills to utilize a variety of project management approaches

My organization incorporates agile skills development in performance plans

My organization incorporates program management in performance plans

My organization provides access to program management mentors

We have established agile project leaders as a formal role

My organization provides internal peer-to-peer training programs

<table>
<thead>
<tr>
<th>PMO</th>
<th>No PMO</th>
<th>Base: 154 low-agility and 450 high-agility respondents</th>
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<tbody>
<tr>
<td>53%</td>
<td>29%</td>
<td></td>
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<tr>
<td>41%</td>
<td>20%</td>
<td></td>
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<tr>
<td>43%</td>
<td>18%</td>
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<tr>
<td>41%</td>
<td>19%</td>
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<tr>
<td>45%</td>
<td>15%</td>
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<td>46%</td>
<td>27%</td>
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</table>

Figure 9: Organizations with PMOs are more likely to execute on critical people drivers

We have metrics and systems to accommodate fast portfolio changes and continuous reprioritization

We consistently use customer market feedback data to revise or modify our product roadmaps

We have implemented multiple agile approaches

We review and adjust our project roadmaps and plans on a quarterly or even monthly basis

We have organized resources into standing product teams to support product releases

We routinely incorporate multiple approaches within a project

<table>
<thead>
<tr>
<th>PMO</th>
<th>No PMO</th>
<th>Base: 154 low-agility and 450 high-agility respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>41%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>46%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>47%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>49%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>47%</td>
<td>22%</td>
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</tbody>
</table>

Figure 10: Organizations with PMOs are more likely to execute on critical process drivers

To serve a more responsive environment, the PMO also plays an essential role in removing critical organizational-level impediments to flexibility and change. PMO leaders can provide oversight of transformational progress, decipher circumstantial and systemic obstacles, and inform ongoing quality assurance. They can review processes and documentation from a value perspective, and make decisions around simplifying or eliminating those with the least value. Similar to project managers, they can adopt a servant-leadership role to empower teams and encourage self-direction.

As the role of the PMO evolves, its leaders are in perhaps the best position to address what our research identified as the most common challenges to agile and hybrid implementation. We looked at the responses by different variables, including whether an organization was predictive, agile, or hybrid. The primary challenge was shifting from a “command and control” culture. After that, the order of challenges changed, but they were consistent with how organizations operate (see Figures 11 and 12 on the next page).
AGILE OR HYBRID IMPLEMENTATION CHALLENGES

Figure 11: Organizations with agile or hybrid as most common approach see as challenges

- Shifting from “command and control” culture: 41%
- Adapting the governance model for agile implementation: 36%
- Using accepted project management practices: 35%
- Adapting the PMO to an agile environment: 33%
- Implementing agile processes/frameworks without modification/tailoring: 33%
- Adapting the role of the project manager for agile implementation: 32%
- Measuring and tracking financials: 30%
- Defining adequate documentation for projects using agile approaches: 29%
- Engaging the product owner within teams: 29%
- Lack of support from executive leadership: 29%
- Initiating/starting project: 26%
- Using standard terminology: 24%
- Other: 2%

Base: 926 global respondents with agile or hybrid as most common approach

Figure 12: Organizations with predictive as most common approach see as challenges

- Shifting from “command and control” culture: 34%
- Implementing project management processes: 33%
- Using accepted project management practices: 31%
- Obtaining executive support for transformation: 29%
- Obtaining organizational support for transformation: 28%
- Initiating/starting project: 28%
- Measuring and tracking financials: 28%
- Defining adequate documentation for projects using sequential approaches: 24%
- Engaging the product owner within teams: 24%
- Implementing sequential processes/frameworks without modification/tailoring: 23%
- Lack of support from executive leadership: 23%
- Adapting the role of the project manager for sequential implementation: 23%
- Adapting the governance model for sequential implementation: 22%
- Using standard terminology: 15%
- Other: 4%

Base: 543 global respondents with predictive as most common approach
At PMI, we have long recognized the strategic role and untapped potential of the PMO. In our prior PMO research we identified three characteristics of high-performing PMOs that are vital to agile transformation: create a culture of project management, continually evaluate performance, and evolve and improve through knowledge management and change management (The Impact of PMOs on Strategy Implementation, PMI, 2013).

PMOs will continue to focus on critical initiatives, institute smart and simple processes, foster talent and capabilities, and encourage a culture of change to ensure projects deliver the expected benefits with maximum efficiency.

Successful implementation of strategic initiatives requires that PMOs be accorded time, resources, and attention by senior leaders. Nimble PMOs are empowered by their executives to act with greater agility and achieve better business outcomes. Their focus and leadership are essential for effective collaboration, communication, and responsiveness to change to improve the organization.

**CASE STUDY**

Creating a Dynamic PMO Organization: Caterpillar Adopts Predictive, Agile, and Hybrid

In the past, Caterpillar was primarily considered a manufacturing company. Because of the linear nature of manufacturing, projects were historically managed using predictive/waterfall. As we evolved and began focusing more heavily on non-manufacturing initiatives, such as digital solutions, we started to investigate other models for project management. These new projects’ inherent fluidity demanded more, so teams began using agile approaches to manage them. Unfortunately, agile by itself also wasn’t the answer—so our Global Program Management (GPM) organization started a journey to create a loose hybrid services to help business partners meet objectives and ultimately ensure their success.

Our primary challenge in implementing agile was cultural: Decision makers lacked full understanding of the methodology. Program coordinators often heard comments like these: “If we use agile, we no longer need deadlines,” “We’re not executing an IT project, so agile isn’t applicable,” and “We do not need a plan in agile.” To tackle this challenge, we formed a cross-functional team charged with developing a comprehensive strategy to educate team members and roll out agile to business partners.

Beyond the cultural challenges, other challenges existed from an organizational perspective. GPM is a service organization to the rest of the company, and other divisions within the company were also in the process of rolling out agile. To streamline efforts, GPM reached out to several of these other divisions, learning about their roll-out strategies and exchanging ideas in the spirit of collaboration.

To sustain the model, we began actively recruiting team members with experience in all approaches who also have great initiative and love developing creative solutions to challenges. With these skill sets, a robust model, educational curriculum, and team vision, our GPM team continuously improves, innovates, and collaborates, which ultimately benefits our business partners.

—Contributed by Seth Norburg, PMP, Program Management Supervisor, and Niel Magsombol, PMP, SPC4, SSM (SAFe Program Consultant, Scrum Master), Program Coordination, both at Caterpillar Inc. Read the full case study in the companion piece: The Drivers of Agility.
ACHIEVING GREATER AGILITY

SUPPORTING LONG-TERM SUCCESS

The more aware organizations are of the drivers of agility, the more likely they will achieve long-term success. Organizations with high agility experience greater revenue growth, with 75 percent in our findings reporting a minimum of 5 percent year-over-year revenue growth last year, compared to only 29 percent of organizations with low agility (see Figure 13).

<table>
<thead>
<tr>
<th></th>
<th>High Agility</th>
<th>Low Agility</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% or more</td>
<td>75%</td>
<td>29%</td>
</tr>
<tr>
<td>0 to less than 5%</td>
<td>34%</td>
<td>16%</td>
</tr>
<tr>
<td>Negative</td>
<td>11%</td>
<td>2%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>26%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Organizations with high agility make significant financial impacts by ensuring project costs remain consistent, communicating internally, offering training and development, and listening to the customer, just to list a few.

CASE STUDY

Focus on Benefits: IBM and City Furniture

City Furniture, the leading furniture retailer in the South Florida area, was looking to delight customers through the best-in-class shopping experience that would contribute to increased sales.

With showrooms spanning from central Florida to the west coast and all the way to Miami, they have grown to over 1,400 associates strong. These associates work together every day to turn guests into happy customers and are proud of the extraordinary, high customer satisfaction ratings they receive. But they needed help.

They wanted to track each customer’s unique budget and personal preferences and be able to provide all of the needed information (such as product availability, pricing, and delivery data) directly from the sales floor. This would shorten the order and payment process time, increasing both customer satisfaction and sales opportunities.

City Furniture turned to IBM, known for our extensive tooling for agile conduct and performance and collaborative relationship with the company.

The benefits of the IBM solution and approach include:

- Best-in-class user experience capabilities
- Analytics and development expertise
- Secure and reliable mobile platform
- Industry-specific skills to solve pain points
- Seamless and efficient implementation with effortless adoption
- An increase of customer base
- Increased brand reputation and appreciation

Our project managers took a system view and incorporated design, development, and deployment with City Furniture’s organizational change, training, and deployment teams. Through this effort, we helped transform City Furniture’s change management process and adopt agile risk management.

—Contributed by Jerry Gura, Leader: Agile Center of Competency, IBM, and Jeff Shilling, Agile Transformation Consultant, NA Agile Center of Competence, IBM. Read the full case study in the companion piece: The Drivers of Agility.
When we embarked on the research for this report, the objective was to confirm the people and process factors that enable more agile approaches to project management—and to explore how different methods and approaches differentiate success. What we learned is that the approach is not the determining factor itself. Instead, the agility of an organization to accommodate change across the enterprise is the great differentiator. So as we talk about agile transformation, we must address not only project delivery, but also—and even paramount—the support network within an organization.

Simply put, agility is the primary driver of an organization’s success in today’s complex and disruptive global marketplace, which has ushered in unprecedented levels of competition. Agility happens when organizations acknowledge the need for constant change, and muster the will to make it happen.

No one denies that change is hard. And to thrive in this uncertain business climate, organizations must promote faster responsiveness, smarter delivery, and better outcomes.

If well-trained people and effective processes are employed together to build greater agility, organizations will have the groundwork for success. They can identify challenges and opportunities more quickly; understand customer needs and wants routinely; and, ultimately, deliver new and innovative products and solutions to the market faster than their competitors.

Organizations that want to stay on the path to greater success are wise to remember the following, as supported by our research:

**AGILITY IS A BALANCE—NOT A BATTLE—OF CHOICES:**
Seek a balance of speed and flexibility, stability, and scale.

**ADAPTABILITY IS KEY:**
Include all approaches to project delivery in your organization’s project management toolkit.

**DRIVERS OF AGILITY INCLUDE PEOPLE AND PROCESSES:**
Encourage open thinking and commit to talent development to accelerate results.
Build effective processes to achieve high performance.

**AGILITY LEVELS CAN DETERMINE THE SUCCESS OF AN ORGANIZATION:**
To achieve maximum business value, react with flexibility, respond to change, and engage employees and customers.

In this report, we focused on the people and process drivers of agility. The ability of both to evolve and keep pace with change is contingent on an organization’s culture. We explore those cultural drivers in our 2017 Thought Leadership Series, which we will deliver later this year.
ACHIEVING GREATER AGILITY

PULSE OF THE PROFESSION IN-DEPTH REPORTS®

FURTHER READING
The following PMI reports provide more insight into the skill sets that support greater individual and organizational agility. The material includes examples of how to build certain skills and the value they deliver to help organizations achieve their strategic goals.

Access the full reports on PMI.org.

**Capturing the Value of Project Management Through Knowledge Transfer** *(PMI, 2015)*

The process of transferring knowledge is an ongoing progression of learning, adjusting, and improving. An effective knowledge transfer process ensures:
- Vital knowledge is identified, captured, shared, applied, and assessed
- Lessons learned contribute to improvement
- Learning curves are scaled more quickly
- Experiential learning benefits others

**Capturing the Value of Project Management Through Decision Making** *(PMI, 2015)*

Good decisions based on strategic insight, the right information, and adequate risk management lead to more successful projects—projects that deliver more value to the organization. When decision making is approached with discipline, 79 percent more projects meet original goals and business intent, 110 percent more are completed within budget, and 128 percent more are completed on schedule. An effective decision-making process ensures decision makers:
- Have the right information to make decisions
- Are familiar with organizational strategy
- Give adequate attention to risk management

**The High Cost of Low Performance: The Essential Role of Communications** *(PMI, 2013)*

Communications is a core competency that, when properly executed, connects every member of a project team to a common set of strategies, goals, and actions. Unless these components are effectively shared by project leads and understood by stakeholders, project outcomes are jeopardized and budgets incur unnecessary risk.

An effective communications process ensures:
- Essential project information is reported to key stakeholders
- Appropriate levels of clarity and detail are routine in progress reports
- Information flows are timely
“Organizations do not need to choose between speed and flexibility, or stability and scale. True agility is a balance—not a battle—of choices. Organizations balance the need to be adaptive, fast, and cost effective with the need for high performance, discipline, and risk management.”

Mark A. Langley, President and CEO, PMI