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Insights and Trends: Current Portfolio, Programme, and Project Management Practices

The third global survey on the current state of project management

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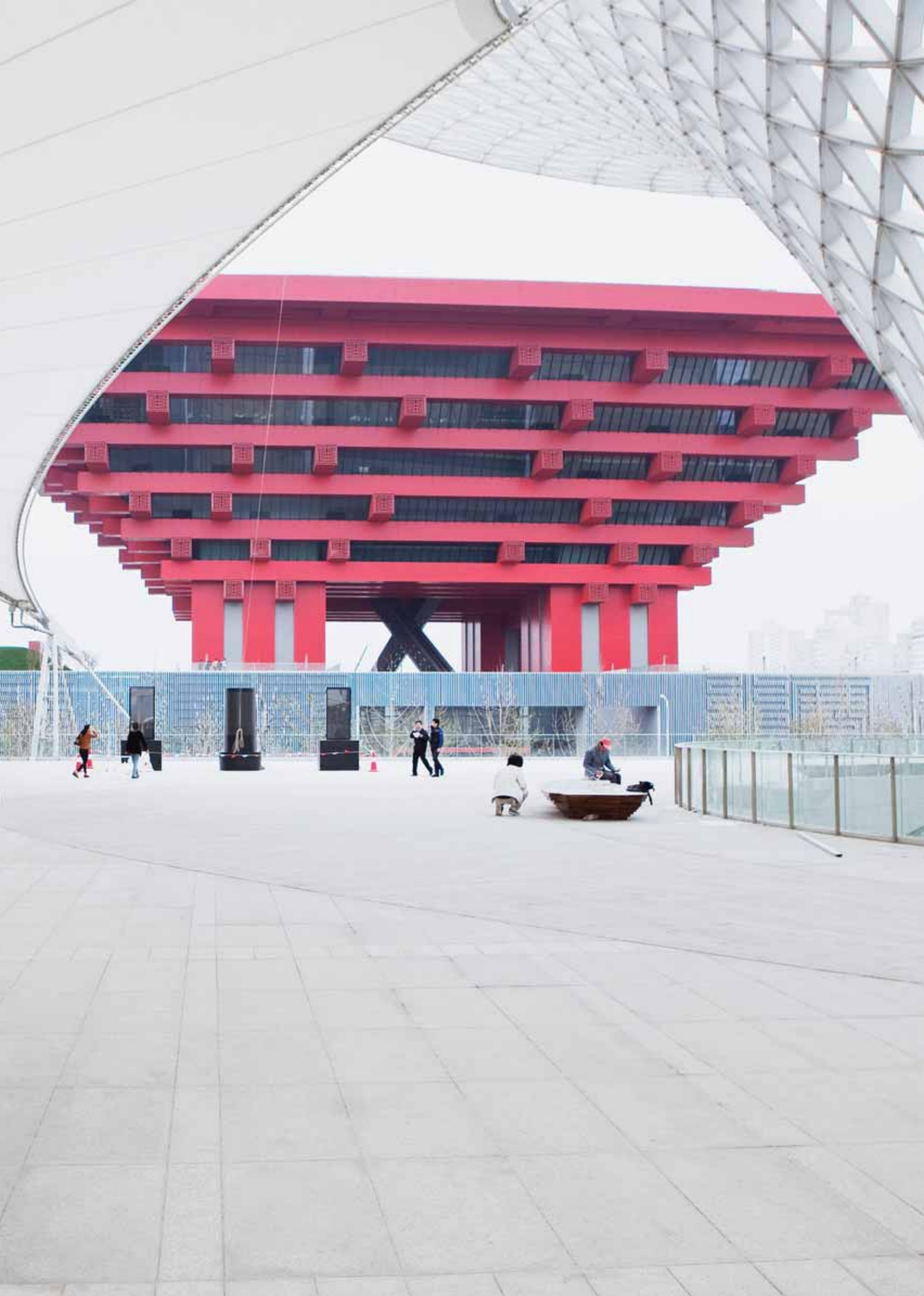

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Executive Summary

"CEOs in industries in the throes of disruptive change require radical innovation; if their business cannot quickly create new products or services that customers will buy, they will not survive. However, innovation does not just mean end product or service changes – it sometimes now includes taking costs out of processes or forming strategic alliances to collaborate."

- PwC 15th Annual Global CEO Survey 2012: Delivering Results, Growth, and Value in a Volatile World

In today's difficult economic times, organisations are constantly faced with the challenges of fiercely competitive and changing environments driven by regulatory modification and organisational restructuring. Environmental forces - competitive, economic, technological, political, legal, demographic, and cultural - create challenges and opportunities for organisations. They must, therefore, continuously adapt to the environment if they are to survive and prosper. Top management are thus confronted with the critical task of analysing and improving the ability of an organisation to change, survive, and grow in this complex and changing global economy and volatile world. In order to stay competitive, today's organisations have been moving from operations and business as usual, to project management as part of their competitive advantage strategy.

The ability to successfully execute projects is what drives the realisation of intended benefits and the achievement of business objectives. Organisations that execute projects successfully employ effective Project Management (PM) practices as a tool to drive change. Given the strategic impact that projects have on business, organisations must follow effective PM processes that capitalize on innovation; measure progress, value, and risks; and confirm that the right projects can be delivered in alignment with organisational strategy.

In 2004, PricewaterhouseCoopers LLP (PwC) invited senior executives and practitioners to participate in our first Global PM survey. The survey's main objective was to investigate whether a higher maturity level would go hand-in-hand with a higher project performance level. In 2007, PwC conducted a similar survey to determine the current state of PM maturity in organisations across the world. The survey's main objective was to identify current trends in PM, and pinpoint the characteristics of PM that are applied on higher-performing projects. Beginning with the first survey in 2004, PwC sought to find the leading practices of successful companies, followed by the 2007 survey that validated three points:

- There is a link between higher maturity levels and high project performance.
- Senior management that supports PM-driven key initiatives achieves stronger business results.
- Effective PM is vital to many organisations.

Now, with increased scrutiny over budgets and "doing more with less," efficiency and effectiveness are key factors of successful organisations. We have reviewed the data from the 2012 third edition of the survey to help identify correlations between PM and organisational success within our five key performance indicators (delivering projects on time, within budget, to scope, to quality standards, and with the intended business benefits). In the 2012 survey, we continued our analysis to determine the current state of PM maturity and the characteristics of higher-performing projects. The survey also set out to find out more about current trends and best practices in PM. We evaluated what was working well, and where areas for improvement were needed within the PM discipline. We also observed the following trends and common practices, based on the survey results and subsequent detailed analysis:

- As many as 97% of respondents agreed that PM is critical to business performance and organisational success, and 94% agreed that PM enables business growth.
- We found that although PM maturity levels are on the rise, most organisations desire a higher maturity level. Approximately 32.1% of organisations are continually striving to reach higher maturity levels by seeking to strengthen effective team-building and skill development activities to improve team performance and promote high productivity, work quality, and good morale. However, most organisations also require improvement in organisational structure, human resource management, and quality assurance. Nearly 30.7% of respondents believe their organisations do not have suitable succession plans and contingency plans in place for key project resources. We also found that higher maturity yielded higher performance within the five key performance indicators.
- Employing an organisation's typical PM approach leads to accomplishments in achieving project scope, quality, and business benefits; however, lower performance levels were noted in meeting schedule and budget objectives. Survey data showed that organisations employing their typical PM approach would meet or exceed the organisation's quality standards 93% of the time; deliver within the project's scope 92% of the time; and result in meeting or exceeding the projected business benefits of the project 89% of the time. While these results are encouraging, the data also showed lower performance levels in the project's schedule and budget. In these areas, we find you would miss your project's schedule and budget objectives approximately 30% of the time.
- Poor estimation during the planning phase continues to be the largest (32%) contributor to project failures.
- The percent of organisations that use established PM methodologies is stable, and employees are obtaining the applicable certifications. Using these methodologies increases success in the key performance indicators of quality, scope, budget, time, and business benefits.
- Private sector organisations with certified Agile practitioners are leading the current adoption and use of Agile PM methodologies. However, organisations have not yet achieved a high level of maturity in implementing Agile values and principles. We found that 34% of respondents use an Agile PM methodology within their organisations. Most organisations which employ an Agile PM methodology contribute the use of Agile toward project success (59%), project efficiency (59%), and enabling business performance goals (49%).
- The adoption of Portfolio Management (PfM) has not increased amongst organisations, but its use leads to increases in the five key performance indicators of quality, scope, budget, time, and business benefits. When implementing PfM, we have found that the three largest ways to be more successful include aligning the portfolio with the organisation's strategy; using an enterprise Project Management Office (PMO) to manage the portfolio; and conducting monthly reviews. Organisations employing these approaches should expect to see an increased likelihood of portfolios that meet schedule, scope, quality, budget, time, and business benefits.
- Leveraging efficient and effective communication methodologies positively impacted a project's quality, scope, and business benefits, but showed a negative correlation with budget and schedule. This is the same trend noted in the use of employing an organisation's "typical" PM approach. Data further suggests that Executive Management agrees that the use of communication methods have a higher positive effect on success of projects than the other respondents within the survey population. Based on their responses, there was a 7% increase in delivering of scope, 4% increase in meeting quality standards, 4% increase in delivering intended business benefits, and 8% increase in finishing within or ahead of schedule. The largest increase (17%) in the use of effective communication methodologies was found in finishing within budget.
- A combined total of 65% of our respondents reported international and national level involvement in their project which echoes the importance of organisational inclusion and collaboration, spanning departmental and geographical boundaries. More than 80% of respondents reported that senior management supports their respective project; however, lack of executive sponsorship was the second largest factor that contributed to poor project performance. While a majority of the projects are supported by senior management, it appears that executive sponsorship should be improved in order to help projects achieve success.

- 70% of respondents agreed that suitable project organisational structures exist on their projects, which clearly outlines the project team and reporting relationships. For those who disagreed to the same question, survey data reveals an undeniable positive correlation between organisations that do not have a suitable organisation structure in place and those without appropriately defined and documented roles and responsibilities within the governance structure. Since organisational structure provides the foundation for roles and positions, hierarchical levels and spans of responsibility, it is not surprising to see such a positive correlation between these elements. Poor organisational design and structure can result in unnecessary role and responsibility ambiguity and confusion, a lack of accountability, and less coordination among functions.
- There is evidence of alignments between project scope, project portfolio, and organisational business strategy. Approximately 80% of respondents agreed that there was a strong correlation between their organisation's strategy and the project portfolio. Approximately 70% of respondents also indicated there was no conflict between project scope and overall business strategy, which may prove to impact the performance and achievement of project goals. With increased alignment of projects with business strategy, organisations can expect greater project portfolio impact on business success.
- Quality Management Systems may be a worthwhile investment for vendors. Respondents who strongly agreed that their organisation requires all vendors to have Quality Management Systems had more projects (90% or greater), meet their organisations quality standards versus those organisations that do not have this requirement in place.
- Established PMOs result in projects with higher quality and business benefits. Respondent feedback indicates a positive relationship between the length of time a PMO has been established and successful project performance. In comparison to organisations which said they do not use a PMO, or have had a PMO in place for less than six years, organisations who establish a PMO for six years or longer reported higher performance in delivering high quality (74%) and achieving the intended business benefits (62%).
- Engaged, experienced, key staff leads to project success. Approximately 80%, of respondents agreed that project managers, business unit managers, quality managers, and budget managers have the relevant and suitable experience to lead a project to successful completion.
- Training and staff development in the field of PM has grown drastically, in a variety of forums. Approximately 76% of survey respondents indicated PM training and development opportunities were available, up 32% from 2007. Our survey noted 67% of participants believe PM training contributes to business performance. Survey data also showed that a majority of projects performed higher in three of the five key performance indicators - scope, quality, and business benefits.
- The use of commercially available PfM software drives higher levels of portfolio performance and greater satisfaction with an organisation's PM practices. The majority of the increase in performance and satisfaction is obtained by deploying specialized PfM software. Customization of Commercial off-the Shelf (COTS) packages actually led to slightly lower levels of performance and satisfaction.
- The Scrum process is the predominant Agile PM methodology in use, with approximately 43% of respondents leveraging this methodology. At a distant second was the Lean and Test-Driven Development (TDD) methodology (11%).
- Earned Value Management (EVM) is more heavily relied upon and useful in the United States (U.S.), but has yet to gain popularity or use due to a lack of EVM expertise and experience in the remainder of the world. Most organisations that utilize EVM, contribute its use towards project success (62%); as a useful tool to predict project success (73%); and enabling leaders to use EVM metrics to assess project status (51%).

We hope that this report provides you, the global PM community, with a thorough view of PM trends, including: successful practices, tools, certifications, and training. Additionally, we encourage you to share this report with your colleagues to help identify best practices across your organisation and to promote PM and its positive influence on business performance.

Special Thanks

PwC would like to thank the PM community, and the 1,524 respondents from 38 countries and within 34 industries who shared their insights with us. The success of the PwC Global PM Survey is directly attributable to the candid participation of these individuals around the world. The demands on their time are many and varied, and we greatly appreciate their involvement.

PwC would like to extend special thanks to the Project Management Institute (PMI) for their support of our Global PM Survey. PMI conducted critical reviews of the survey questions and report. Additionally, PMI shared the survey with their membership base, providing invaluable input into the survey.

Introduction

Increasingly, successful organisations employ PM to drive change and achieve their business objectives. Policy implementation, along with systems development and implementation are some of the initiatives being managed as projects in today's dynamic world.

As one of the leading professional services firms, PwC has worked with numerous organisations of various sizes, industries, and sectors within the field of PM. Some organisations delivered projects consistently better than others across what we have called the five key performance indicators (delivering projects on time, within budget, to scope, to quality standards, and with the intended business benefits). Our observations have been that organisations that have projects with higher performance allow the organisation as a whole to perform better.

One of the many questions companies ask us is: *Do organisations with a higher level of PM maturity achieve better project results?* In 2004, we conducted our first study on this topic, and indeed found a link between higher maturity levels and high project performance. In this year's survey, we continued this analysis to determine the current state of PM maturity and its linkages to project success, business performance, and organisational success.

The other main goal of the survey was to find out more about current trends and best practices in PM. We assessed whether leading projects scored high in terms of our five key performance indicators. By looking at these key performance indicators, we can help organisations determine areas for growth and development, or areas of high performance to help drive business and organisational success through the PM discipline. As we evaluated organisations' PM performance, there are four core elements that we have taken into account: processes, organisational structure, people, and systems and tools.

Organisation's Core Elements Evaluation

Processes

A systematic and organised set of processes brings order and efficiency to PM. Therefore, the existence of well-defined repeatable PM processes - often grouped into a PM methodology - differentiates those companies that are able to consistently deliver high project results from those that do not.

Aspects considered in this area include: standardisation and institutionalisation of PM processes; prioritisation of projects and application of a standard project life cycle; utilisation of project portfolio techniques; utilisation of PM methodologies; and leveraging communication management best practices.

Organisational structure

The way an organisation is structured is fundamental to the outcome of their PM performance. If organisational alignment is underestimated or completely ignored by management, it can lead to lower project performance.

Aspects considered in this area include: resource ownership; definition of clear roles and responsibilities; support and involvement of senior and top management; and usage of a PMO.

People

Theoretically, finding a good candidate to fill a position should now be a very straightforward exercise. There have never been as many educated people in the world, nor has it ever been as simple for employers to tap this vast pool online. The reality is far different. High jobless rates persist in the U.S. and Europe, disproportionately among the young, even as businesses fret that they cannot attract the digitally adept 'Millennial' generation to pursue careers in their industries. Too many well-educated citizens of the Middle East and elsewhere are not in the workforce at all. This is the talent crunch. It is a complex and frustrating challenge and it is being felt worldwide. There are challenges in hiring across most industries, as well as in retention in some markets and industries, as businesses compete for highly talented people.

Teamwork is an integral component of PM; therefore, the ability to manage people is an essential skill for project managers. When it comes to project success, project or programme managers carry a great deal of the responsibility, but success is also dependent on the performance of others who are in key project roles (e.g., project team members, project sponsors, customers, and stakeholders). Therefore, well developed people management skills are fundamental to a high PM maturity level.

Aspects considered in this area include: project staff skills and experience; development and training programme; and an emphasis on PM certifications.

Systems and tools

Organisations purchase and create systems and tools to automate and support their PM processes. Oftentimes, a great deal of money is spent on systems that are subsequently not used.

Aspects considered in this area include: the use and benefits of leveraging software (PM, PfM, and Agile); and the benefits and use of earned EVM.

Methodology

We conducted our third survey to identify leading PM practices and trends, and to determine the correlation between PM, business performance, and organisational success. The focus of our third survey was to continue analyzing the use and impact of PM activities in successful organisations.

The survey was organised in three main sections. Section 1.0 of the survey focused on the background of survey respondents' organisations. Section 2.0 of the survey focused on the management of a specific project, and included the following areas: Project Background, Factors Impacting Project Success, Governance, Scope Management, Risk Management, Benefits Realisation Management, Human Resource Management, Cost Management, Quality Management, and Change Control Management. Section 3.0 of the survey focused on the following areas: Project Portfolio Management, PMOs, PM Training, EVM, and Agile PM.

From December 2011 through January 2012, 1,524 participants responded to the survey from 34 industries, across 38 countries. The data was gathered via a web-based quantitative survey, which consisted of 146 close-end questions. The survey gives us insights into the collective opinions of these groups of people on a wide range of topics (project types, success factors, tools, and people aspects) and 'best practices' (organisational structure, maturity level, and project performance). In addition to group opinions and key trends, we calculated two essential indices that have been used for the analysis: maturity level and PM performance. Maturity level has been calculated by combining the answers to 73 of the survey questions within the areas of Governance, Scope Management, Risk Management, Benefits Realisation Management, Human Resource Management, Cost Management, Quality Management, and Change Control Management. The PM performance was computed by aggregating elements of individual performance measured as a percentage of projects that meet our five key performance indicators - delivered on schedule, within budget, to scope, meeting quality standards, and that deliver business benefits. As we evaluated organisations' PM performance, there are four core elements that we have taken into account: processes, organisational structure, people, and systems and tools.

This year's survey consisted of similar questions to our prior surveys. However, in order to stay current with the PM discipline, some questions have been modified and/or added to draw more insight. In those instances where questions were the same or similar to prior surveys, we drew comparisons in order to show the trends from prior years.

Survey Participants' Profiles

Thirty-eight (38) countries are represented in the survey results:

Figure 1: Survey Participants

The largest participating industry was Information Technology (IT) at 22.4%. Consulting was the second largest participating industry at 11.7%. Other* industries included those sectors where <1% of the survey respondents were represented. Please refer to *Figure 2* for the complete breakdown of industry representation. We also noted that 67% of participants reported working in the private sector and 33% in the public sector.

Figure 2: Survey Respondents Industries

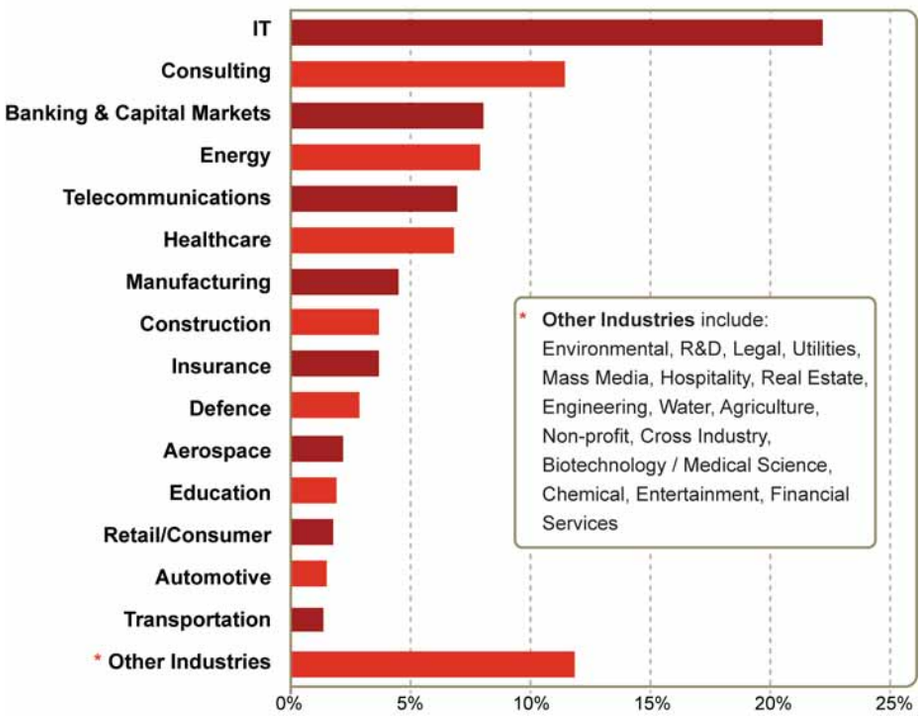
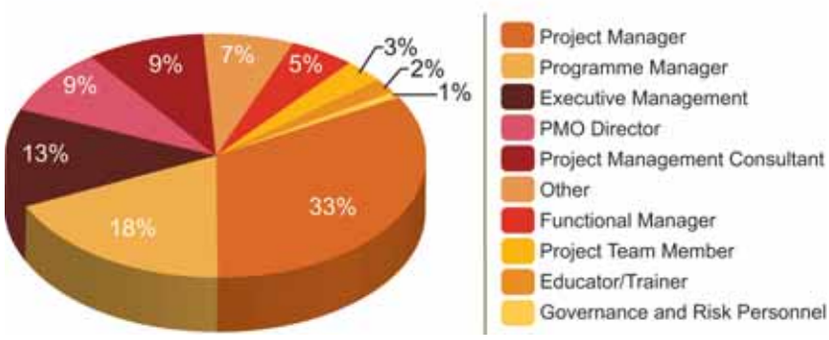


Figure 3: Survey Respondents Positions

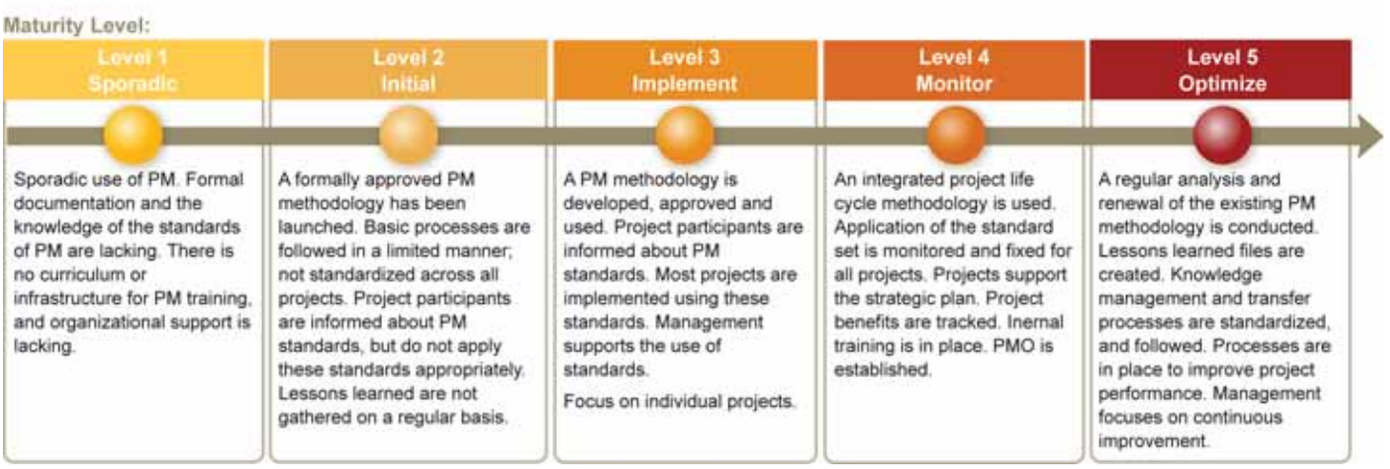


Survey results showed relatively balanced representation from all organisation levels. The majority of the participants were Project Managers, Programme Managers, or Executive Managers. Refer to *Figure 3* for the complete breakdown of participant positions.

Project Management Maturity

One of the key findings from the 2004 survey was the correlation between strong PM performance and maturity of PM practices in an organisation. Generally, a higher maturity level was linked to sustainable project delivery. The 2004 survey also found that: "Those few cases where a higher maturity level does not represent high performance are mainly due to the fact that the organisational structure neither is suited to, nor supports the capacity of projects required by the company's business. And, therefore, the organisation is not aligned and does not fulfil its project requirements, and hence is unable to maximise its performance." To determine the current level of PM practices, we used the PwC maturity model used in our 2004 survey to maintain consistency with our previous survey. We chose 2004 as the base year to reflect on our first comprehensive study linking PM maturity and performance. It consists of the following five levels:

Figure 4: PwC's PM Maturity Model

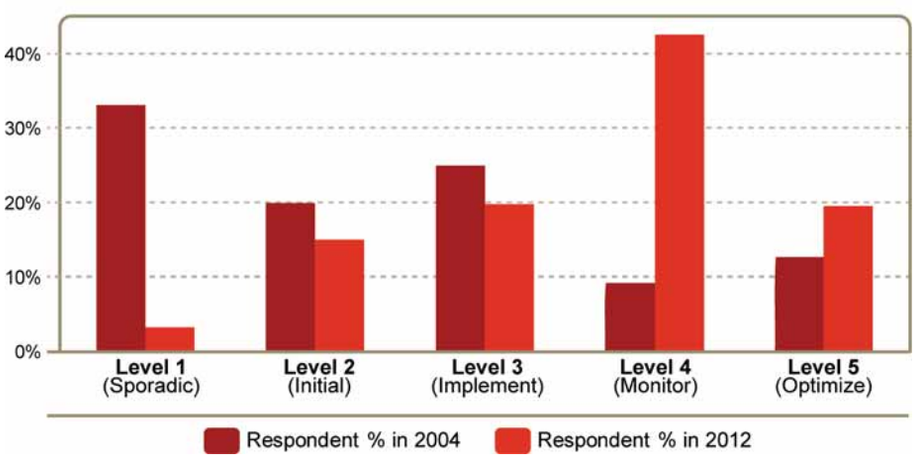


Key Finding: PM Maturity Levels are on the Rise.

The PM Maturity Level has been calculated by analysing the answers to survey questions within the areas of governance, scope, risk, benefits realisation, human resources, cost, quality, and change control management. We compared this information against organisations that report varying levels of project success within our five key performance indicators. In order to gain a comprehensive perspective on the assessment, we also considered our previous research on PM theories and economic studies, complemented by our Firm's extensive experience in project and programme management activities.

We continued the research in our 2012 survey and found that 19.5 % of the respondent organisations are at the Level 5-Optimize, and 42.5% are at Level 4-Monitor, compared to 12.7% and 9.2% respectively in 2004. In 2004, the majority of organisations were operating projects within Level 1, 2, or 3. In 2012, the majority (62%) of organisations are operating projects within the Level 4 or 5 of maturity. This indicates a significant rise in PM maturity over the last eight years. *Figure 5* shows a comparative study of the PM maturity between 2004 and 2012 respondents. As previously stated, the current survey showed a greater percentage of organisations at a higher level of PM maturity from previous surveys.

Figure 5: Survey Respondents PM Maturity Model



More organisations are implementing PM tools in the four core elements of processes, organisational structure, people, and systems and tools. In the current economic times, growth and process improvements are key factors contributing to the success of organisations, and PM enables this growth. As these elements are incorporated into an organisation's PM resources, they are adapted to meet the particular needs of an organisation. Organisations have found that they still require the greatest need for improvement in organisational structure, human resource management, and quality assurance.

Key Finding: Advancements in PM methodologies leading to greater organisational maturity have raised the bar for standards in project maturity.

As maturity levels indicate, there have been significant increases in organisational maturity since our 2004 report. In this competitive business environment, businesses focus on maximizing resources, efficiency, and effectiveness through PM. Effective tools, along with innovation, aid organisations to measure progress, increase value, minimize risks, reduce costs, and promote the on-time delivery of projects. Not only have organisations raised the bar in order to stay competitive in the turbulent business environment, but PM standards have also significantly increased.

Processes, organisational structure, systems and tools have all been enhanced to better meet business objectives. PM takes costs out of processes and allows organisations to focus on performance. PM practitioners look to performance indicators to define areas where PM methodologies can be maximized. Approximately 76% of survey respondents reported PM training and development opportunities available within their organisation, and more practitioners are becoming certified in PM with an increased adaptation of Agile PM and EVM. Organisations are enhancing their portfolio management systems as organisations grow and mature, and are seeing increased success within the five key performance indicators.

Effective PM tools create strategic alliances with vendors as well as other businesses as more tools are utilized and tasks can be outsourced. With the use of external tools, resources, and channels, organisations not only look internally to see where PM and process improvement can be adapted, but also look externally to their vendors to utilize PM methodology. Organisations that require vendors to have Quality Management Systems report 90% or more of their projects meet quality standards.

Key Finding: Most organisations desire a higher maturity level, but require improvement in organisational structure, human resource management, and quality assurance.

The targeted maturity level is the level that the respondents agree best fits their organisation according to the PM requirements of their business. Almost 50% of the respondents in the current survey indicated that their organisations are striving for continuous improvement in PM practices. Survey data indicated that organisations are seeking to standardize and enhance processes and tools, and thereby trying to achieve higher levels of PM maturity. However, the survey shows that more than half of the companies are not satisfied with their current maturity level. As discussed, organisations must seek to grow in line with enhancements in PM methodology as external factors create an increasing demand for efficiency and effectiveness.

In an ever-changing competitive environment, a surprising 25% of the respondents were neutral to establishing sustainable PM improvements. However, the survey data shows 32.1% of organisations are continually striving to reach higher maturity levels by seeking to strengthen effective team-building and skill development activities to improve team performance, and stimulate high productivity, work quality, and good morale. Approximately 70% of survey respondents agree that a suitable project organisation structure exists that clearly outlines the project team structure and reporting relationships. Effective communication methodologies enable project teams and organisations to increase quality, scope, and business benefits success.

While seeking to enhance organisational PM maturity, it is important to create an alignment between the project scope, portfolio, and the organisation business strategy. If properly aligned, the organisational structure is suited to support the capacity of projects required by the company's business. Therefore, the organisation can fulfil its requirements and maximize performance.

Organisations additionally seek improvements in human resource management. Human resource management and succession planning remains an area to be developed as 30.7% of respondents believe their organisations do not have suitable succession plans and contingency plans in place for key project resources. Less than half of respondents agreed that the approach to quality assurance is risk-based, and is consistent with organisational standards.

"Poor estimates during project planning" is the largest contributor to project failure. Furthermore, less than half (46.5%) of survey respondents agree that an effective, formal process is in place to manage changes to baseline plans. This statistic indicates that organisations may underestimate project requirements and have difficulty efficiently and effectively adapting to changes throughout the project lifecycle. Changes in scope may have ramifications in each performance indicator and PM processes, organisational structure, people, and systems and tools must be in place in order to adapt to these changes. Without the implementation of these core elements, projects run the risk of not meeting schedule, scope, budget, quality, and business benefits.

Performance indicators allow organisations to track and record project success. As PM tools are adapted, organisations can better track these core elements.

Key Finding: Higher maturity yields higher performance.

Over 62% of organisations are in the Level 4 or 5 of PM maturity and have increased standards for PM. We analyzed the data to determine if organisations and their leadership are putting emphasis on sustainable project and programme management processes, and aiming for higher levels of maturity to realise higher performance and other benefits.

As project maturity strives to produce sustained outcomes in a predictable, controllable, and reliable manner, it is essential for most organisations to establish formal, effective processes to promote high performance through the project lifecycle. High maturity identifies best practices for the implementation of organisational strategy through successful projects. Our analysis showed that as respondents are demonstrating higher PM maturity, the three main areas where organisations have formalized processes in place to manage performance are the following:

- **Scope Management** - The largest percentage of survey respondents indicated formal processes in place for Scope Management. This statistic is a clear indicator of high maturity as organisations have grown to anticipate needed changes throughout the project lifecycle, supporting changes within a project, and promoting traceability. As projects anticipate changes within the project lifecycle, they are better prepared to deliver on time, within scope, and within budget without hindrance.
  - **66.6% of participants agree** that additional change control processes and deliverable controls are in place throughout the project lifecycle to assure quality of project delivery.
- **Quality Management** - Survey responses indicate that organisations have established organisational enablers for developing capabilities to aggregate best practices, and methods for evaluating best practices and capabilities. These practices monitor, track, and record quality throughout the project lifecycle to indicate where the project is successful, and where the project seeks to improve. This measurement allows the organisation to pinpoint areas to focus on, encouraging a higher quality of performance.
  - **62% of participants agree** that adoption of quality assurance strategy effectively addresses scope of testing, timing, responsibility, approach, pass/fail criteria, corrective action processes, and sign-off.
  - **62.9% agree** that document control processes are in place, including appropriate identifiers (naming conventions), version control, audit trails, reviews, approvals, referencing, and confidentiality labels/controls.
- **Cost Management** - As budget assumptions and financial performance are leading indicators of project success, organisations seek to establish formalized processes to manage project costs.
  - **54.9% of respondents agree** that the underlying budget assumptions have been clearly documented and assessed, and these are considered to be reasonable.
  - **57.5% of respondents agree** that funds are appropriately allocated to the project, consistent with the project stage, and are only released when board approval has been given.

Organisations are focusing on quality and cost while managing the scope of the engagement in order to reach higher levels of performance. Internal controls and processes allow organisations to better respond to changing project demands, decreasing the time spent adapting to change, and increasing project success.

Key Finding: Organisation maturity is directly correlated with organisational success.

Organisations that operate at higher levels of maturity are on average more successful than those operating at lower maturity levels. Organisations that are able to implement and optimize effective PM tools will receive greater benefits realisation. When an organisation, which has a methodology in place to improve project performance and management and focuses on continuous improvement, it will have a competitive advantage strategy in place to remain successful in the marketplace. Successful organisations identify the four core elements (processes, organisational structure, people, systems and tools) needed to achieve benefits realisation. Elements are in place to adapt to performance needs in the areas of schedule, scope, budget, quality, and business benefits. These organisations will be better suited to meet changing environmental factors and business needs, as well as to cut costs and maximize efficiency and effectiveness.

Project Management Performance

Figure 6: Average Size of Projects in U.S. $

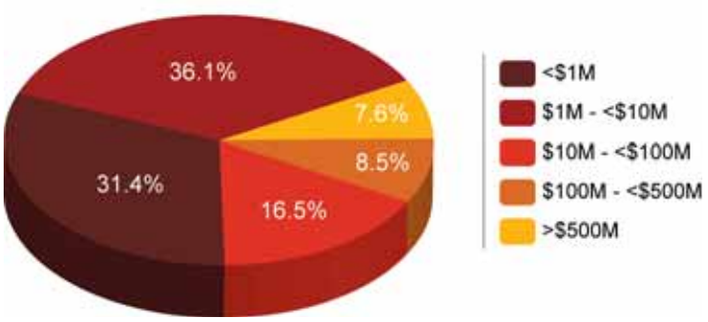


Figure 7: Number of Projects in the Respondent Organisations' Portfolio

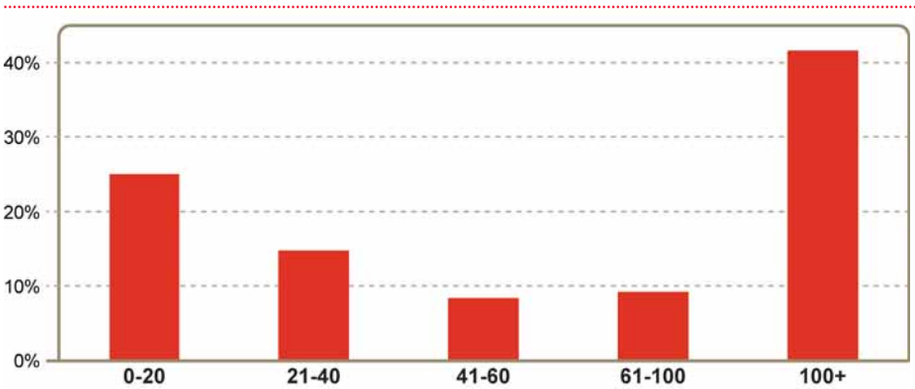
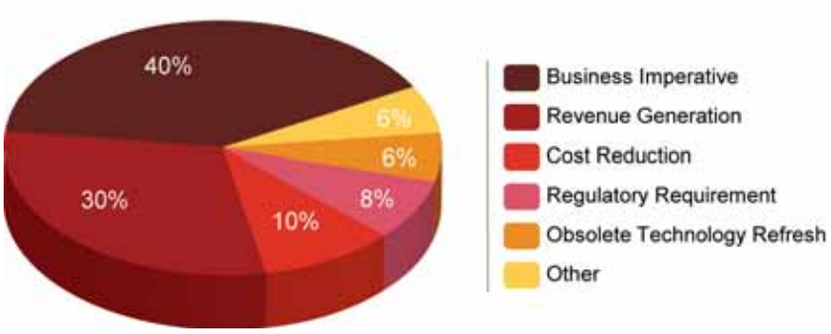


Figure 8: Drivers for Establishing Projects within Respondents' Organisations



Survey respondents were asked a series of questions related to the projects in their organisational portfolio. Over 67% of the projects within the organisation's portfolio were valued at less than U.S. $10M. The majority (42%) of portfolios were comprised of greater than 100 projects, whilst 25% of the users have less than 20 projects within their organisations' portfolios. Time spent on projects and the amount of staff appears to not be affected if an organisation has few or many projects. The majority of projects were less than three years in duration (90%) and required fewer than 50 staff (87%). Only 3% of respondents have an average project team size of more the 200 staff.

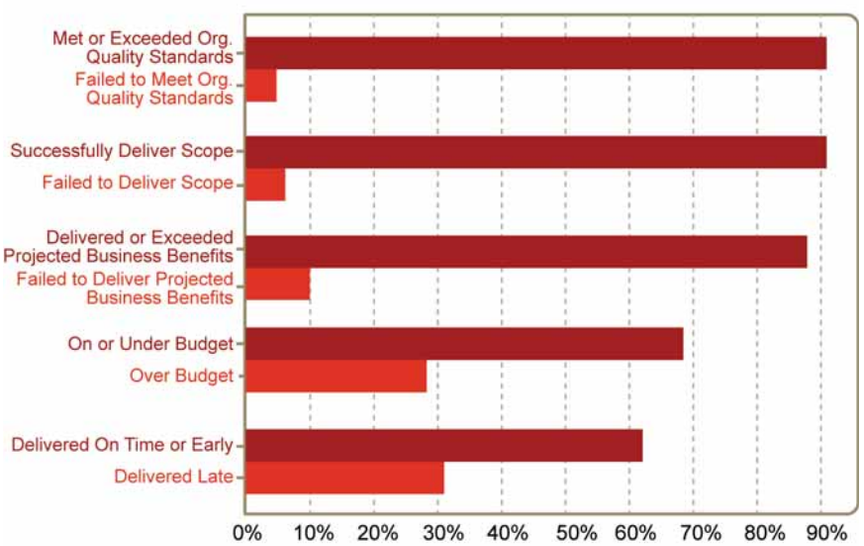
We also asked respondents to provide the primary reason why a project is initiated. Of the organisations that responded, the main drivers for establishing a project is for business imperatives (40.2%) and to generate revenue (30.1%). Due to current economic climate, it is reasonable that an organisation would have a sizeable amount of their projects focused on generating revenue. The remaining three reasons to establish a project, each representing less than 10% of the population polled, included reducing costs, implement changes due to regulatory requirements, and refreshing obsolete technology.

Now that we have established that projects are being managed at a higher level of maturity, we wanted to evaluate how project management performance scored high in terms of our five key performance indicators. Organisational project management performance includes four core elements: processes, organisational structure, people, and systems and tools. Therefore, we categorized our findings within these four core elements.

Processes

As previously noted, a systematic and organised set of processes brings order and efficiency to project management. Therefore, the existence of well-defined project management processes - often grouped into a project management methodology - differentiates those companies that are able to consistently deliver high project results from those that do not. Our key findings in this area include the following: standardisation and institutionalisation of project management processes; prioritisation of projects and application of a standard project life cycle; utilisation of project portfolio techniques; utilisation of methodologies in project management, portfolio management and Agile project management; leveraging communication management best practices; and emphasis on project management certifications.

Figure 9: Key Performance Indicators for a Project Implementing the Typical Organisations Approach to PM



Key Finding: Employing an organisation's typical PM approach leads to accomplishments in achieving project scope, quality, and business benefits; however, lower performance levels were noted in meeting schedule and budget objectives.

While not all organisations approach project management in the same way, they do apply certain principles of project management when managing their projects. The global project management survey provides insight into the state of today's organisational approach to PM. Not surprisingly, an organisation's approach to project management directly affects the outcome of project's key performance indicators.

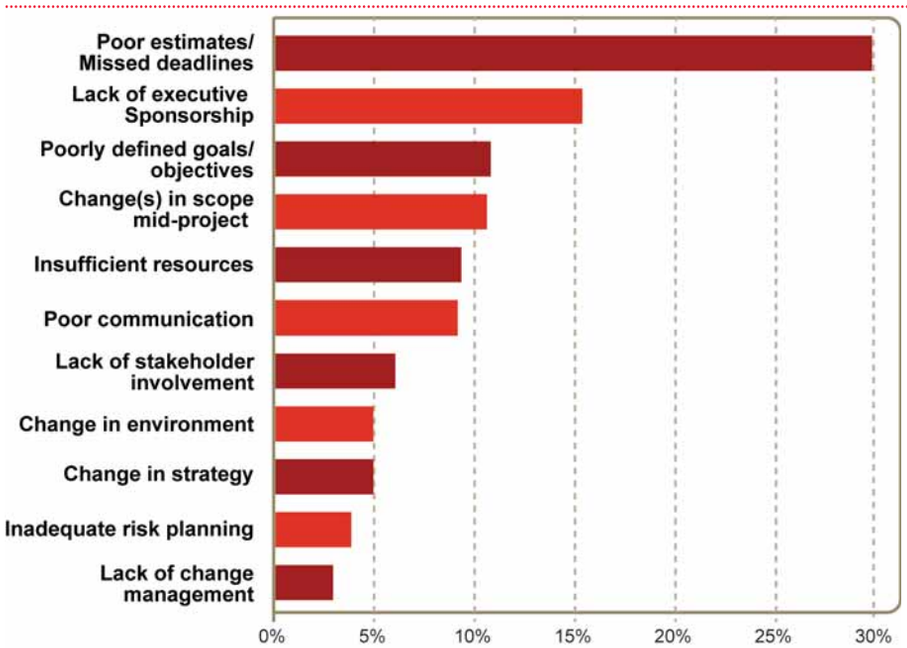
Survey respondents were asked to rate a project that best represents their organisation's approach to project management. Of the projects that met the five key performance indicators, if an organisation was to employ their "typical" approach to a project, it would meet or exceed the organisation's quality standards 93% of the time; deliver within the project's scope 92% of the time; and result in meeting or exceeding the projected business benefits of the project 89% of the time. While these results are encouraging, the data also showed lower performance levels in the project's schedule and budget. In these areas, we find you would meet your project's schedule and budget objectives approximately 70% of the time.

Key Finding: *Poor estimation during the planning phase continues to be the largest contributor to project failures.*

In order to determine what is contributing to poor project performance, we examined the reasons organisations were failing to meet their desired outcomes. *Figure 10* provides some insight into the current contributors to lower performance levels when implementing an organisation's approach to project management. Poor estimates, lack of executive sponsorship, and poorly defined goals and objectives make up the top three contributors to a project's underperformance. These three factors account for 53% of poor project performance. The top six contributed to 78% of poor performance when implementing an organisation's approach to project management.

Poor estimates in the planning phase continue to be the single largest cause for poor performance in projects and the single largest worsening trend. For instance, in our 2004 survey, participants contributed project underperformance 17% of the time to poor estimates and missed deadlines, whereas today that number has increased to 32%. Improvements in any of the key factors found in *Figure 10* will lead toward better implementation of an organisation's approach to project management and, in turn, improve project scope, schedule, budget, quality, and business benefits performance. The remainder of this report provides insight into both positive and negative factors influencing project performance as an organisation implements its approach to project management.

Figure 10: Factors contributing to poor project performance when implementing an organisation's approach to PM



Key Finding: Reported use of established PM methodologies is stable and employees are obtaining applicable certifications.

Respondents reported using a wide variety of methodologies, as illustrated in *Figure 11*. The most prevalent methodology was Project Management Institutes (PMI) Project Management Body of Knowledge (PMBOK)® or modifications thereof, with 41% of responses. A variety of Information Technology (IT) methodologies were reported, with Agile and waterfall being the most prevalent. Many other methodologies were listed, although some would not strictly be considered PM methodologies. A significant number of respondents reported using combinations of multiple methodologies; the most common methodologies included in these combinations were PMBOK®, PRINCE2®, and IT methodologies.

The data related to use of established methodologies is predominantly consistent with PwC's 2007 PM survey. Of note, adoption of industry-standard PMBOK ® and PRINCE2® methodologies has increased slightly (38% in 2007 vs. 44% currently). Focusing on these two methodologies, the regions with the highest reported use of PRINCE2® relative to PMBOK ® are Australia, Europe, and South Africa, as shown in *Figure 12*.

Employee certification is a common theme among companies that reported using a PM methodology. 90% of respondents from organisations reporting the use of project management methodologies indicated their organisations have individuals certified in the preferred methodology. This indicates general acceptance that individuals must be trained in PM methodologies in order to capture their benefits. Cost performance is an example of the positive impact of individual certifications, especially in light of the budget performance challenges documented through this survey. 38% of organisations with individuals certified in their preferred PM methodology reported successful budget performance, 6% higher than for organisations without certified individuals.

Figure 11: Reported use of PM methodologies

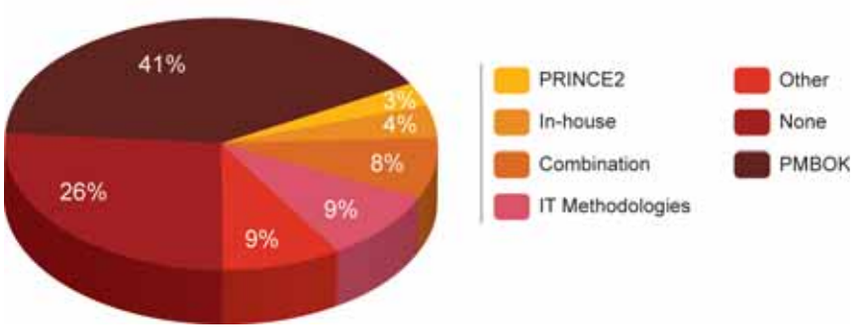
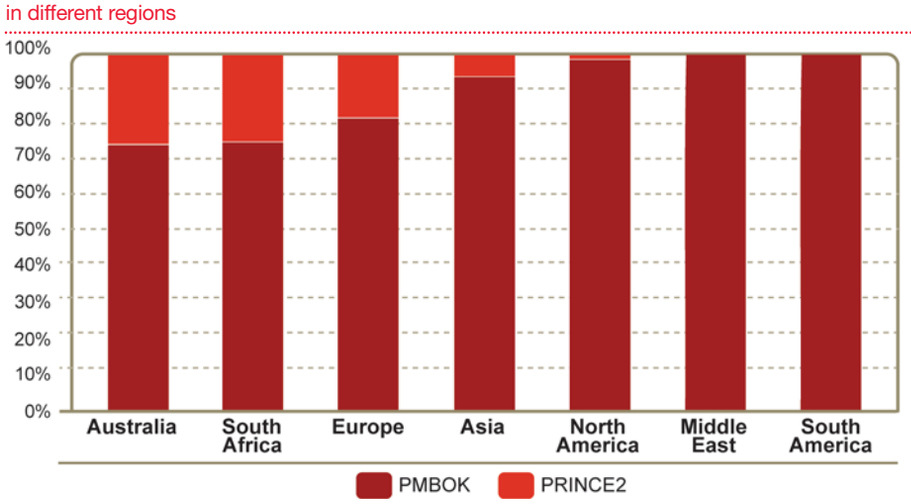


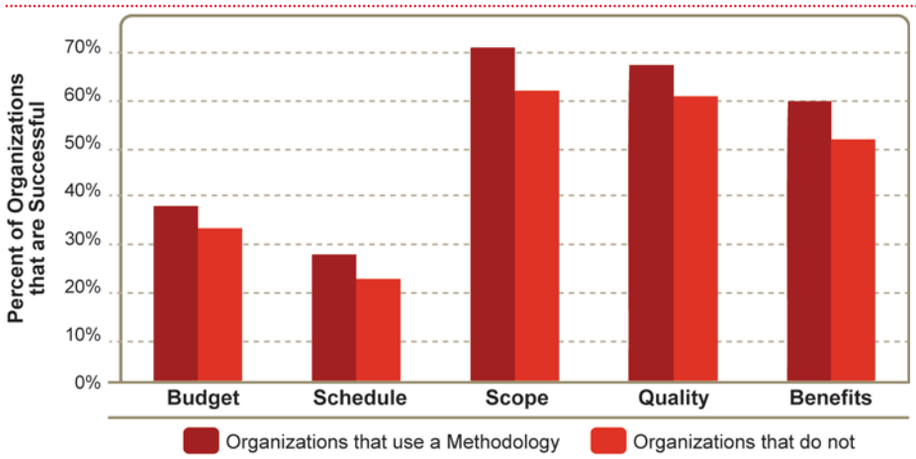
Figure 12: Comparison of reported use of PMBOK® and Prince2® methodologies in different regions



Key Finding: Using Established PM Methodologies increases success in the key performance indicators of quality, scope, budget, schedule, and business benefits.

For each of the five performance indicators, survey data indicate that using a preferred PM methodology increases the chance of organisations meeting project objectives. As shown in *Figure 13*, the percent of organisations that are successful in each dimension is higher for organisations that use methodologies than those that do not. The increase in performance is between 5% and 9%, with scope performance being the most improved. Similarly, organisations that meet objectives for a key performance dimension less that 25% of the time are more likely to not use project management methodologies, with performance spreads between 3% and 9% between those that do and do not use methodologies. Response data indicate that organisations with the highest project success rates use in-house methodologies or combinations of methodologies. This result indicates these organisations may have a greater investment in PM methodologies that meet their unique situations.

Figure 13: Percent of Respondents that Reported their Organisations are Successful in the Five Performance Indicators, for Organisations that do and do not Use PM Methodologies



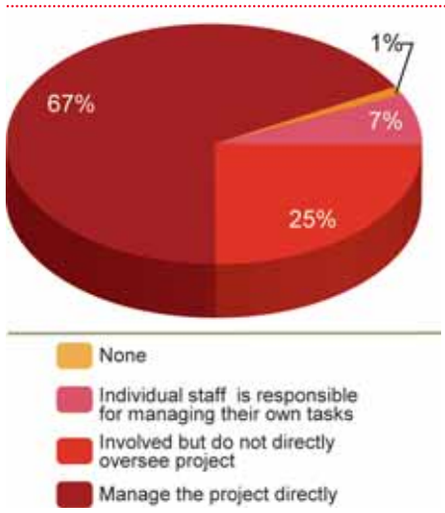
Key Finding: Private sector organisations with certified Agile practitioners are leading the current adoption and use of Agile PM methodologies. However, organisations have not yet achieved a high level of maturity in implementing Agile values and principles.

A growing project management area is the adoption of an Agile PM methodology. Agile methods emphasize incremental delivery of working products, focused on maximizing customer value. Through establishing a cycle for intermittent product delivery, Agile PM assumes that changes and improvements will be incorporated throughout the product development life cycle. Change is viewed as a welcome opportunity to improve the product and make it a better fit to the business. We found that 34% of respondents use an Agile PM methodology within their organisations. A majority of these are in the information technology industry (71%), and have certified Agile practitioners (62%).

Most organisations which employ an Agile PM methodology contribute the use of agile towards project success (59%), project efficiency (59%), and enabling business performance goals (49%). Approximately 17% of projects using an Agile PM methodology meet the five key performance indicators. Whilst this is lower than the overall key performance indicators, it is reflective of organisations continuing to understand and refine the use and application of Agile PM methodologies within the context of their organisational culture and projects.

As shown in *Figure 14*, the project manager currently serves as a traditional phase-based project manager on the majority (67%) of agile projects. In this scenario, the project manager and other team members have specified and distinct functions, which often leads to independent efforts within the project team. As organisations continue to mature their understanding of Agile PM methodologies, the role of the project manager should also evolve and align with key agile concepts of integrated, self-directing teams in which team members take responsibility for managing their tasks and commitments.

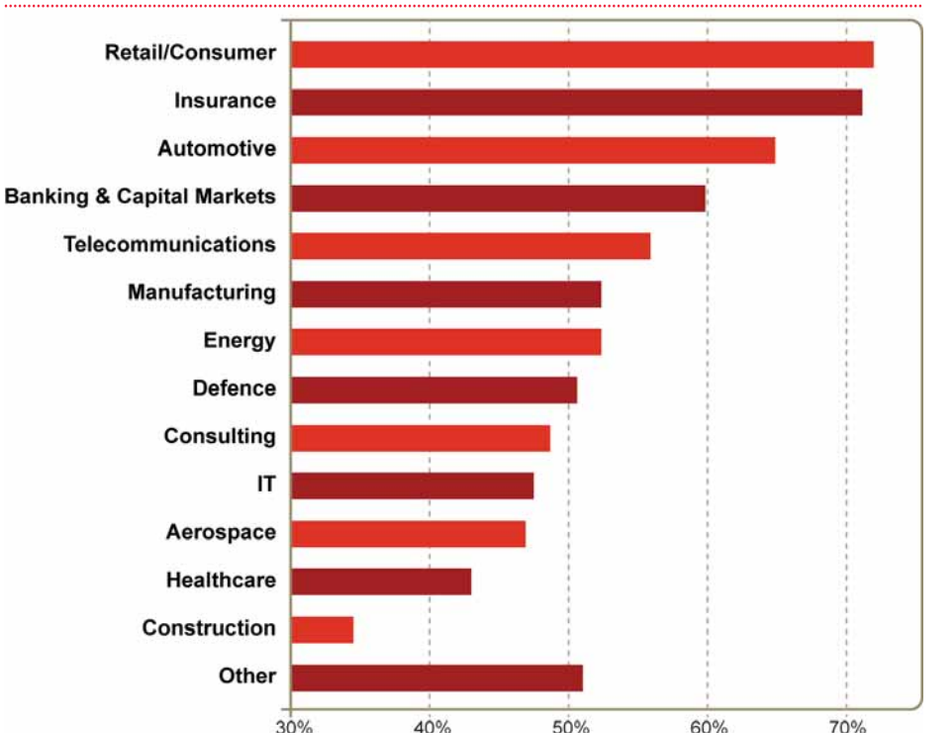
Figure 14: Project Manager Role on Agile Projects



Key Finding: The adoption of PfM has not increased amongst organisations, but its use leads to increases in the key performance indicators of quality, scope, budget, schedule, and business benefits.

The 2004 survey report addressed portfolio performance as a secondary effect of enhanced PM capabilities. One of the primary conclusions drawn from the survey was that maturity levels did matter and that they improved not just project performance, but that of the portfolio of all projects. The 2007 survey results pointedly defined the emerging practice and stressed that its purpose was to promote the achievement of strategic business objectives. The report highlighted the increase in organisational adoption of PfM (53%, a 7% increase from 2004), and drew attention to the degree to which respondents leveraged various PfM capabilities, with Project Selection being the most common. In 2012, the survey results do not show an increase in adoption (remained at 53%), but they do provide a much more robust look at the effects of PfM and the tools that are available to support it. Since the adoption rate has not increased, we wanted to show where PfM is being used by depicting which industries and sectors are using PfM in *Figure 15* below.

Figure 15: Adoption of Portfolio Management by Industry



The data analysed make a compelling case for the benefits that can be achieved with an effective deployment of PfM processes and dedicated software.

Benefits of Adopting PfM

- Adoption of PfM has positive effects on both project performance and performance of the overall portfolio at all portfolio scales (portfolios with project investments valued at <US$100M to those of >US$60B).
- Combining portfolio scale with the dimensions of average project duration (ranging from < 1 year up to 6-10 years), the number of projects managed in the portfolio (<20 to 100+) and the number of people involved in the average project (teams of 10 or less to 200 or more), we investigated the effect of PfM at varying levels of portfolio complexity; the gains of adopting PfM hold at all levels of complexity.
- Users of PfM agreed that their organisation's project management capabilities were effective and efficient at much higher levels than those that did not use PfM.
- The benefits of deploying PfM are compelling for organisations at the margins of performance. Nearly two thirds of respondents that employ PfM reported that more than 90% of their organisation's projects perform to expectations on the five key performance indicators. In contrast, seven out of ten organisations that do not employ PfM reported that less than 10% of their projects met the key performance indicators. This phenomenon was even starker for highly complex portfolios.

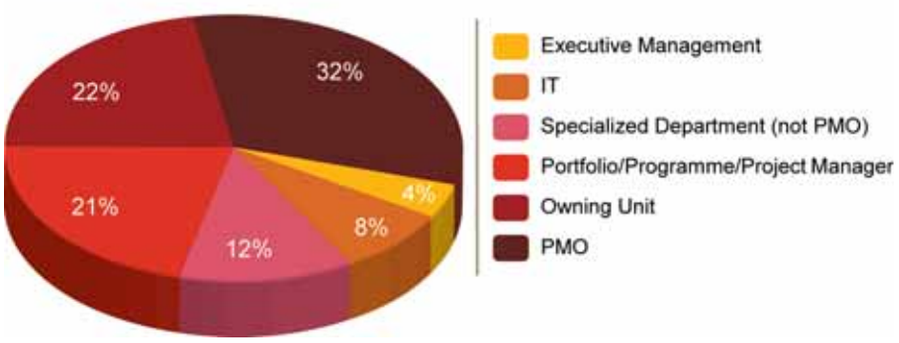
Key Finding: When implementing PfM, we have found that the three largest ways to be more successful include aligning the portfolio with the organisation's strategy; using an enterprise PMO to manage the portfolio; and conducting monthly reviews.

The most important factor in the success of PfM is alignment of managing the portfolio with the organisation strategy. The positive effects of strategic alignment lead to higher levels of portfolio performance, and increases stakeholder satisfaction with their organisation's project management practices at all levels of portfolio scale and complexity. Respondents were asked to judge the statement "There is a strong correlation between my organisation's strategy and our project portfolio." Respondents who gave a positive response reported higher rates of portfolio performance on the five key performance indicators. The effect was particularly strong for within budget, where organisations with a high correlation between the portfolio and strategy were twice as likely to report more than 75% of their projects met budget targets, and 40% as likely to report that less than 25% of their projects did. Respondents were also asked "Are portfolio priorities aligned with the organisation's overall strategy?" Those who gave a positive response also were more likely to report high rates of projects meeting the key performance indicators. In all five indicators, respondents with a positive perception of alignment were twice as likely to report more than 75% of their projects meeting the performance targets and less than half as likely to report less than 25% meeting targets. Organisations that align their organisation's overall strategies with their project portfolios and prioritise their portfolios' priorities with the strategy are more likely to have portfolios that meet schedule, scope, quality, budget, and business benefits requirements.

Globally, nearly 70% of respondents who reported using PfM also reported that their Enterprise PMO was responsible for the effort. Results varied by sector and region with private enterprises deploying PfM through their Enterprise PMO at a slightly higher rate than their public sector counterparts, and Europe having the lowest level of Enterprise PMO involvement among the regions of the world. With the exception of the smallest scale portfolios, the portfolio performance levels of respondents whose PfM programs are managed by an Enterprise PMO are consistently higher than those whose portfolios are managed by other groups or individuals, resulting in an increased likelihood of portfolios that meet schedule, scope, quality, budget, and business benefits requirements.

More than half of all respondents reported that they reviewed their portfolio on a monthly basis. 20% reported more frequent reviews. Only 4% reported reviewing their portfolio less than quarterly. Respondents with monthly review cycles reported significantly higher rates of performance on scope, quality and business benefits. Satisfaction with budget and schedule performance did not vary as much with changes in review frequency. Quarterly portfolio reviews and reviews less frequent than quarterly are associated with a decline in the benefits of PfM. The risk of reduced performance increased in all five performance indicators for organisations with a low review frequency.

Figure 16: Distribution of portfolio management responsibility.

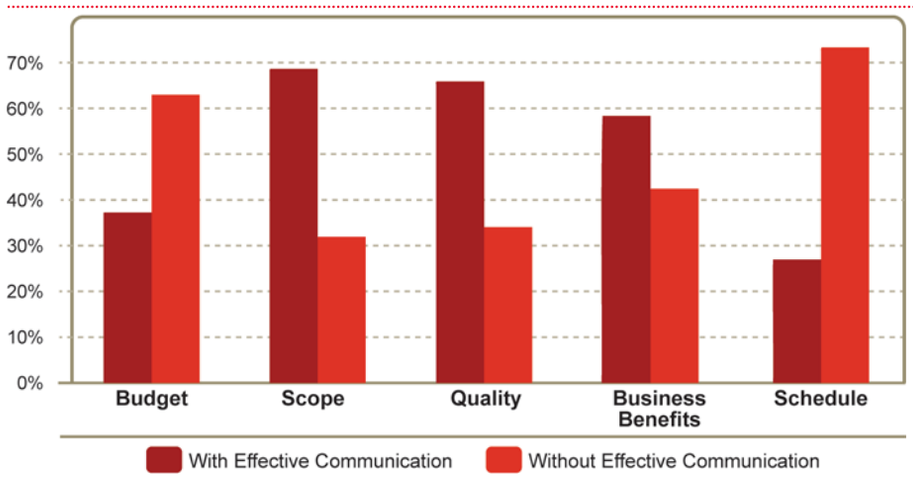


Key Finding: Leveraging efficient and effective communication methodologies positively affected projects' quality, scope, and business benefits performance levels; however, lower performance levels were noted in meeting schedule and budget objectives.

We looked at survey questions related to the use of communication in a project to understand its effect on organisational success through the five key performance areas of budget, scope, quality, business benefits, and schedule. In the review of three uses of communication management methodologies, (transparency in projects, status reporting at all project levels, and visibility of governance and leadership to the project team and stakeholders), a majority of respondents agreed communication management is in use in their organisation. Sixty-two percent (62%) of respondents agreed there was transparency and clear communication around key decisions and actions; 66% of respondents agreed that status reporting at all levels is effective and includes relevant, timely, verified and reliable information in the appropriate format, and 59% of respondents agreed that governance and leadership are clearly visible to the project and stakeholders.

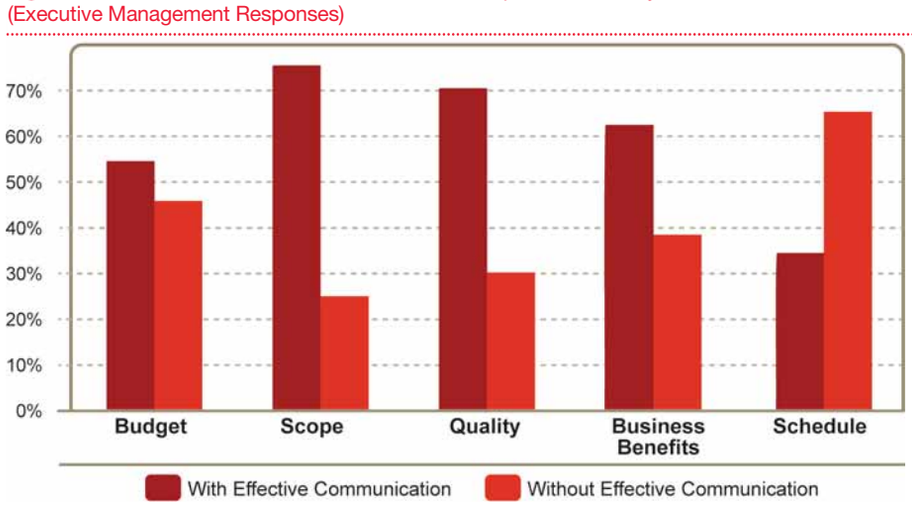
We further examined the respondents that agreed that these types of communication were evident on their projects, and found that projects that employed effective and efficient communication methods were performing better in the areas of delivering project scope (68%), meeting quality standards (66%) and delivering intended business benefits (58%). While these results are encouraging, the data also showed that projects employing effective communication mechanisms are only finishing within budget 37% of the time and finishing on schedule only 27% of the time. This is the same trend noted in the use of employing an organisation's "typical" project management approach. As mentioned earlier, respondents indicated that the number one reason for project failure is poor estimates in the planning phase. Effective communication may not alleviate project failures due to budget and scope estimating.

Figure 17: Use of Effective Communication and its Impact on Key Performance Indicators (All Respondents)



To provide a deeper understanding of the use of communication methods, the Executive Management level responses to the questions related to employing effective and efficient communication methods were examined. Based on their responses, the five key performance indicators improved. There was a 7% increase in delivering of scope, 4% increase in meeting quality standards, 4% increase in delivering intended business benefits, and 8% increase in finishing within or ahead of schedule. The largest increase in the use of effective communication methodologies was found in finishing within budget, which increased by 17%. This suggests that Executive Management agrees that the use of communication methods have a higher positive effect on success and failure of projects than the others groups within the survey population.

Figure 18: Use of Effective Communication and its Impact on Five Key Performance Indicators (Executive Management Responses)



Organisational Structure

As noted previously, the way an organisation is structured is fundamental to the outcome of their project management performance. If organisational alignment is underestimated or completely ignored by management, it can lead to lower project performance. Our key findings in this area include the following aspects: resource ownership; definition of clear roles and responsibilities; support and involvement of senior and top management; and usage of a PMO.

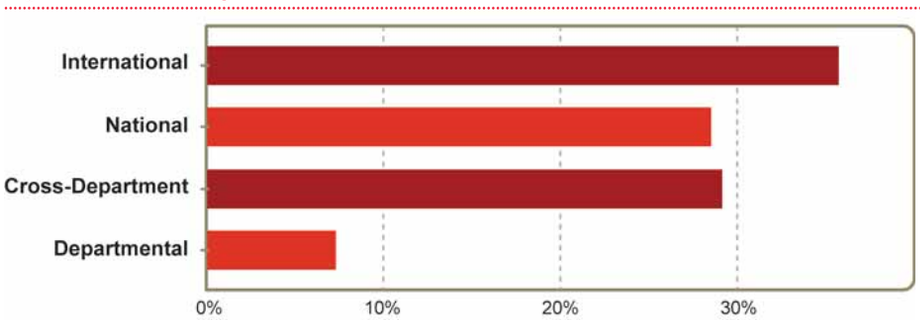
Key Finding: PM was reported to be critical to business performance and organisational success and enables business growth.

For this year's survey, we asked participants if project management is critical to business performance and organisational success. As many as 97% of respondents agreed that project management is critical to business performance and organisational success and 94% agreed that project management enables business growth. In close association, revenue generation was determined to be one of the top scoring drivers for establishing a project which further demonstrates the critical role that effective project management and execution plays in achieving intended results for the project and the broader organisation. We further probed this area and asked respondents to estimate the percentage of their projects that deliver required business results. Results further validate the declining rate of project failures whereby nearly 58% of the respondents reported that their projects deliver required projected business benefits greater than 76% of the time.

Key Finding: The majority of organisations are involved at the national and international levels and the majority of respondents agree that projects are supported by senior management.

Globalisation and the economic crisis have forced many organisations to rethink their strategies and change the way they do business in order to thrive in uncertain economic times. PM is no different and is evidenced in our finding, which suggests that organisations are expanding their sphere of involvement from an internally focused and driven project to a much broader and global approach to accomplishing project and programme goals. For example, as noted in *Figure 19*, a combined total of 64% of our respondents reported international and national level involvement in their project which echoes the importance of organisational inclusion and collaboration thus spanning departmental and geographical boundaries. Furthermore, approximately 84% of respondents reported that senior management supports their respective project which may be a contributing factor to project success especially for projects that are expanding from departmental to national and international levels. The appropriate level of organisational involvement and stakeholder buy-in and support are important elements of any programme and should not be underestimated and/or overlooked especially given the unique complexities of global and multi-national faceted programs.

Figure 19: Levels of Organisational Involvement



Key Finding: Projects with suitable project organisational structures were also found to have appropriately defined and documented roles and responsibilities within the governance structure.

All too often, organisations under estimate the impact poorly designed organisational structures can have on programme effectiveness. In our 2007 Global PM survey, we explored the importance and influence of organisation structure and overall project performance which revealed the higher the alignment between organisational and business needs, the higher overall project performance. We revisited the premise in our 2012 survey. We asked respondents if suitable project organisational structures exist on their project(s) that clearly outlines the project team and reporting relationships. It was interesting to see such favourable responses where more than 70% of respondents reported the presence of a suitable organisation structure.

For those who responded unfavourably to the same question, we conducted cross comparisons to assess the relationship between organisational structure and appropriately defined and documented roles and responsibilities within the governance structure. Survey data reveals an undeniable positive correlation between organisations that do not have a suitable organisation structure in place and those without appropriately defined and documented roles and responsibilities within the governance structure. Since organisational structure provides the foundation for roles and positions, hierarchical levels and spans of responsibility, it is not surprising to see such a positive correlation between these elements. Poor organisational design and structure can result in unnecessary role and responsibility ambiguity and confusion, a lack of accountability and less coordination among functions.

Key Finding: There is evidence of alignment between both project scope and portfolio and organisational business strategy.

Organisational business strategy is intended to drive all decisions within an organisation. It provides a direction, a rallying point, and basis for decision making. Hence, it only stands to reason that organisational business strategy should form the basis and drive project portfolio and scope. Effective portfolio management should map well to organisational strategy and business goals. Misalignments and conflicts in these areas can threaten the success of a programme with the most effective project manager and staff - this can make or break a programme. We asked respondents two questions. First, to respond to the statement: There is a strong correlation between my organisation's strategy and our project portfolio. Approximately 80% of respondents provided a favourable response. Similarly, we asked respondents to respond to the statement: There is no conflict between the project scope and my organisation's overall business strategy. Results suggest that approximately 70% of respondents perceived there was no conflict between project scope and overall business strategy, which may prove to be impacting the performance and achievement of project goals. With increased alignment of projects with business strategy, organisations can expect greater project portfolio impact on business success.

Key Finding: Quality Management Systems may be a worthwhile investment for vendors.

Quality Management Systems establish a framework for how organisations manage key processes and are creating the next wave of thinking about the management of projects and potential benefits that can be realised. They can also help new projects start off on the right foot by ensuring processes meet recognised standards, clarify business and project objectives and avoiding expensive implementation mistakes which can put project and business outcomes at risk.

Within the 2012 survey, we examined the extent to which organisations are requiring vendors to have Quality Management Systems and its impact on the achievement of quality objectives in projects. There appears to be a positive correlation between organisations that require vendors to have a Quality Management System and their projects' ability to meet the organisation's quality standards. While only 35% of our respondents reported a requirement to have all vendors to have a Quality Management System, respondents who strongly agreed that their organisation requires all vendors to have Quality Management Systems had more projects (90% or greater) meet their organisations quality standards versus those organisations that do not have this requirement in place.

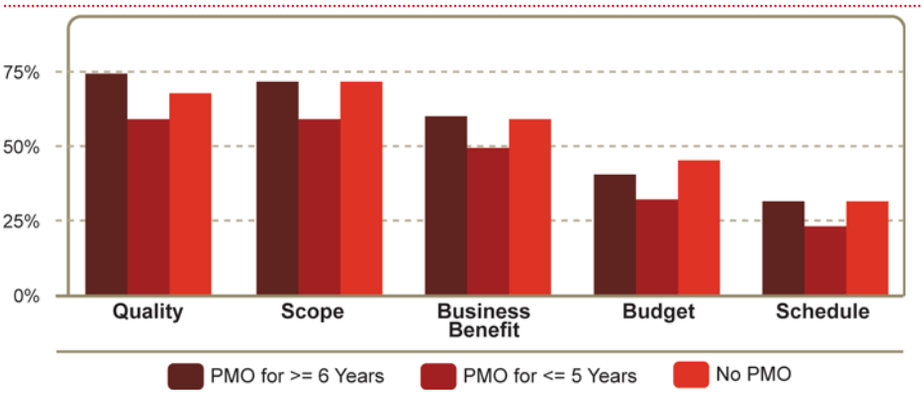
Key Finding: Established project management offices result in projects with higher quality and business benefits.

Respondent feedback indicates a positive relationship between the length of time a PMO has been established and successful project performance. In comparison to organisations which said they do not use a PMO, or have had a PMO in place for less than six years, organisations who establish a PMO for six years or longer reported higher performance in two of the performance indicators, as shown in *Figure 20*. Survey data indicates that using an established PMO will result in projects delivering high quality (74%) and achieving the intended business benefits (62%).

Employing a PMO is one of many methods to institute standardized project management processes and project controls in an organisation. Although the majority of organisations (66%) currently use a PMO, this is a decline from 2007, when 80% of organisations reported having a PMO. However, organisations which do not use a PMO reported similar success rates in the key performance indicators with organisations than had a PMO for six years or longer, indicating that other types of project organisational structures or methodologies are being employed. This is evidenced by the data, which reports that 23% of organisations not using a PMO structure use an agile methodology.

Organisations which continue the use of a PMO for longer timeframes benefit from greater familiarity and adoption of project processes throughout the organisation, translating into better project performance. Organisations with a PMO implemented for six years or longer have successfully communicated PMO standards across the organisation at a significantly higher rate (66%) than those with a shorter term project management office (47%).

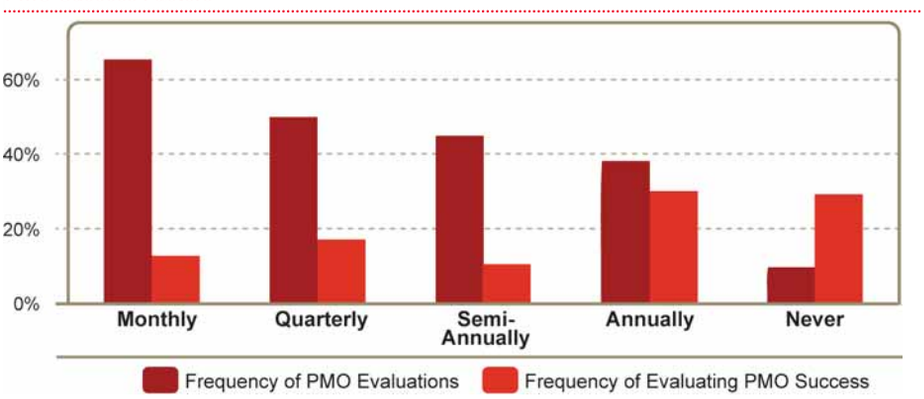
Figure 20: Comparison of Project Success Rates Based on Length of Time Using a PMO



Key Finding: A majority of organisations do not conduct regular evaluations of their PMO and also do not consistently measure benefits or returns from the PMO.

As noted in earlier, using a PMO contributes to improved project performance; however, organisations currently do not consistently evaluate and measure the success or returns on investment (ROI) of the PMO. As shown in *Figure 21*, 29% of organisations never evaluate their PMO and 30% conduct evaluations on an annual basis. However, the 14% of organisations which evaluate their PMO on a monthly basis also measure their PMO for ROI (65% of the time). Those organisations that never evaluate their PMO measure their ROI only 9% of the time. Organisations can benefit from finding similar positive correlations between using a PMO and project performance, through conducting more regular evaluations of their PMO, as well as, measuring for ROI.

Figure 21: Rate of Measuring for PMO ROI Based on Frequency of Evaluating PMO Success Factors



People

Despite the challenges facing organisations in hiring highly talented people, it is vital to project success to have a project management team that has the right skill sets, experience and training to enable project success. Our key findings in this area consider the following: project staff skills and experience; and development and training programmes.

"Talent shortages and mismatches are impacting profitability now. One in four CEOs said they were unable to pursue a market opportunity, or have had to cancel or delay a strategic initiative because of talent. One in three is concerned that skills shortages impacted their company's ability to innovate effectively."

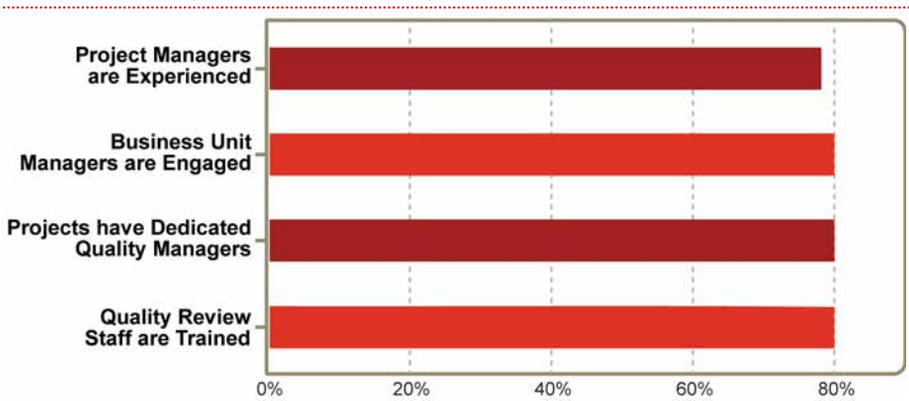
- PwC 15th Annual Global CEO Survey 2012: Delivering Results, Growth, and Value in a Volatile World

Key Finding: Engaged, experienced key staff leads to project success.

The project manager is a critical component of meeting the key performance indicators. 87% of respondents reported successful project budget management within their organisation also reported that their project managers have the relevant and suitable experience managing projects similar in industry, project size, and business area. In contrast, only 15% of respondents who reported their organisations did not have project managers with relevant and suitable experience reported that their organisations have successful business unit managers. The data suggests that trained project and business unit managers increases project budget success.

Survey data also indicated that engaged business unit managers have the highest correlation with project success. Other key staff types that contribute to project success include dedicated and skilled quality managers, and trained and skilled quality review staff. Approximately 80% of responses to questions regarding these four staff profiles (See *Figure 22*) agreed that staff from their organisation meet these success profiles. With these skilled professionals in place, the data suggests that an organisation may avoid poor project performance.

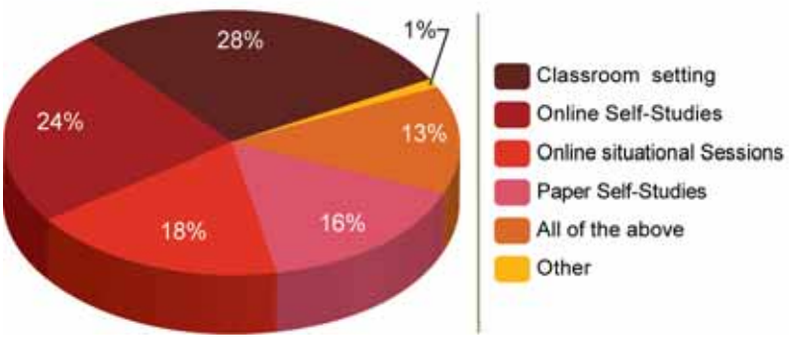
Figure 22: Percentage of Respondents that Agree Staff Meets the Success Profiles



Key Finding: Training and staff development in the field of project management has grown drastically, in a variety of forums.

We asked survey participants whether their organisation utilize some form of project management staff development. Approximately 76% indicated opportunities were available to obtain training, up 32% from 2007. Respondents were then asked the question: "Which medium does your company utilize to have project management training delivered?" As shown in *Figure 23*, classroom settings and online self-studies were the top two training options being used in organisations today. The breakdown of training options organisations are using is depicted in *Figure 23*.

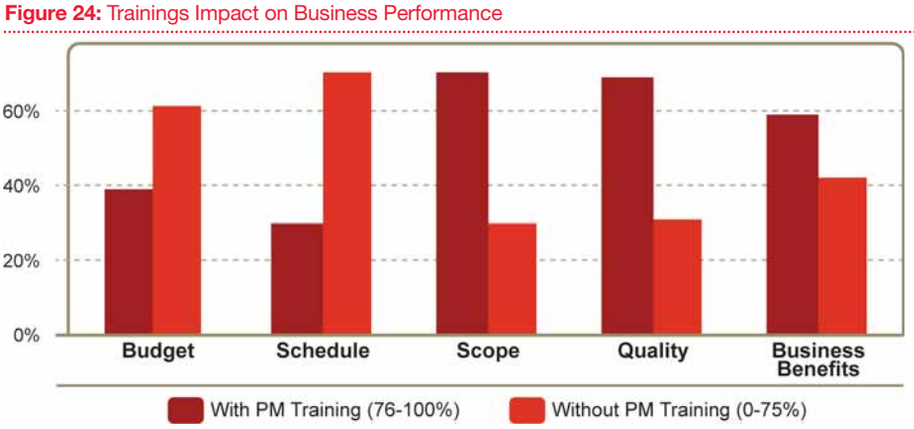
Figure 23: The Breakdown of Training Options Organisations are Using



Over half the participants agreed that ample time and adequate technology was provided for PM training and development. Survey data also showed that 55% of respondents felt training was continuously improving from lessons learned and new information. Since these numbers are just slightly over half, organisations may benefit from improving in these areas. The survey also showed that 67% of participants agreed that project management training contributes to business performance.

As noted in *Figure 24*, of the respondents that indicated training was available, survey data showed that a majority of their projects performed higher in three of the five key performance indicators - scope (70%), quality (69%) and business benefits (59%). However, respondents that indicated training was available also reported lower project performance within the budget (39%) and schedule (29%) key performance areas. This statistic isn't surprising since respondents indicated that the number one reason for project failure is poor estimates in the planning phase. Current training programs may not include budget and schedule estimating in the planning phase. Survey data suggests that organisations may benefit from developing robust training programs around the area of estimating.

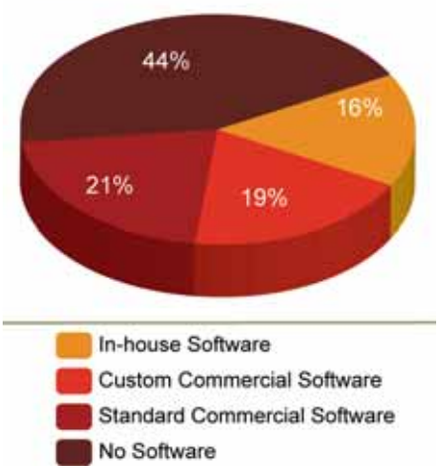
Figure 24: Trainings Impact on Business Performance



Systems and Tools

As noted previously, organisations purchase and create systems and tools to automate and support their project management processes. But oftentimes, a great deal of money is spent on systems that are subsequently not used. The key findings in this area consider the following: the use and benefits of leveraging software (project management, portfolio management, and Agile); and the benefits and use of earned value management.

Figure 25: Types of PfM Software in Use



Key Finding: The use of commercially available PfM software drives higher levels of portfolio performance and greater satisfaction with an organisation's project management practices.

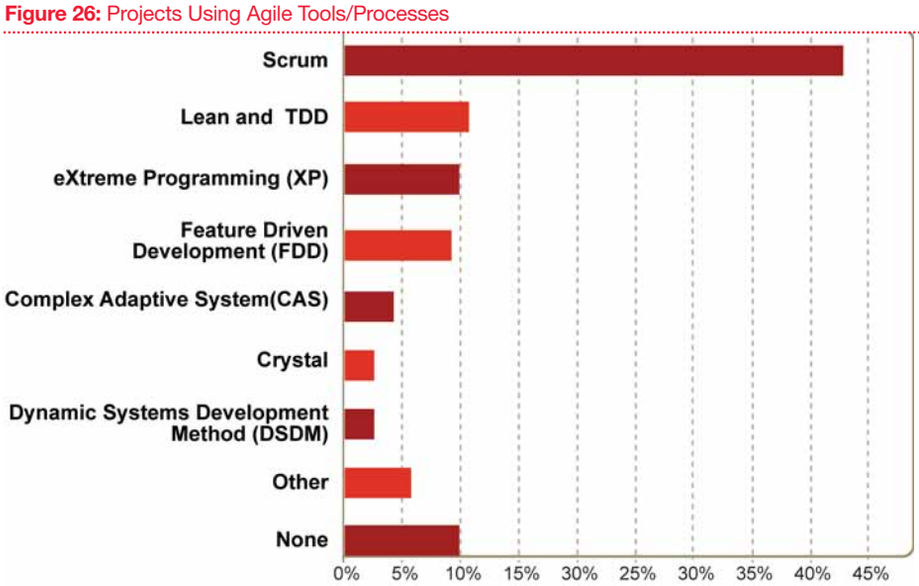
Commercial off-the Shelf packaged software has grown in sophistication since the last survey and in this edition we asked about PfM software adoption for the first time. 56% percent of respondents who reported using PfM also reported using software, with 21% using Commercial off-the Shelf packages, 19% using Commercial off-the Shelf packages with customization, and 17% reporting use of internally developed software.

The majority of the increase in performance and satisfaction is obtained by deploying specialized PfM software. Customization of Commercial off-the Shelf packages actually led to slightly lower levels of performance and satisfaction. Internal development of tailored applications offered mixed results with portfolios at the smaller end of the scale seeing improvements in performance but less consistent gains for mid to large scale portfolios.

Key Finding: The Scrum process is the predominant Agile PM methodology in use.

Most organisations which are using an Agile PM methodology employ the Scrum process, as shown in *Figure 26*, and the second most common is Lean and Test-driven Development (TDD). Data indicates that Scrum practices are the most well-known and/or most frequently used Agile PM methodology.

Figure 26: Projects Using Agile Tools/Processes

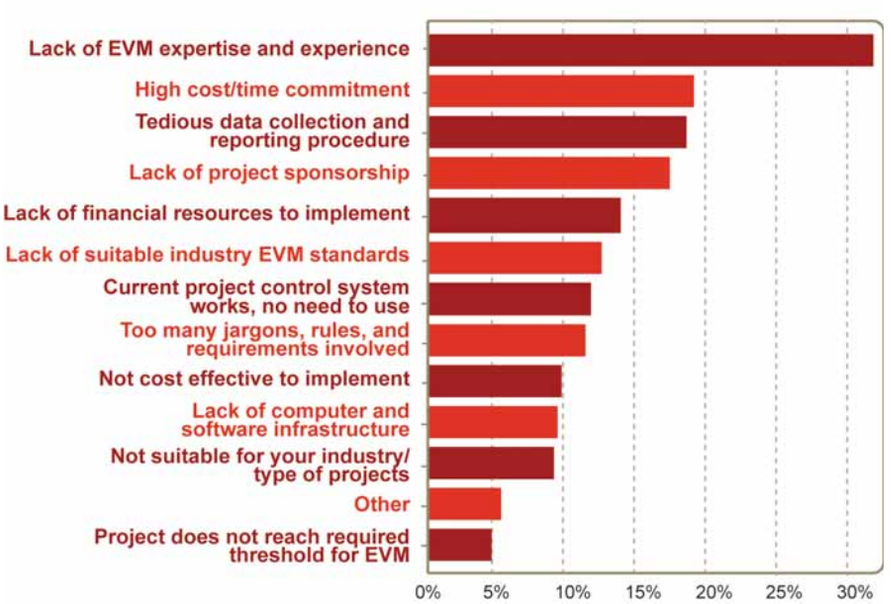


Key Finding: Earned Value Management (EVM) is more heavily relied upon in the United States and is found as a useful tool, but has yet to gain popularity or use due to a lack of EVM expertise and experience.

In the 2007 Global PM Survey, the top three reasons identified by respondents for project failure were bad estimates/missed deadlines (schedule), scope changes (scope) and insufficient resources (costs) which are all internal project factors. These factors, commonly referred to as the 'triple constraint' in the project management framework, are combined and measured under EVM. EVM is a management methodology through the integration of scope, schedule and costs used to objectively measure project performance. The third survey takes a closer look at the use of Earned Value Management and its correlation to the success of projects in organisations.

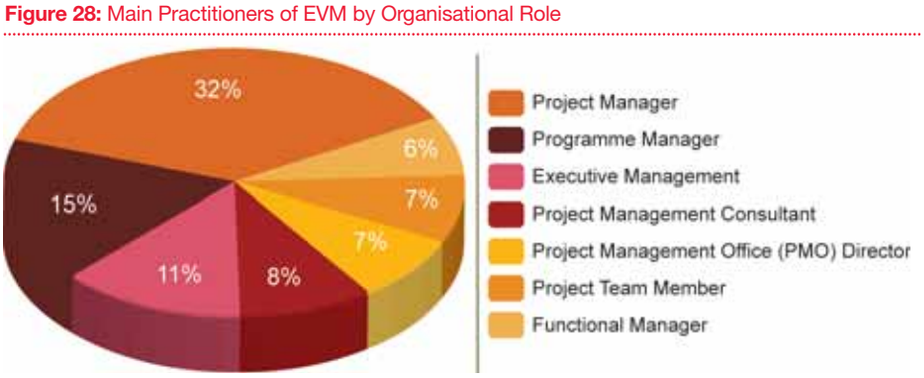
The survey showed that 40% of participants use EVM in their organisations with the United States having the most respondents that always use the methodology, followed by Australia and Canada. The main reason respondents cited for rarely or never using EVM in their organisation is due to a lack of EVM expertise and experience. This is consistent with the organisations that do not have certified EVM professionals, which were 68% of the respondents. The survey results indicated that project management training contributes to high performance across the key indicators; therefore more training on EVM may be needed within organisations. Other reasons identified for rarely or not using EVM are listed in *Figure 27* where the high cost/time commitment, and tedious data collection and reporting procedure were the next main areas.

Figure 27: Reasons for Not Using EVM in Organisations



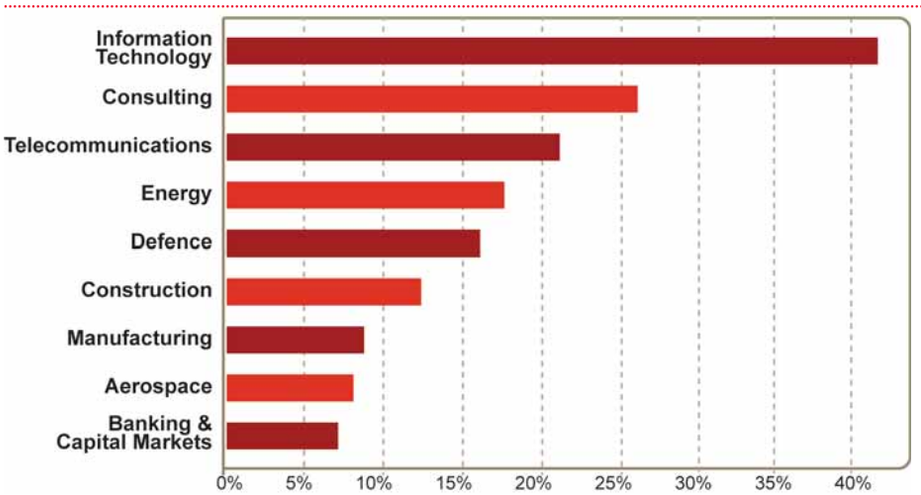
As shown in *Figure 28*, the main practitioners of EVM within organisations are project managers who are primarily responsible for the project's scope, schedule and resources, followed by programme managers that manage a portfolio of projects.

Figure 28: Main Practitioners of EVM by Organisational Role



The top three industries that reported their organisations always or usually use EVM in their organisations were Information Technology (42%), Consulting (26%) and Telecommunications (21%) as shown in *Figure 29*.

Figure 29: Main Practitioners of EVM by Industry



EVM has been used by half of the survey respondents for over five years to track projects, with the Defense, Energy and Information Technology industries using the methodology for over ten (10) years. The survey data showed that EVM is a requirement for 32% of organisations with projects within US$1 million to US$5 million and 40% for ones that are more than US$5 million. In the Information Technology industry, it is a requirement for projects (21%) in excess of US$10 million to use EVM. The majority (54%) of the Public Sector required EVM for projects valued at less than US$5M. The Public Sector also required EVM (23%) for projects valued at US$20M or more.

Most organisations that utilize EVM attribute the use of EVM towards project success (62%); as a useful tool to predict project success (73%); and enabling leaders to use EVM metrics to assess project status (51%). Organisations that are using EVM have projects that successfully met three of the key performance indicators: to scope (82%), meeting quality standards (84%) and delivering business benefits (80%). However, the data showed that organisations using EVM did not show a majority of projects being complete on time (35%) or within budget (45%). This is consistent with the survey findings on project management training, where the results indicated more robust training programs are required in the areas of budget and schedule. While EVM is a preferred methodology for organisations to manage their projects' scope, cost and schedule, qualified or knowledgeable staff is needed to validate and interpret the data; while proactive project management and risk mitigation is needed to effectively use the information to execute corrective actions to get the project back on track. Having experienced and engaged EVM staff leads to project success.

Appendix

Portfolio Management and Software – The European Perspective

The purpose of the European Appendix is to see if there was a greater adoption rate and any further insights into Portfolio Management and Software in Europe.

Summary

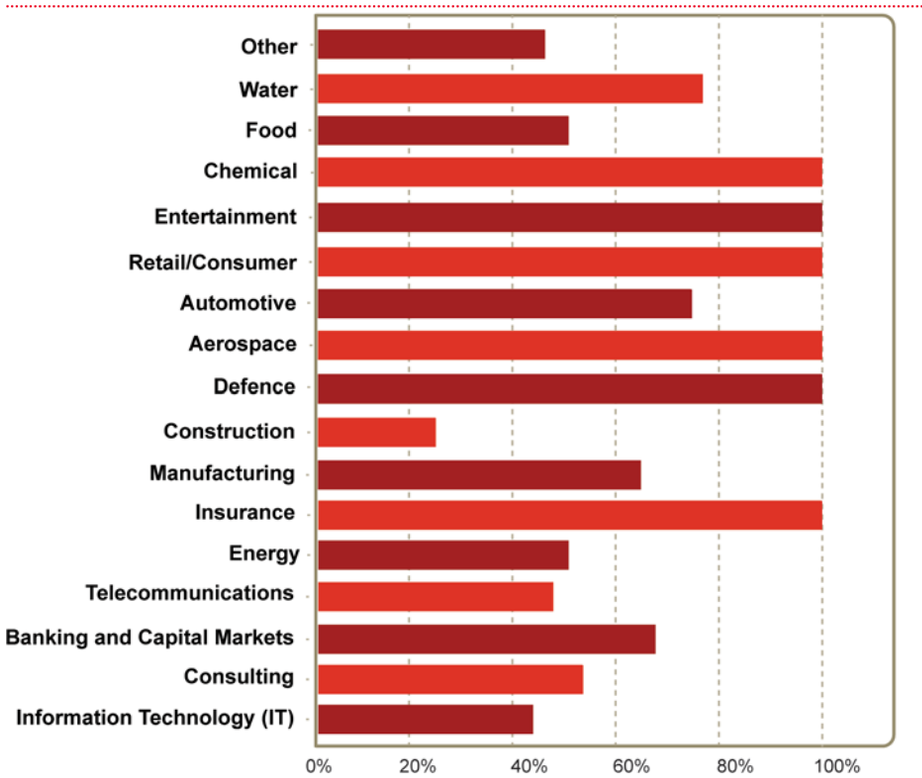
133 respondents within Europe provided information about their PfM practices. Adoption in Europe is 54% which is in line with the global benchmark of previous years and is slightly higher than the 53% adoption rate from this year's global survey. Themes which emerged in Europe echoed the Global picture. What was striking amongst European respondents was how critical the role of prioritisation criteria played.

Key Finding: Organisations that adopt portfolio management can experience greater satisfaction in their project performance.

The positive effects of PfM can be seen in user satisfaction with each of five key indicators of performance and on additional characteristics of project management (Governance, Risk Management, Resource Management, and Change Control). Overall portfolio management leads to overall higher satisfaction with project performance; however, the European data showed different aspects of improved satisfaction in project performance in portfolios of different sizes of value:

- ***Less than $1M***: projects performed better on delivering project quality when using PfM. However, for smaller portfolios (less than 20 projects) the results were more marked where, the use of PfM can improve satisfaction with project performance to deliver on schedule and realizing business benefits.
- ***Between $1M and $10M***: (or portfolios of between 20 and 100 projects) PfM can improve satisfaction on project performance on schedule, and on budget.
- ***Greater than $10M***: there was improved performance on budget, on delivery of scope and quality when using PfM.

Figure 30: Adoption of Portfolio Management by Industry



Key Finding: Align your portfolio with the organisation strategy to improve satisfaction of project performance around budget, scope, and quality and benefits realisation.

Responses in Europe strongly echoed the global picture in that the most important factor in the success of PfM is alignment of the means of managing the portfolio with the organisation strategy. The positive effects of strategic alignment lead to the higher levels of stakeholder satisfaction with project performance around budget, scope, quality and benefits.

Key Finding: Apply Prioritization Criteria to improve benefits realization, quality and budget management.

Agreed criteria from which to prioritise the portfolio of projects has been a critical factor to be considered within portfolio management. Agreeing criteria improves satisfaction on project performance indicators. In particular it improves satisfaction in the delivery of scope, quality and benefits realization.

Key Finding: Conduct Monthly Portfolio Reviews to improve satisfaction with project performance to meet quality standards, deliver to scope and benefits.

Performance of the portfolio should be reviewed by all stakeholders to ensure it meets their needs. For respondents who say the performance of their portfolio is reviewed by all stakeholders monthly, there was a positive correlation in regards to the number of projects meeting quality standards, delivering within scope and realising benefits. Where the portfolio is reviewed more frequently than just monthly, each of the five key performance indicators has a positive correlation. This remains consistent with this year's global survey data.

Key Finding: Use Portfolio Management Software and an Enterprise PMO to manage your Portfolio to improve your satisfaction with project performance.

Within Europe the use of PfM Software is regarded as a key enabler of Project Portfolio Management. The research concluded that software makes a positive impact on satisfaction regarding project performance, in particular around: budget, scope, quality and benefits realisation.

Globally, nearly 70% of respondents who reported using PfM also reported that their Enterprise PMO was responsible for the effort. Results varied by region and sector with private enterprises deploying PfM through their Enterprise PMO at a slightly higher rate and Europe having the lowest level of Enterprise PMO involvement. The portfolio performance levels of respondents whose PfM programs are managed by an Enterprise PMO are consistently twice as high as those whose portfolios are managed by other groups or individuals. This holds true for all indicators of performance.

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