

A white paper by PMI India and
NEC Technologies India Private Limited

Game-Changers in Project Maturity Measurement

Leading IT companies are adopting new project practices to align their
PMOs to changing business realities

March 2016

Preface

Globalization presents new opportunities for growth, as companies can now tap a larger market for their goods and services, and access a wider talent pool in new geographies. However, global expansion is a tricky business, with intense competition from existing market, the need to localize offerings, dependence on global supply chains, unfamiliar regulatory environments, and challenges in managing cultural differences across global teams.

Before starting out in a new market, an organization must re-examine its existing practices and realign those to the new realities of a global business. Some of the greatest lessons come from the experience of companies that have already “been there and done that.” Some of these global companies have redefined themselves and demonstrated great agility in adapting to change, while those who have resisted change to maintain their age-old practices and processes have been struggling to survive in the new business environment.

One of the key factors that differentiates leading companies is their project management maturity level. But what constitutes project management maturity? Are new factors emerging as must-haves for project success? What should the governance structure of an organization’s project management offices (PMOs) in different locations be? What role do next generation cloud, social media, and analytics technologies play in building a strong project environment?

Background

NEC Technologies India (NTI) launched a research initiative in mid-2014 to shed light on the capabilities that global IT companies in India were building to help them scale the project management maturity curve. The research was commissioned by an NTI client in the IT industry with a strong regional presence who was looking to expand their business operations and product portfolio globally.

Undertaken by the knowledge and advisory wing of NTI’s market research and consultancy department, the research helped NTI’s client benchmark their project management practices with those of global industry leaders, including their competitors.

NTI has collaborated with Project Management Institute (PMI) India to publish these research findings and recommendations, and bring forward leading practices that global organizations are adopting.

Several companies that participated in the research have an evolved state of project management. This means they have standardized project processes and practices across the enterprise; strategic alignment of business operations with organizational goals; integration of enterprise-wide functions without departmental silos; the right environment to promote collaboration; strong knowledge management practices; next generation technologies for greater visibility and control of projects; and the right culture to develop and nurture talent.

Other companies are relatively new to project management and are catching up with the global leaders. They are moving away from a reactive mode of doing business and toward developing the right mechanisms to anticipate change, prepare for it, and respond in due time. These companies in an emergent state of project maturity are replacing ad hoc processes with systems that offer seamless integration of people, processes, and organizational assets for better project outcomes.

The names of NTI's client and the companies that were part of this research have been masked to protect their identity.

Research Objectives

The mandate for the NTI team was to create recommendations of global leading practices that mature IT companies in India had established. Leading practices were in these areas:

- The management of globally-distributed teams
- How an enterprise PMO was achieving alignment of enterprise portfolio with enterprise priorities
- A governance structure to manage projects in different locations using integrated program and project management processes and systems
- Improved visibility into portfolio risks and interdependencies
- Reduced complexity of enterprise-wide resource capacity planning

Methodology

The client provided the team with a list of ten IT companies. Half of the companies were global IT companies with a strong presence in India and the other half were Indian IT leaders. These companies were comparable with the client in terms of scale of operation, and were either IT product companies or IT services companies with a strong project practice. This competitive landscape study of project maturity included companies in both advanced and evolving stages of project maturity.

The team conducted interviews of team leads, project directors, PMO executives, advisors, and consultants. The primary data collected through these interviews covered the following areas:

- Placement of the PMO in the organization's structure
- Governance framework, composition of different PMO teams based on operational level, and their roles and responsibilities
- Alignment of the PMO with the strategic outlook of the company
- Project management methodologies adopted in the ten Knowledge Areas as defined by PMI's *A Guide to Project Management Body of Knowledge (PMBOK® Guide) — Fifth Edition*
- Case studies that demonstrated the constant involvement of the PMO in delivering successful projects
- Illustration of other facts that demonstrated the critical role that the PMO played in rescuing failed projects

The scope of the study also included understanding the structure of a global team, its priorities and challenges, project management tools and methods used, and roles and responsibilities of PMOs at the global and regional levels.

After the primary data was collected, the team conducted focused group discussions to understand the underlying factors needed for greater flexibility and to deliver excellence through continuous process improvement.

The research focused on understanding the project methodologies that these companies followed and how well they tied in with the *PMBOK® Guide* Knowledge Areas. The research focused on four of the ten Knowledge Areas – Project Communications Management, Project Integration Management, Project Human Resource Management, and Project Quality Management.

The findings from each organization were benchmarked against one another on NTI's in-house project management progression measurement tool (PMO-PMT™) and the PMO Performance Metrics™ tool that determined the difference in the level of maturity on the benchmarked parameters for all the organizations.

The PMO-PMT™ tool was used to compare the processes and tools used by the selected organizations and to identify leading practices in the four Knowledge Areas. The research also sought to unearth details that acted as catalysts for project performance but often went unrecognized.

Research Findings

NTI's PMO-PMT™ tool revealed the following components as new trending practices that were delivering successful projects in today's global business environment:

1. Project management process
 - a. The hierarchy at which the PMO is operating, at the level of projects, programs, or enterprise portfolio
 - b. Processes established for knowledge management
2. Resource capabilities
 - a. Efforts undertaken for certification and training of resources through in-house and/or external collaboration
 - b. An enterprise-wide shared resource pool of different skills
3. Project management tools
 - a. Project collaboration
 - b. Integration of different project tools
 - c. Maturity of dashboards
 - d. Delivery of excellence model
4. Authority of PMO
 - a. Integration of PMO with different business units
 - b. Engagement of PMO at different levels of the project lifecycle
 - c. The reporting structure of PMO
5. Organizational culture
 - a. Lean model of business operation
 - b. Flow of communication within the organization

Maturity Dashboard—Evaluation of Companies on NTI's PMO-PMT™ Tool

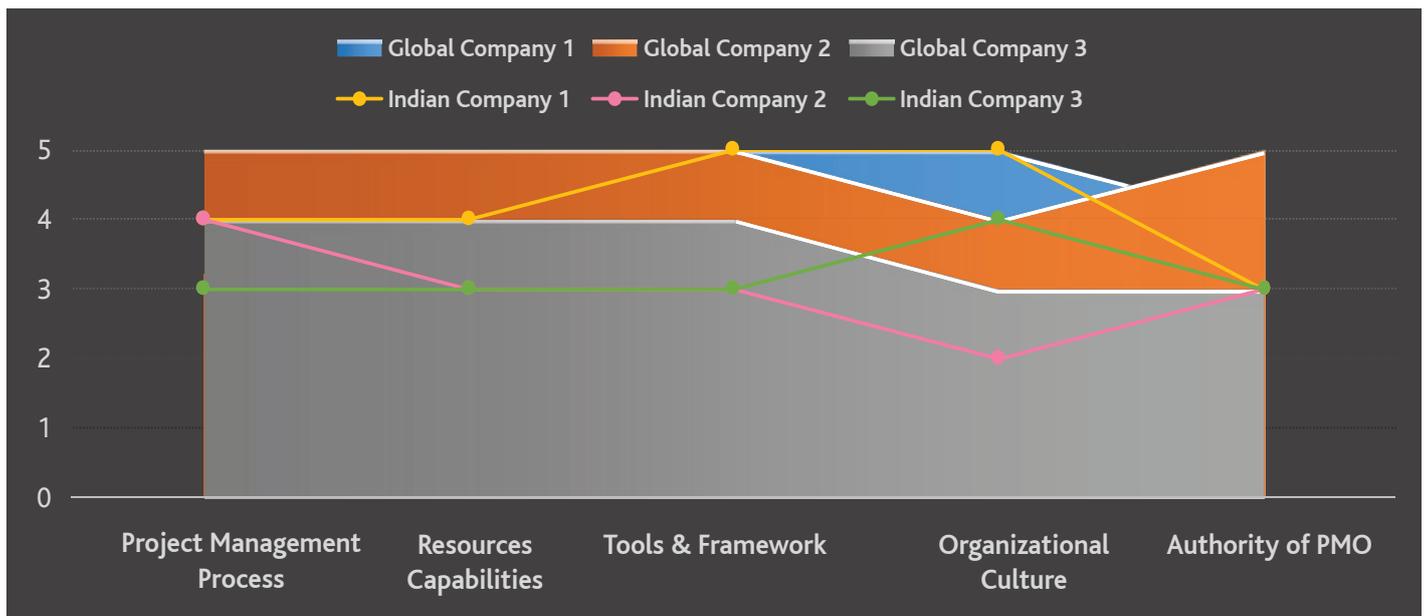
Scores were given to the above five trending practices that were termed sub-components on the tool. A cumulative score was given to each company for each of the five components and ranked on a scale of 1 to 5, where scale 1 indicated the initial level and scale 5 indicated the optimal maturity level. Refer to Table 1 on the next page to understand the factors that determined the scores.

Table 1

	Level 1	Level 2	Level 3	Level 4	Level 5
Project Management Process	Project management processes centered on the management of critical projects.	Project processes in place. PMO(s) organized. Emerging understanding of PPM. Risk is being reviewed.	PMO(s) organized. There is realization of the importance of knowledge management.	Different categories of PMO established. Various knowledge management initiatives taken. Additional process defined to improve project management process.	Comprehensive PMO. Project pipeline managed in real-time.
Resource Capabilities	Newly created Project Portfolio Management (PPM) leader's role but still has the focus of a project manager.	PMO(s) established. Project staffing/ resources capacity issues begin to be addressed.	PPM leader's role formalized and there is a trend towards higher specialization. Certification and training encouraged.	Network of PPM leaders exist company-wide in a federated model. In-house training and certification mandate for the majority of cases.	PPM leaders exist in all areas of the company. Focus on certifications in different industry verticals. Shared resource pools formalised.
Tools and Framework	Project scheduling tools and milestone reporting adopted. Non-existent PMO.	Project collaboration and team workspaces encouraged. PMO formalized.	Reporting dashboards established. PMO integrated with work places across locations.	Business users adopt tools as useful. Single, integrated system exists.	Creation of internal project management framework and delivery excellence model.
Authority of the PMO	Non-existent PMO.	PMO formalized.	PMO integrated with work places across locations.	PMO reports to IT/ operations/finance. Holds limited number of project management reportees. Has limited involvement in Project Life Cycle (PLC).	PMO reports to the CEO's office. A significant number of project managers monitored by the PMO. Engaged at all level of PLC.
Organizational Culture	Restricted flow of information from top to bottom. Various layers of communication.	Process of interaction between senior management and employees initiated.	Moved towards a lean organizational structure.	Reorganized the organizational structure to promote effective communication and encourage innovation.	Offers different channels of communication between the different layers of the organization. Strong enforcement practices exist.

The results were then plotted on the PMO-PMT™ tool as shown in Figure 1 to illustrate the difference in the level of maturity on the benchmarked parameters for all of the organizations. The client was also mapped on the same metrics to benchmark its own maturity against these companies. The findings were collated to derive leading practices for the Indian IT industry.

Figure 1



PMO maturity dashboard for global (non-India headquartered) companies and Indian (headquartered in India) companies

Case Studies

This white paper contains snapshots of case studies from the selected organizations that illustrate how mature project practices helped these organizations overcome some common business challenges. Each of these success stories goes to show how project maturity is directly linked to business outcomes and produces tangible benefits, whether it's quality standards, business excellence, project leadership, revenue growth or employee satisfaction.

Case study #1—PMBOK® Guide Knowledge Area: Project Quality Management

Objective

A leading Indian IT company, which is part of a large corporate group, wanted to make quality the hallmark of its corporate identity and launched a business excellence initiative that covered its products, services, operations, and employees

Challenges

- Lack of a standard framework to assess performance across businesses
- No standard measures to benchmark themselves with business competitors
- Develop tools and processes to enhance financial performance and operational efficiency

Solution

- Trained resources from other group companies that assessed the existing processes
- Feedback was derived from an exhaustive, structured assessment process that listed the company's strengths and opportunities for improvement
- The initiative paved the way for a business excellence model that focused on quality of management and addressed all practices related to leadership, strategy, customers, knowledge management, human resources, core processes, and end results
- With the help of technology, cross-functional teams and senior management institutionalized the new practices in a smooth and quick transition
- Quality and excellence were introduced to employees at all levels of hierarchy through intensive training programs

Benefits

- The model has been rated as world-class and has improved quality control across the organization
- A formal system of benchmarking and assessment was institutionalized across the group
- The business excellence model has helped establish a standardized process of seamlessly integrating newly acquired companies to the organization's culture
- As a continuous improvement process, sharing leading practices has become an integral part of the group

Case study #2—PMBOK® Guide Knowledge Area: Project Human Resource Management

Objective

To establish a robust set of project management processes and training programs with emphasis on human resources to win big projects

Industry view

The second case study shows that while industry standard courses provide critical knowledge and learning, the deployment of the knowledge from these courses into the current work environment requires more work. This is where an in-house learning curriculum helps to provide the much needed bridge and additional skills required for trained practitioners.

Vishwadharmi K Sharma, Director, CGI (India)

Challenges

- Projects frequently overshot schedule and budget due to inefficient project management practices
- Mentoring project managers to eliminate inefficiencies was the need of the hour

Solution

- Apart from encouraging employees to take up Project Management Professional (PMP)® certifications and follow the PMBOK® Guide, the company introduced trainings and courses customized to meet the organization's specific needs
- An in-house project management learning center, in which senior project managers underwent annual week-long trainings and competitions, was launched
- Project management themed events at the center helped build a strong platform to network, share knowledge, and establish mentoring relationships among employees
- As a follow-up process, all attendees were periodically assessed to determine how much of the course learning was put to practice and whether the changes yielded results

Benefits

- These tailored project management courses have helped project managers to enhance process efficiency, and improve leadership and communication skills
- Process efficiency in turn leads to project completed on time and on schedule
- Feedback from post-training follow-up surveys are constantly incorporated into the training content to formalize a structured course across the organization

Case study #3—PMBOK® Guide Knowledge Area: Project Communication Management

Objective

To institute behavioral change by way of a proactive, problem-solving work culture through leadership engagement

Challenges

- A “fire-fighting” mode of operation, where projects were getting executed under extreme pressure
- Teams worked in silos
- There was little time for innovation
- The focus was on reinventing the wheel rather than continuous improvement

Solution

- The delivery team was tasked to build an excellence framework based on their understanding of client expectations and awareness of drawbacks in existing processes
 - This framework, based on lean management thinking, provided a new approach for behavioral change, process improvement, and benefits utilization
 - It focused on leadership engagement to challenge the status quo and promote continuous improvement
- Introduced daily coaching on lean thinking, such as field visits of managers to understand issues better, instilling a problem-solving attitude in every team member, encouraging transparency and openness, and time management

Benefits

- Brought about positive behavior change in team members, starting with the company’s leaders
- Though it was not possible to quantify gains, the company measured behavior and operational change by tracking the quality of problem-solving, technical issues, throughput, operational key performance indicators, and how teams shared resources

Case study #4 - PMBOK® Guide Knowledge Area: Project Integration Management

Objective

Replace legacy management practices and a command-and-control structure with transparent practices that promote a self-sustaining, can-do culture among employees

Challenges

- The company was growing at a slow pace as compared with its competitors
- Middle-level managers were distanced from the clients and unaware of the ground realities

Solution

- A CEO-led initiative started with the top leader meeting employees in small and large groups to shed light on the main issues confronting the company
- The need to create highly engaged teams was identified and an enterprise-wide, employee-focused initiative was introduced
- Developed a system of “reverse accountability” where instead of the traditional approach of only developers being accountable to the PMO, now the company’s shared service organizations (responsible for creating documentation and other PMO related activities) had to be accountable to frontline employees, including those on development teams. Shared services personnel were evaluated on their ability to serve the needs of revenue-producing employees.
- The company created an online platform that encouraged employees to ask tough questions and offer honest feedback, which was visible to everyone in the company
 - It was the first big step toward transparency, with top management made accountable for the frontline and employees encouraged to take responsibility for solving some of the thorny issues that the management faced
 - It also helped identify critical issues early for proactive action

Industry view

As illustrated in the fourth case study, the CEO-led institutionalized PMO concept with accountability at the middle management level is among the core constructs that has led organizations to be successful.

Vishwadharmi K Sharma, Director, CGI (India)

- An online evaluation process of business plans was introduced in which peers across units were invited to review the document and provide feedback. It helped highlight opportunities for cross-unit learning and collaboration.
- The company continued to thrive in the years ahead with more, similar programs and initiatives as it strives to transform from institutionalized PMO to strategic-level PMO

Benefits

- Twenty percent of the company's revenue came from the new practices three years after the launch
- Employee satisfaction grew by 70 percent
- Ranked best employer of the year
- Significantly outgrew its major Indian competitors
- Collective decisions through online forums and the power-shift strategy as a result of reverse accountability increased the speed and quality of innovation
- Review of unit-level plans was better managed and issues pertaining to time and expertise shortage resolved

Table 2

Some project management leading practices that IT companies are adopting

Area	Existing Practices & Their Challenges	New Practices Research Identified	Potential Benefits
Project management process	The siloed approach, with each department using its own tools and applications that are incompatible with each other.	Simplified process and communication tools that allow sharing of knowledge and information between departments and consultants across its global locations.	Better visibility and control of risks across projects, programs, and portfolios. Improved understanding of interdependencies.
Project management tools	Standard project tools and milestone reporting adopted.	Creation of customized internal project management framework and delivery excellence model.	Improved the quality principles. Gain trust of the clients.
Authority of the PMO	There was ambiguity of purpose of the PMO in an organization and lack of C-level sponsorship of the PMO leading to non-fulfilment of its goals.	A strategic PMO that includes three broad categories: planning (governance structure and procedure, capacity and resources, internal and external communication), Performance Management (metric collection, reporting and redefinition, output delivery and value creation, program health check-up), Execution Effectiveness (project portfolio management, process redesign and improvement).	Improvement in alignment of projects with the organization objectives. Improvement in productivity. Better performance management with strategic PMO as it creates a culture of reverse accountability that increases the speed and quality of innovation.
Organizational culture	The command and control method of leadership was leading to a "fire-fighting" style of working.	Tech-based collaboration platforms. Engagement of project level leaders in goal-setting.	Greater ownership of projects. Higher chances of risk mitigation. Better responsiveness towards clients' requirements.
Governance	Processes and changes in project management practices were communicated as policies through a formal communication channel using different open discussion platforms not as a manager conveying a change in policy to his/her immediate subordinates.	Soft resources for process enforcement such as induction plan for new employees (including fresher and mid-career employee). Microblogging platforms are being used internally to foster an environment of learning and sharing, to gather insights from the frontline, and to host webcasts from senior leaders.	Improved enforcement of processes non-affected by the transition of employees over the years. Complements traditional productivity tools, encourages collaboration across the globe.

Conclusion

Some of the companies covered in the research have an evolved state of project management, while others are moving toward that goal. The case studies demonstrate how mature project practices go a long way in achieving organizational goals. Project management maturity is an important element of strategic planning because it provides a methodology and a road map to determine and address gaps that are potential impediments in an organization's quest for growth.

Businesses cannot ignore project maturity if they want to consistently achieve their business goals. PMI's *2015 Pulse of the Profession®: Capturing the Value of Project Management* report has established the close links between project maturity, project performance, and business outcomes.

The report shows that high-performing organizations – that is, organizations that complete 80 percent or more of their projects on time, on budget and meeting original goals — are creating competitive advantage by embedding a project management mindset in their organization's culture.

The report calls for a return to the basics:

- Fully understand the value of project management
- Actively engage executive sponsors
- Align projects to strategy
- Develop and maintain project management talent
- Establish a well-aligned and effective PMO
- Use standardized project management practices throughout the organization

The selected case studies in this white paper further demonstrate how organizations have improved business performance in terms of higher productivity, better alignment of projects with the organization's objectives, and enhanced client satisfaction and expectations of employees with enhanced project maturity.

However, transitioning into a high project maturity level is not an easy process; it requires commitment and sponsorship from senior management. The focus

Industry view

"At times, managing risks is not limited to managing the ten Knowledge Areas of the *PMBOK® Guide* but also includes achieving maturity of people and processes involved in handling tasks within and outside the lifecycle of a project. The white paper has distinctly highlighted the granular details that act as catalysts for delivering projects – from the stage of project selection to execution, beyond on time and within budget completion of a project. Clients, project owners, and those working on projects have appreciated these catalysts. The white paper draws the attention of IT companies to the changing dynamics in project management."

Piyush Sinha, CEO & MD, DMICDC Logistics Data Services Limited, and Director, Corporate Planning & Business Management, NEC Technologies India Pvt. Ltd.

has to be as much on tangible, quick gain methods, such as boosting the capabilities of resources with PMP® certifications, as on long-term, intangible ways, such as organizational behavior change management for greater ownership and responsiveness of employees.

The study helped NTI’s client:

1. Align itself with project management leading practices being adopted by global leaders
2. Present the right facts for senior management to communicate to the executive management on the organization’s current state of project maturity and areas of improvement as identified by the PMO-PMT™ and PMO Performance Metrics™
3. Understand the placement of the PMO in the organizational structure and define an effective governance structure to manage projects at different locations using integrated program and project management processes and systems
4. Enable categorization of projects to be executed at different operational levels of the PMO at different company locations
5. Discover the changing perspectives of project management in today’s business environment

Industry view

“The white paper reflects extensive research and demonstrates the meticulous representation of leading practices across the four case studies. The recommendations provided are complete and accurate. This work completely resonates with my observations and experiences of the past two decades in the field of information technology.”

Sumit Mathur, PMP, program head – global IT services & IT consulting organization and PMI India Champion

Industry view

Many of the case studies resonate with the challenges that several of us in the IT industry have experienced and overcome. The solutions described (collaboration tools, lean principles, the CEO-led PMO initiative) are practical and, at the same time, in line with satisfying the needs of clients, shareholders, and members.

Vishwadharmi K Sharma, Director, CGI (India)
