Capturing the Value of
PROJECT MANAGEMENT

Through Decision Making

2015

PMI®
Project Management Institute

MAKING EFFECTIVE DECISIONS

Good decisions lead to great things: Henry Ford's decision to double the wages of his autoworkers, paving the way for the growth of the middle class and changing the U.S. economy for the next century. Bad decisions lead to disaster: Kodak's decision not to release the digital camera they invented in 1975, leaving the door open for competitors and leading to the company's bankruptcy.

Actions like these force us to examine our decision-making effectiveness. As we rethink this issue, I remember what my good friend J. Davidson Frame points out in his book, *Framing Decisions*—our attention should focus on two things: "First, it is important to recognize that decision making is a social activity. It is rooted in people and should not be approached as an objective process detached from human factors. … Second, decision makers must recognize that decisions are the end product of wrestling with constraints: constraints of knowledge, time, resources, skills, political forces, legacy, laws of nature, human laws, ethics, personalities, and more. Effective decision making requires decision makers to surface these constraints and figure out how to craft workable decisions that accommodate them."

With this latest *Pulse of the Profession®* in-depth report, we wanted to better understand the conditions and processes by which decisions, both good and bad, impact the outcomes of projects and programs. The good news, as we expected, is that sound decisions lead to better project outcomes. The bad news, as we also expected, is that many organizations struggle with giving decision makers the information they need to make effective project- and program-related decisions—and this contributes to project failure.

Making good decisions is hard work. It requires a number of critical elements, which are easy to overlook in the haste to keep things moving. But as business consultant, author, and lecturer Jim Collins says "… it all begins with having the right people—those who can debate in search of the best answers, but who can then set aside their disagreements and work together for the success of the enterprise."

In this report you'll read about organizations that support effective decision making and how they do it. You'll discover that they focus on what we've come to recognize as the essential aspects of effectiveness: creating a culture in which the right people have access to the processes and tools they need to be successful. Read on for ways to improve the path to effective decision making in your organization.

Let's do great things together (and make good decisions)!

Mark A. Langley
President and CEO
Project Management Institute

INTRODUCTION: DECISION MAKING AS A STATE OF MIND

By Margaret Heffernan

Every project starts with a decision. Leaders typically have a bias for action so they like making decisions, and often do so with a strong sense of certainty that inspires those around them. Doubt, after all, is neither inspiring nor productive.

And yet anyone with any experience knows that decisions are often ill-informed, biased, over-optimistic, and sometimes just plain wrong. The last seven years have revealed massive errors of judgment in strategic thinking, planning, execution, and communication. Poor decisions are made because decision making is difficult and judged by circumstances that keep changing.

Having studied business failures large and small, I don't believe that most are due to ill intent. I think they often derive from willful blindness: ignoring data, people, and details that are available but overlooked. We are all biased and our preferences steer us in one direction, away from others. Our mental models—of what constitutes decisiveness and success—will often obscure rich possibilities that appear attractive only too late. Time pressures can eliminate the pause for reflection, which would make us think again.

These days, we typically work in teams because we know that groups of people will identify more solutions or problems than individuals can see on their own. But—and it's a big "but"—the benefit of teamwork materializes only when members of the team are diverse, bringing a wide range of different perspectives and experiences, and a variety of biases and blind spots. If we let them, our team members will reveal what we might overlook. They'll challenge our assumptions and broaden our vision. The richness and security that teamwork promises, however, are achieved only when colleagues feel their differences are valued, and their candor is viewed as a contribution not a nuisance.

After 30 years of running projects and businesses of varying complexity, I'm persuaded that the single biggest challenge leaders face is creating a culture of candor in which the smart people we hire can, and will, raise issues, concerns, ideas, and challenges without fear. Why? Because nobody has the time, energy, IQ, knowledge, experience, or objectivity to know everything. We are all biased by what we've done and seen, and that is never comprehensive. We depend on those around us to contribute all that they know if we're to use all the information and insight required for sound decision making. Knowledge sharing is crucial—but it inevitably engenders conflict and debate of the kind that intimidates many. The open acknowledgment that disconfirmation has value, that argument is how organizations think, is our best way to inspire the candor needed for safe decision making.

There are two reasons why candor is so critical. The first is that debate and discussion are how weak ideas turn into great ideas. Contrary to popular mythology, no concept is born perfectly formed. Rather, we start with a sketch, fill in and discard details, and rearrange the pieces until finally we end up with an idea, goal, or specification that seems right. Shortcut the process and you undercut the potential of the project.

But once a decision is made, life isn't static. Change is continuous, and new political sensitivities, innovative technologies, and emerging markets change the context in which decisions stand or fall. When a team is in furious execution mode, horizon scanning is impossible, so you need an early warning system that can alert you when the great decision yesterday is about to become irrelevant today. For the most part, that early warning system is *people*.

Every decision is only ever a hypothesis: a belief that an action will have a predicted outcome. But perhaps the toughest part of decision making is remaining open to new information that may reinforce or challenge that prediction. Decision making never really stops. It demands that we continue to share information, review assumptions, and scan for blind spots. For agility, decision making can't be a special event. It has to become a state of mind.

Ms. Heffernan is the former CEO of five businesses and author of numerous books, including Willful Blindness: Why We Ignore the Obvious at our Peril. *She is an entrepreneur and world-class speaker who is working with members of PMI's Global Executive Council to improve their organization's decision-making skills.*

BUSINESS CASE: THE IMPORTANCE OF EFFECTIVE DECISIONS

Decision making in the complex global business environment is increasingly challenging and vulnerable to unforeseen circumstances. Yet it is also vitally important to every aspect of business, especially project management, which involves making a multitude of decisions every day about priorities, approaches, resources, and timelines.

As with all important business decisions, project outcomes can be traced to decisions that were made at an earlier point in time—and there's no doubt that poor decisions have negative consequences to both outcomes and an organization's bottom line. There are many reasons projects fall short of their original goals. In past research we've identified a number of contributing factors and the percentage of projects they impact: ineffective communications (56 percent), poor requirements management (47 percent), poorly engaged executive sponsors (34 percent), and untimely/inaccurate knowledge transfer (34 percent).

47% of unsuccessful projects are impacted by poor decision making

Poor decision making is one of the leading reasons. In fact, nearly half of unsuccessful projects are impacted by poor decision making, according to the findings of our latest *Pulse of the Profession®* in-depth report.

These findings reinforce our belief that decision making requires more attention. Because it's an integral part of everyday operations, many organizations assume that decisions are being made by the right people with the right information—and at the right time. But it's not that simple. And to overlook the complexity of the decision-making process is a risk that could negatively impact organizational performance, especially on an organization's most important projects and programs—those that make up the portfolio of strategic initiatives.

The most effective decision making—the kind that helps improve project outcomes—results from a formal, methodical approach, such as the five-step process highlighted in *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*:

> **"** People make decisions all the time. All humans, regardless if they are CEOs or janitors, have so-called bounded rationality. We cannot comprehend all complexity of the world and implement simplified strategies to make decisions. **"**
>
> —*Lev Virine, PhD, Project Manager* and one of the Authors of Project Think: Why Good Managers Make Poor Project Choices, *winner of the PMI David I. Cleland Project Management Literature Award*

1. **Problem Definition:** Fully explore, clarify, and define the problem.

2. **Problem Solution Generation:** Prolong the new idea-generating process by brainstorming multiple solutions and discouraging premature decisions.

3. **Ideas to Action:** Define evaluation criteria, rate pros and cons of alternatives, and select the best solution.

4. **Solutions Evaluation Planning:** Perform post implementation analysis, evaluation, and lessons learned.

5. **Evaluation of the Outcome and Process:** Evaluate how well the problem was solved or project goals were achieved (extension of previous phase).

This approach can improve the effectiveness of decisions—often dozens each day—that drive successful projects and programs. Some of these decisions are small and barely noticed, whereas others are prominent and under intense scrutiny. But together they make up the work that will lead to success or failure.
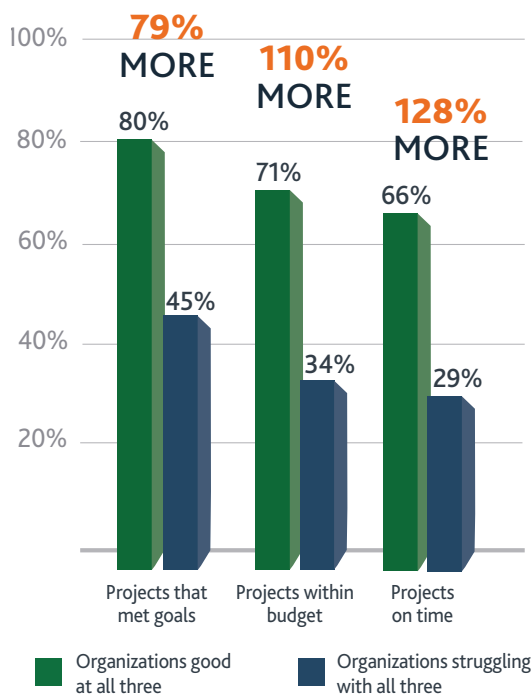
Our report details the challenges in decision making as they relate to projects and programs and identifies ways organizations can improve the decision-making process by focusing on the fundamental aspects of culture, people, and process. They may seem too simple, but the consistent, too-high project failure rate indicates that these three differentiators of organizational success are clearly not easy. Yet the most successful organizations improve decision making by:

- Embedding a *culture* that enables an effective decision-making process and supports the people making the decisions.

- Providing the right support and information to the *people* making project and program decisions.

- Establishing and following a transparent *process* to support effective decision making.

FOCUS ON EFFECTIVE ORGANIZATIONS

A number of culture-, people-, and process-related challenges complicate an organization's ability to make effective decisions and, in turn, to improve project outcomes. But they are not insurmountable. In fact, those challenges can be overcome with three practices:

- Fostering a culture of transparency that ensures the people making decisions understand organizational **strategy**.

- Establishing a process to provide people making decisions with access to the right **information** at the point of need.

- Employing procedures for managing **risk** in the decision-making process.

When organizations effectively address these three issues, **79 percent more projects**, on average, meet original goals and business intent; **110 percent more projects** are completed within budget; and **128 percent more projects** are completed on time (see Figure 1).

Understanding Strategy

Knowledge and information about an organization's strategy are central to effective decision making. This is especially important in the context of projects and programs, since they are the means to implementing strategy and change. But, depending on cultural factors, employees throughout an organization may have varying degrees of information about strategic plans and objectives—a scenario borne out by the fact only one in five organizations says decision makers at the project level are always familiar with strategy and how projects support it.

FIGURE 1

IMPROVING PROJECT OUTCOMES
THROUGH EFFECTIVE DECISION MAKING

79% MORE

110% MORE

128% MORE

Organizations good at all three

Organizations struggling with all three

Projects that met goals — 80% / 45%
Projects within budget — 71% / 34%
Projects on time — 66% / 29%

That means most are missing out on the efficiencies good decisions deliver, because when decision makers are familiar with organizational strategy all the time, an average of 78 percent of their organizations' projects meet original goals versus 43 percent who aren't familiar with strategy; 66 percent are completed within budget versus 31 percent; and 61 percent are completed on time versus 27 percent (see Figure 2).

While plenty of everyday decisions are made independent of strategy, decisions of consequence—the business purpose that leads to a project or program charter—must reflect organizational strategy in order to be most successful. That's routine at DuPont Pioneer, said James Brown, PMP, PgMP, PfMP, Director of the company's Project Management Office. "The decisions we make today have implications on our revenue 8 to 10 years from now," he said. "The first thing we look at when it comes to organizational decision making is to ensure our new ideas—the projects and programs we want to execute—are tied to our strategy."

Accessing the Right Information

People need the *right* information to make effective decisions. That information is current, accurate, relevant, objective, and sufficient—it brings context and meaning to disparate facts. Yet decision makers in 81 percent of organizations don't always have access to what they need. In fact, they often lack even the most fundamental information, such as risk assessments (46 percent), insight into available resources (40 percent), and full knowledge of project requirements (35 percent).

This suggests that a significant percentage of decisions are guesswork rather than deliberate choices. The data also emphasize the need for organizations to create a more structured and well-supported decision-making process. That alone is simply good risk management.

Organizations that harness the right information make more effective decisions that improve project outcomes. In fact, when decision makers have the right information, an average of 78 percent of their organizations' projects meet original goals versus 49 percent among those that continually lack information; 67 percent are within budget versus 37 percent; and 63 percent are on time versus 36 percent (see Figure 3).

FIGURE 2
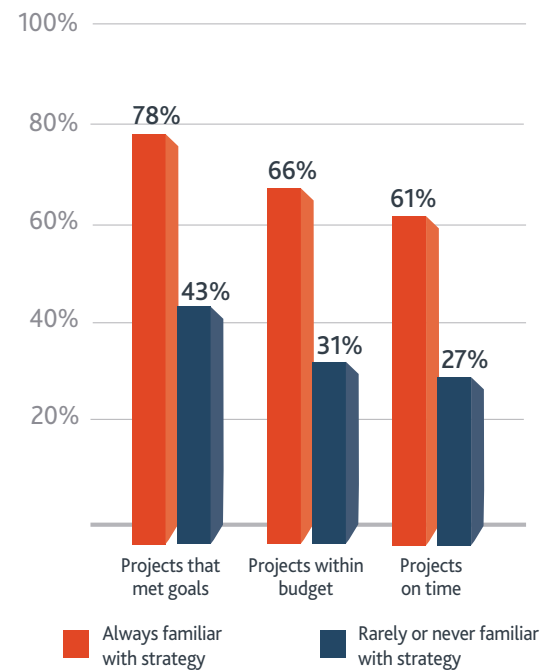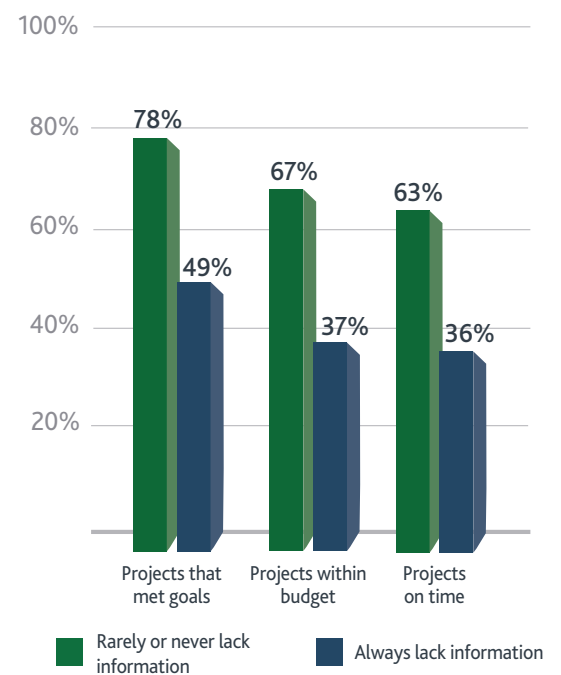FAMILIAR WITH ORGANIZATIONAL STRATEGY TO MAKE DECISIONS

Legend:
- Always familiar with strategy
- Rarely or never familiar with strategy

FIGURE 3
HAVING THE RIGHT INFORMATION TO MAKE DECISIONS

Legend:
- Rarely or never lack information
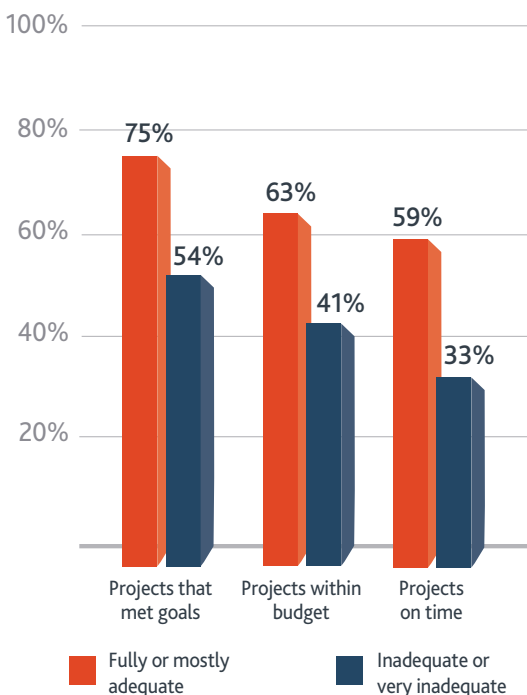- Always lack information

For many organizations, getting the right information is complicated because decision makers aren't always sure of what they need—or what's even available. For example, many err on the side of capturing only the information that will lead to consensus among project partners and stakeholders. A better approach is to include information that will raise questions and even lead to robust debate. Broad and open conversations allow for more objective assessments of the information that could help in the decision-making process and also reduce the impact of inherent bias.

In addition, this approach encourages individuals to participate more fully in discussions that support decisions. Even dissenting voices will feel they have an opportunity to be heard—and may have information that better informs the ultimate decision.

"We need to make sure we look wide enough for the information to make decisions," said Ms. Heffernan. "If you don't have any dissenting voices or disconfirmation, chances are you don't have enough information or have not looked hard enough to make the decision. Ask yourself: What further information would make this decision easier? What information is missing?"

Attending to Risk

The anchor for a robust decision-making process is proper risk management. This includes weighing the severity of risks and the correlation to achieving strategic objectives before a decision is made. By exercising proper risk management, organizations can achieve a comfort level with the unknowns that exist in projects; and by coming up with alternative risk management strategies, they are more likely to circumvent obstacles and make effective decisions.

Since we know that risk factors frame most decisions about projects and programs, it's perhaps surprising that only two in five organizations believe they have adequate risk management in place to support the organization overall, and only half believe they have adequate risk management relative to project- and program-related decisions.

These numbers are exceedingly low, considering that by managing risk in project- and program-related decisions, organizations realize a higher percentage of projects meeting original goals and intent (75 percent); delivering on budget (63 percent); and meeting the schedule (59 percent) (see Figure 4).

Figure 4

MANAGING RISK TO MAKE DECISIONS

This is not a complicated equation: When organizations turn decision-making challenges relating to strategic insight, information adequacy, and risk management into opportunities, and follow the practices outlined above, they are more successful. A notable 79 percent more of their projects meet original goals and business intent; 110 percent more projects are completed within budget; and 128 percent more projects are completed on schedule. Even so, making it happen is not easy.

THE PATH TO SIGNIFICANT IMPROVEMENT

The most productive organizations make good decisions quickly and execute them efficiently. As noted earlier, our findings reveal that decisions improve with the right **culture, people,** and **process**. We see that consistently high-performing organizations[1] empower their people to make the best possible decisions, have a formal decision-making process, and tie it all together by embedding support for good decision making into their culture. Strategy, information, and risk management are important factors in their success, but there are many more issues under the culture-people-process umbrella that both directly and indirectly affect good decision making.

> 66 Great decisions consider the now and future implications of the direction chosen. 99
>
> — *Michael Wood, Former CIO, Showboat Inc.*

The Culture to Support Effective Decision Making

Organizational culture plays a key role in decision making. As the foundation on which everything is built, culture sets the tone that ultimately shapes the common experiences of employees. That, in turn, has a significant impact on how individuals approach decision making.

The reasons are varied. They include a lack of executive focus on what is perceived as the more technical, implementation level of activity in an organization, as frequently seen in organizations with more traditional hierarchies. Other organizations simply don't provide beneficial oversight and support resources for projects. They don't invest in executive sponsors, for example, which has been proven to be a smart move.

Our 2014 in-depth report, *Executive Sponsor Engagement—Top Driver of Project and Program Success,* showed that decision making is one of an executive sponsor's most important skills. And the areas where they are seen as most helpful to projects include removing roadblocks and intervening on escalated issues, both of which require skillful decision making.[2]

Improving decisions requires purposeful attention to creating a culture that enables effective decision making, including a commitment to having those executive sponsors actively engaged in projects and programs.

> **"** Decision makers must develop a set of trusted sources looking beyond the data about possible motives for the way the information is presented. They must base their decisions on the information from those trusted sources until the source proves to be untrustworthy and then find a new source. **"**
>
> *—Kevin Coleman, Veteran Project Manager and Former Chief Strategist at Netscape*

The benefits of executive sponsor engagement cannot be overemphasized. Our *Pulse* research continues to show it is the top driver of projects meeting their original goals and business intent. That plays out in high-performing organizations where 81 percent of projects have actively engaged sponsors and a project success rate more than two times higher than other organizations.[3]

To enable good decisions, trust between executive sponsors and project managers is critical. In our most recent *Pulse* survey, just over half of organizations reported that project managers provided strong support for decisions made by executive sponsors. "Without that level of trust, the project managers are never going to be put into a position of decision making; they'll only inform," said Mr. Brown. "Once you develop that level of trust between a project management organization and leadership organization, the project manager's power rises."

Overall, decision makers need to know they have their leadership's support, especially when decisions are difficult and require commitment from others throughout an organization who will respond to the tone at the top. However, senior management in one third of organizations does not strongly support the decisions affecting projects and programs. "If I've made a decision, I need to be assured that my leadership understands what it is and what the implications are," said Ms. Heffernan. "If the answer is yes, I need to know that I have the air cover, time, and resources to implement the decision. You need public and visible support of your decisions."

Decision making also requires accountability, but nearly half of organizations say individuals are not held fully accountable for their decisions affecting projects and programs. And decision makers take responsibility for their decisions in only 61 percent of organizations.

"In the decision-making process, it's fundamental to nail down who is accountable for what," said Ms. Heffernan. "It's the 'holy grail' of accountability—where everyone on the project feels responsible for the decisions."

CASE STUDY
Creating a Culture of Collaborative Decision Making

A massive drought from 2002 to 2003 depleted the water supply in the city of Aurora, Colorado, USA, leaving the city with a mere nine-month supply of water for its citizens, falling to 26 percent of its total capacity. The project team members—comprised of CH2M HILL and City of Aurora staff—turned to an innovative system that recaptures river water on the Prairie Waters Project, honored as the PMI 2011 Project of the Year.

The team worked to create a culture of "what's right instead of who's right." They focused on doing what was best for the citizens of Aurora and avoided any inter-organizational squabbling that could have derailed the project. Taking a collaborative approach to decision making, every delivery team on the project participated in a formal partnering process prior to construction. This helped foster trust and transparency, as well as set expectations for future collaboration among project team members.

Eight significant stakeholder agreements were signed, and 145 land parcels and 44 permits were acquired for the project, which spanned nearly 40 miles (64 km) and took six years to complete. Through the use of skilled project personnel; the rigorous application of project management standards, processes, and techniques; and the use of earned value management techniques—all built on a culture of collaboration enabling quick, sound decisions—the project was able to cut millions from the budget in the design phase without compromising quality or safety. In October 2010, the team delivered a successful project, which resulted in a new pipeline, pump stations, and a treatment plant that will ultimately deliver enough water to meet Aurora's needs through 2030.

People Make the Decisions

Effective decision making requires the right people with the right skills and experience. But decision-making proficiency is not part of every project and program manager's skill set. Instead, many require organizational support to develop this competency. As basic as this sounds, organizations are not universally providing such support—less than half offer training in decision-making effectiveness.

This is the case even though research shows organizations benefit by investing in their people across the spectrum of learning and development. They achieve superior project performance, execute strategic initiatives more successfully, and gain competitive advantage. Such benefits align with the PMI Talent Triangle™, which advocates that technical skills alone are not sufficient for today's project management practitioners. In order to be seen as a strategic asset, project managers require leadership and strategic and business management skills, and effective decision making is central to both.

While the best development programs for project management practitioners include training in decision making, how that is delivered should fit the organization. For many organizations, situational training is an effective way to test the decision-making process and uncover gaps. Training can also be designed to allow rich case-based learning and reflection on both the good and bad choices made when carrying out project or program responsibilities.

Another important people factor is employee empowerment and who is authorized to make decisions. We find that 74 percent of high performers have a clear escalation process for when decisions interfere with a practitioner's ability to execute responsibilities, compared with only 46 percent of low performers. And when the executive sponsor who receives an escalation acts quickly to make a good decision, project performance improves even more. Among other capabilities, good sponsors have sound leadership and decision-making skills. They have the political savvy and ability to influence stakeholders, paired with the ability to bring about decisions, which will contribute to the success of the project or program. This requires access to powerful individuals and groups in the organization and the ability to influence important decisions—and they need to use their clout quickly to clear road blocks.

Authorization and empowerment are central to effective decision making, but so is having choices in the process, according to Dr. Mark Mullaly, PMP, President and Chief Organizational Therapist of Interthink. "Where people feel that their actions and decisions are shaped and constrained by their environment, they see themselves as having no control or autonomy," he explained. "Where people feel they can make decisions and can act independently, and are willing to act independently, they feel a much greater degree of control or autonomy. This is empowerment."

CASE STUDY
Decision Makers Leading the Way

The National Ignition Facility (NIF) constructed at and led by the Lawrence Livermore National Laboratory (LLNL) in Livermore, California, USA, was a massive project where empowered decision makers led the construction of the world's largest laser. The project, honored as the PMI 2010 Project of the Year, had an initial budget of US$3.5 billion for a 500,000-square-foot (46,452 sq meters) facility, which required excavating 210,000 cubic yards (160,556 cu m) of soil and laying 95,480 cubic yards (73,000 cu m) of concrete for a facility that would "build a star on earth," otherwise known as creating a controlled fusion reaction in order to produce a new form of energy. No small task indeed.

As the largest scientific construction project completed by the Department of Energy (DOE)—accomplished by a worldwide collaboration among governments, academia, and many industrial partners—decision making was extensive and efficient. The NIF project manager directed the project organization to work to the fullest extent as Integrated Project Teams (IPTs).

The IPTs were empowered and authorized to make commitments for the organization or the functional area they represented. It was vitally important that all core team members remained a part of an IPT's decision-making process throughout the lifetime of the team. The life cycle ran from the time of team chartering through turnover to NIF operations. These teams were very effective, as their actions and recommendations were based on timely input from the entire team.

IPTs incorporated a systematic approach to the early integration and concurrent application of all the disciplines throughout a system's life cycle. IPTs were multifunctional, multi-organizational groups formed to capitalize on the strengths of all participants in the processes assigned to the team. The NIF Directorate provided infrastructure and support for project controls, system engineering/experimental physics, personnel management, facilities support, public relations, information technology, business management oversight, administration, security, environmental, and safety.
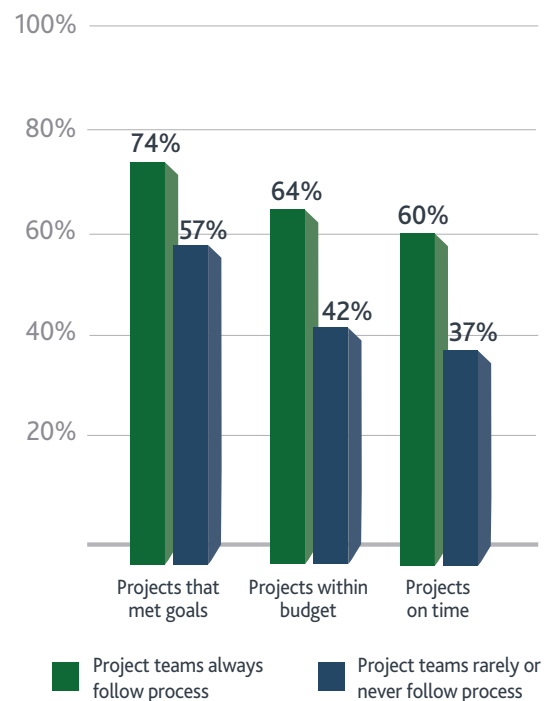
Process to Strengthen Results

While project managers normally know *what* decisions need to be made, *how* to make them often becomes a puzzle when no formal process exists. A process identifies the steps or activities that will lead to a desired goal, such as the process illustrated above from the *PMBOK® Guide*. The best processes provide decision makers with a detailed roadmap, identifying essential inputs and outputs, stakeholders, and decision points. This type of roadmap helps individuals approach decisions consistently, regardless of where they sit in an organization.

Ultimately, project outcomes improve when organizations have a decision-making process in place: 74 percent of projects meet goals and business intent versus 57 percent of those that don't have a decision-making process in play. This pattern continues for those organizations that report projects are within budget—64 percent versus 42 percent, and on time—60 percent versus 37 percent (see Figure 5).

"Decision making in our organization is a well-defined process. With regard to major projects, there is a standing leadership committee that reviews proposals and approves them for further development," said Mike Tressler, MBA, PMP, Corporate Real Estate Manager, Elevations Credit Union. "The proposal then is developed into a business case and if approved from there, enters the project start-up phase and continues along the typical life cycle through planning, implementation, and close out."

FIGURE 5
IMPROVING OUTCOMES WITH A DECISION-MAKING PROCESS

Legend:
- Project teams always follow process
- Project teams rarely or never follow process

Projects that met goals: 74%, 57%
Projects within budget: 64%, 42%
Projects on time: 60%, 37%

The five-step decision-making process outlined earlier—define the problem, brainstorm multiple solutions, select the best solution, perform post-project reviews, and evaluate the outcome—leads to improved outcomes. But while our research tells us most organizations would agree, their actions don't always align. For example, more than four in five organizations recognize the importance of post-project reviews to identify and evaluate key decisions and consequences, but only one half frequently conduct them. And in organizations that frequently conduct post-project reviews, 74 percent met goals and business intent versus 58 percent of those that didn't. The numbers take a dip for organizations that report projects are within budget—63 percent versus 46 percent—and those on time—60 percent versus 37 percent (see Figure 6).

FIGURE 6
IMPROVING PROJECT OUTCOMES WITH POST-PROJECT REVIEWS

Legend: ■ Always or often　■ Occasionally or never
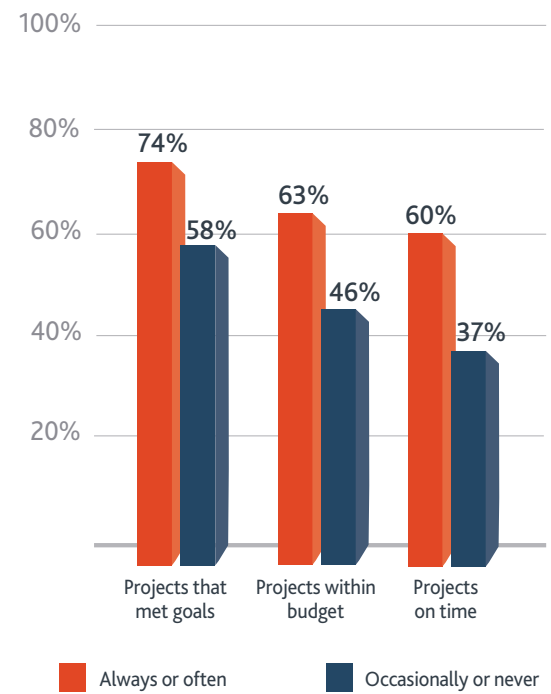
> 66 Transparency is important in decision making. We need to be open and truthful about how well we're doing on each requirement for quality. For example, what if we don't have enough solid alternatives? Or what if we don't have good information that reflects our uncertainty about the future? 99
>
> —*Jennifer Meyer, PhD, Senior Engagement Manager, Strategic Decisions Group*

MAKING PROJECT DECISIONS

Numerous decisions are made in the process of successfully executing a project and bringing value to the organization. The decisions cover everything from when to hold meetings to how proposals for scope changes should be handled. Such situations are more easily addressed when decision-making principles are defined at the beginning of a project, but that's happening in only half of organizations, and only one in four is fully defining these principles within the context of overall project governance.

A project governance framework provides the project manager and team with decision-making models and tools for managing the project, so the importance of defining decision-making principles within project governance cannot be overemphasized. When that happens, projects and programs in 77 percent of organizations meet their goals and business intent, 65 percent are within budget, and 62 percent are on time (see Figure 7).

"Without having the governance set up at the onset of a project, or a defined life cycle, you can't have everybody on the same page," said Mr. Brown.

Good governance models include requirements for transparency and even identify communications channels, which leads to a more open decision-making process, which is directly related to project performance. Twice as many high performers report their decision-making process for projects and programs is transparent (54 percent versus 21 percent of low performers).

"We have established a system that, with the right permissions, our project managers can look at the status of projects or programs to see who's working on what," said Mr. Brown. "If you don't have transparency, people will make up their own stories and it's usually the worst-case scenario. If we aren't transparent in our decision making, it could paralyze execution."

Finally, effective project decisions must take into account the perspectives of the stakeholders—those directly and even indirectly impacted by whatever is decided. That would seem logical, and while 90 percent of organizations report that they consider stakeholder benefits when making project decisions, 10 percent do not. If stakeholder interests are ignored, this can set the stage for project failure. A large majority (73 percent) of organizations report that active stakeholder involvement is one of the most important decision-related commonalities shared by successful projects and programs. And when project decisions are made with stakeholder benefits in mind, organizations average 71 percent of their projects meeting original goals versus 46 percent; 59 percent are within budget versus 39 percent; and 54 percent are on time versus 31 percent (see Figure 8).

FIGURE 7
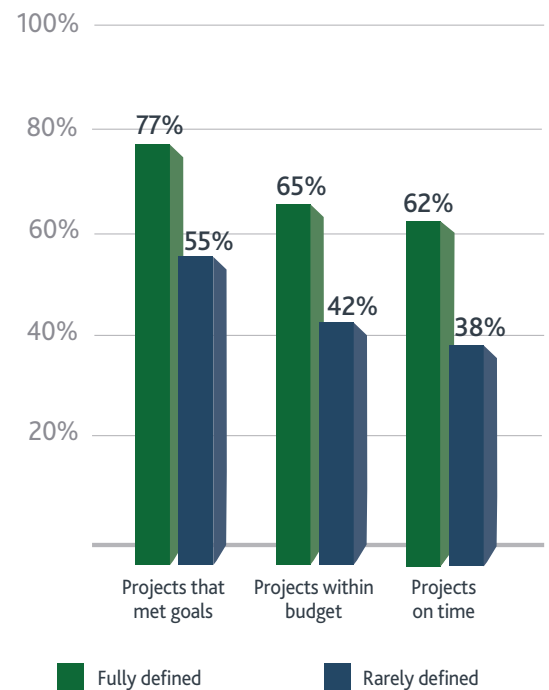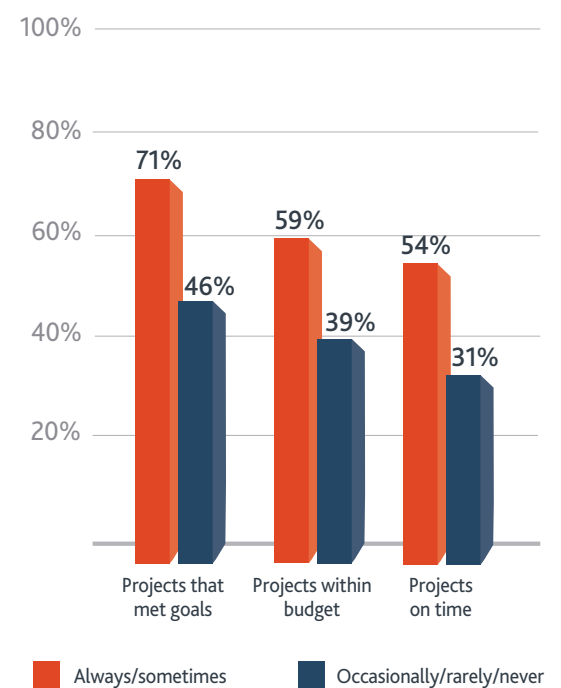**IMPROVING PROJECT OUTCOMES BY DEFINING DECISION-MAKING PRINCIPLES WITHIN PROJECT GOVERNANCE**

Legend: Fully defined (green), Rarely defined (blue)
- Projects that met goals: 77% / 55%
- Projects within budget: 65% / 42%
- Projects on time: 62% / 38%

FIGURE 8
IMPROVING PROJECT OUTCOMES WITH STAKEHOLDERS IN MIND

Legend: Always/sometimes (orange), Occasionally/rarely/never (blue)
- Projects that met goals: 71% / 46%
- Projects within budget: 59% / 39%
- Projects on time: 54% / 31%

CONCLUSION

Every success or failure or every opportunity seized or overlooked is the result of a decision. 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. By taking these very practical steps, any organization can become more skilled at decision making, beginning with the next decision to be made, large or small.

As we've discovered, when decision making is approached with discipline, a notable 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. The essential practices are simply that:

- Decision makers have the right ***information*** to make decisions.

- Decision makers are familiar with organizational ***strategy***.

- Organizations provide adequate attention to ***risk*** management.

The most successful organizations recognize the essential aspects of decision-making effectiveness by creating a culture in which the right people have access to the tools and resources they need to carry out their responsibilities and achieve their objectives. These organizations also establish a formal decision-making process, which removes surprises and reactive behaviors from the equation.

Ultimately, the fact that organizations discuss decision making at all is beneficial. By recognizing it as a tool itself—a critical stopping point in executing projects and programs—organizations and their leaders are more likely to provide the necessary training and support needed for project management practitioners to make better decisions and deliver the value of projects and programs.

REFERENCES

1. High performers are organizations that achieve 80 percent or more of projects on time, on budget, and meeting original goals. Low performers are organizations that achieve 60 percent or fewer projects on time, on budget, and meeting original goals.

2. Project Management Institute. *Executive Sponsor Engagement—Top Driver of Project and Program Success*. Project Management Institute. 2014.
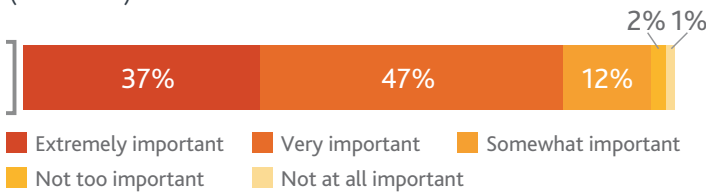
3. Ibid.

ABOUT THIS REPORT

PMI's *Pulse of the Profession*® in-depth research on decision making was conducted in April 2015 among 1,237 project management practitioners around the world who provide project, program, or portfolio management services on a full-time basis within organizations. Additional telephone interviews were conducted for the purpose of obtaining deeper insights into opinions and examples of situations.

APPENDIX

Q: Does your organization provide training on decision making for those who make decisions about projects and programs? (select one)

53%	47%

■ No   ■ Yes

Q: How important is it that post-project reviews are conducted to identify and evaluate key decisions and their consequences? (select one)

2% 1%

37%	47%	12%		

■ Extremely important   ■ Very important   ■ Somewhat important
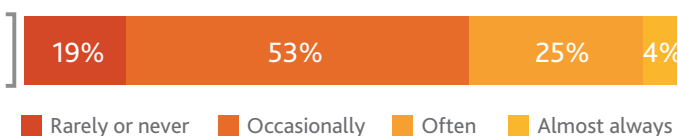■ Not too important   ■ Not at all important

Q: How often does your organization conduct post-project reviews to identify and evaluate key decisions and their consequences? (select one)

18%	33%	26%	17%	6%

■ Always   ■ Often   ■ Sometimes   ■ Occasionally   ■ Never
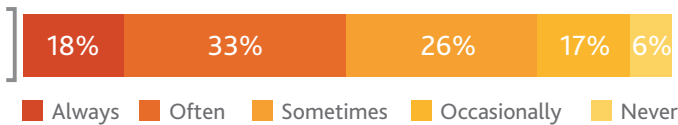
Q: Do decision makers typically have enough familiarity with organizational strategy to be able to make sound decisions for projects? (select one)
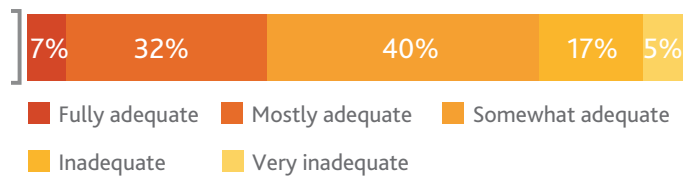
20%	52%	24%	4%

■ Yes, always   ■ Yes, most of the time   ■ Sometimes   ■ Rarely or never
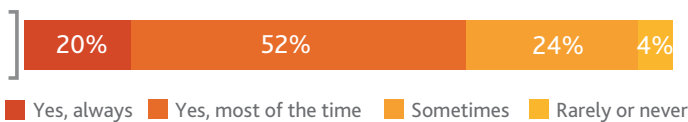
Q: How often do decision makers lack the information needed to make sound decisions for projects and programs? (select one)

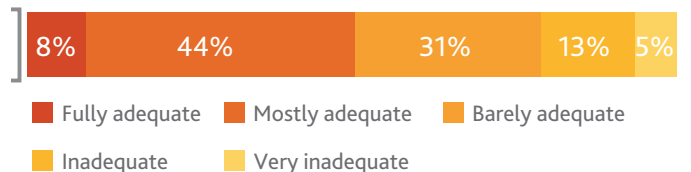| 19%	53%	25%	4%

■ Rarely or never   ■ Occasionally   ■ Often   ■ Almost always

Q: What type or types of information are commonly lacking? (select all that apply)

- Risk assessments — **46%**
- Resource availability — **40%**
- Requirements — **35%**
- External environment data — **34%**
- Resource expertise — **31%**
- Market knowledge — **26%**
- Prior outcomes — **24%**
- Product knowledge — **23%**
- Other — **4%**
- Decision makers almost never lack needed information — **19%**

Q: How would you characterize the adequacy of risk management typically done for projects and programs in your organization? (select one)

7%	32%	40%	17%	5%

■ Fully adequate   ■ Mostly adequate   ■ Somewhat adequate
■ Inadequate   ■ Very inadequate

Q: Do you feel that the attention given to risk management relative to project- and program-related decisions in your organization is (select one):

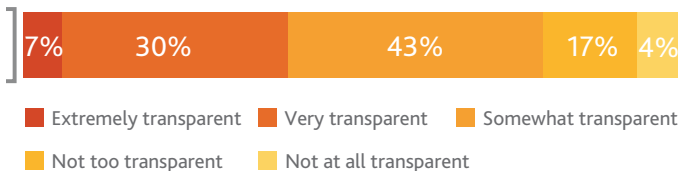| 8%	44%	31%	13%	5%

■ Fully adequate   ■ Mostly adequate   ■ Barely adequate
■ Inadequate   ■ Very inadequate

Q: Is there a prescribed or endorsed process for decisions related to projects and programs in your organization? (select one)

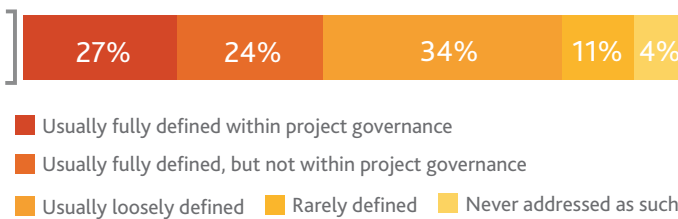| 36%	64%

■ No   ■ Yes

Q: How often do project teams follow an established formal decision-making process for key projects? (select one)

39%	46%	16%

■ Always   ■ Sometimes   ■ Rarely or never
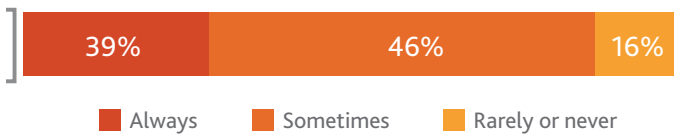
Q: What is the degree of transparency in your organization's decision-making processes for projects and programs? (select one)

7%	30%	43%	17%	4%

■ Extremely transparent   ■ Very transparent   ■ Somewhat transparent
■ Not too transparent   ■ Not at all transparent

Q: To what extent in your organization are the principles by which decisions will be made clearly defined at the beginning of a project? (select one)

27%	24%	34%	11%	4%

■ Usually fully defined within project governance
■ Usually fully defined, but not within project governance
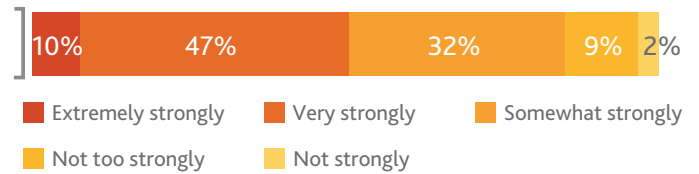■ Usually loosely defined   ■ Rarely defined   ■ Never addressed as such

Q: Is there a clear escalation process for practitioners to follow when decisions are made that interfere with their ability to execute? (select one)
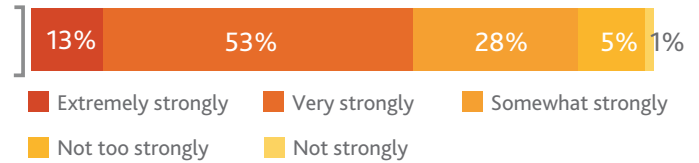
38%	62%

■ No   ■ Yes

Q: To what extent are project decisions made with stakeholder benefits in mind? (select one)

44%	45%	9%	2%

■ Always   ■ Sometimes   ■ Only occasionally   ■ Rarely or never
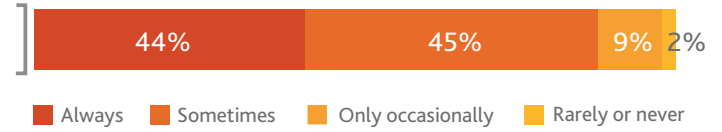
Q: In your organization, how strongly do project practitioners support informed decisions made by executive sponsors? (select one)

10%	47%	32%	9%	2%

■ Extremely strongly   ■ Very strongly   ■ Somewhat strongly
■ Not too strongly   ■ Not strongly

Q: In your organization, how strongly are decisions affecting projects and programs supported by senior management? (select one)

13%	53%	28%	5%	1%

■ Extremely strongly   ■ Very strongly   ■ Somewhat strongly
■ Not too strongly   ■ Not strongly

Q: In your organization, to what extent do decision makers take responsibility for decisions they make that affect projects and programs? (select one)
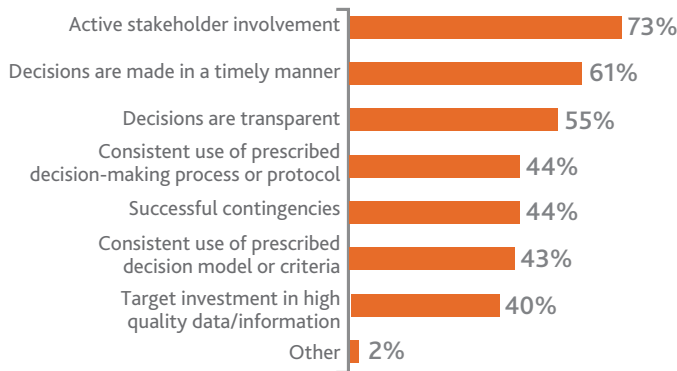
17%	44%	26%	11%	2%

■ Completely   ■ Mostly   ■ Somewhat
■ Not very much   ■ Not at all
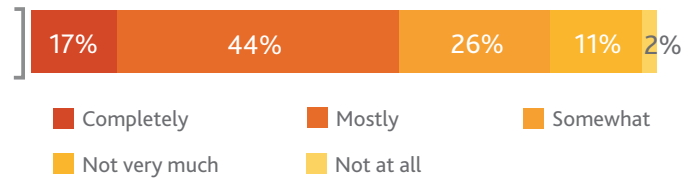
Q: In your organization, to what extent are decision makers held accountable for decisions they make that affect projects and programs? (select one)
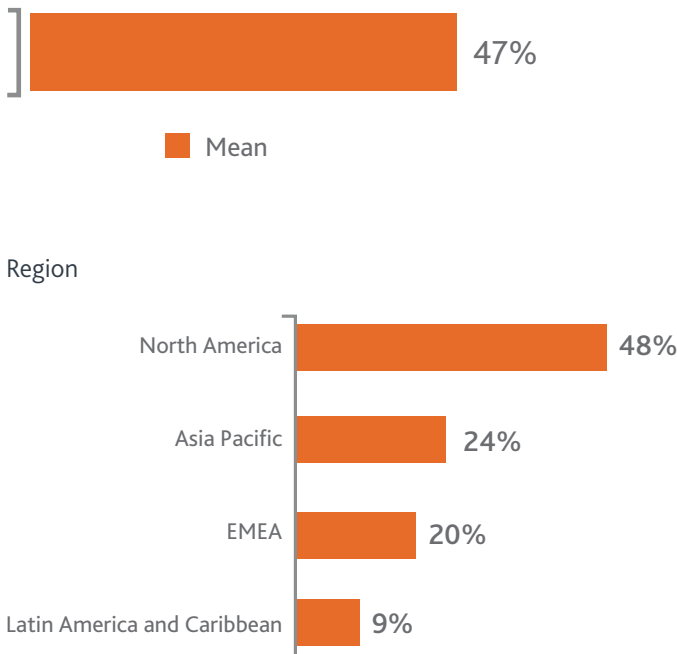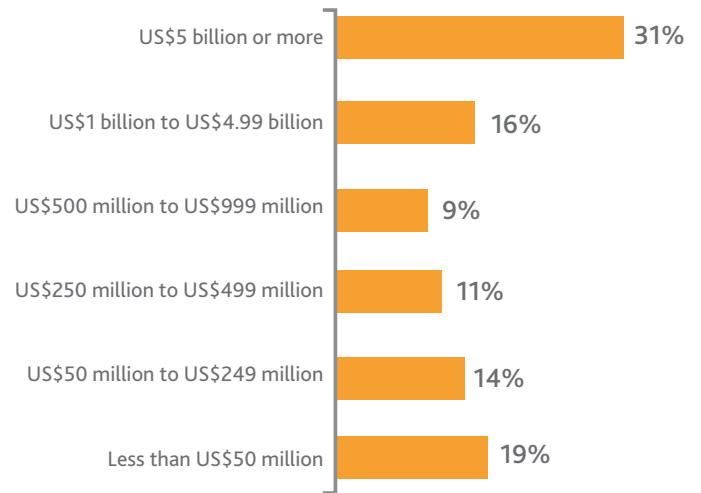
14%	38%	29%	15%	4%

■ Completely   ■ Mostly   ■ Somewhat
■ Not very much   ■ Not at all
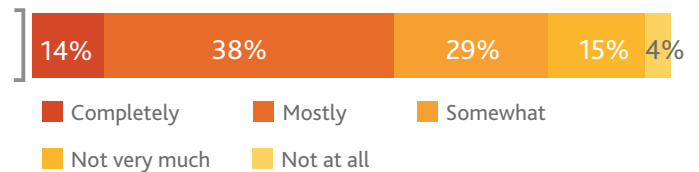
APPENDIX

Q: What are the most important decision-related commonalities that successful projects and programs share? (select all that apply)

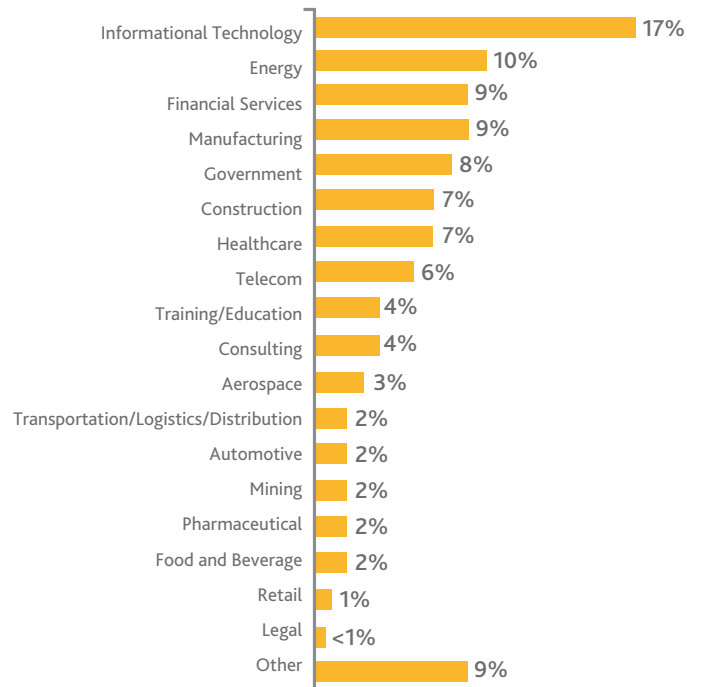|	
Active stakeholder involvement	73%
Decisions are made in a timely manner	61%
Decisions are transparent	55%
Consistent use of prescribed decision-making process or protocol	44%
Successful contingencies	44%
Consistent use of prescribed decision model or criteria	43%
Target investment in high quality data/information	40%
Other	2%

Q: Please focus only on the projects—whether deemed failures or not—that did not meet their original goals and business objectives in the past 12 months. What percentage of those unsuccessful projects would you say were adversely affected due to poor decision making? (enter percentage)

47%

■ Mean

Region

North America	48%
Asia Pacific	24%
EMEA	20%
Latin America and Caribbean	9%

Q: Which of these includes the total annual revenue of your organization (in US$)? (select one)

US$5 billion or more	31%
US$1 billion to US$4.99 billion	16%
US$500 million to US$999 million	9%
US$250 million to US$499 million	11%
US$50 million to US$249 million	14%
Less than US$50 million	19%

Q: Please select the term that best describes the primary focus of your organization. (select one)

Informational Technology	17%
Energy	10%
Financial Services	9%
Manufacturing	9%
Government	8%
Construction	7%
Healthcare	7%
Telecom	6%
Training/Education	4%
Consulting	4%
Aerospace	3%
Transportation/Logistics/Distribution	2%
Automotive	2%
Mining	2%
Pharmaceutical	2%
Food and Beverage	2%
Retail	1%
Legal	<1%
Other	9%

Beijing | Bengaluru | Brussels | Buenos Aires | Dubai | Lelystad | London | Mumbai | New Delhi
Philadelphia | Porto Alegre | Rio de Janeiro | Shenzhen | Singapore | Sydney | Washington, D.C.

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