

# MANAGE India



## Project Nation-Building: Practitioners Can Lead the Way

Conference speakers focus on the need to have a strong foundation on project management to take the country forward



Dr. A.P.J. Abdul Kalam interacting with the conference delegates.

COVER STORY

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# Letter from the Managing Director, PMI India

Dear Practitioners,

I'm happy to present to you a special issue on our recently concluded third PMI India National Conference in Bangalore that was a remarkable success. The theme for the conference, *Architecting Project Management for Nation-Building*, provided us the opportunity to deliberate on and hold discussions on a wide range of topics.

The main highlight of the three-day conference was our keynote speakers who were inspirational, thought-provoking, and insightful. We look up to these individuals for their contributions to nation-building,

like Dr. A.P.J. Abdul Kalam, our former president; Mr. Sam Pitroda, the man credited with envisioning the telecom revolution in the country; Mr. N.R. Narayana Murthy, co-founder of Infosys and probably the biggest brand in Indian IT industry; and Mr. Arup Roy Choudhury, chairman and managing director, National Thermal Power Corporation. We also saw how ancient wisdom from Chanakya applies to today's corporate world.

Senior bureaucrats and industry leaders, with their depth of knowledge and wealth of experience, also added immense value to the conference. I'm confident practitioners received both food for thought and handy tips on how to manage teams, achieve organizational goals, meet project targets, prioritize work, and much more from these sessions.

PMI India has been advocating project management with the government. The high level of participation from the public sector this time goes to show our success in making inroads in this sector. The special track on "Project Management in e-Governance" saw the participation of several senior bureaucrats and policy makers and opened a debate on the need for project management for more success in public-sector projects.

The panel discussions offered delegates divergent views on topics of interest to the community. This year, we introduced pre-conference workshops and case studies, both of which were well-received. We released the Hindi translation of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* and a report, *Project Management in e-Governance: Issues & Challenges in Navigating to the New Normal*.

I commend the role that PMI Bangalore Chapter, our team of volunteers, and the PMI India team played in making the conference a grand success. They overcame logistical challenges with panache and gave us a memorable experience. I'm grateful to Mr. Mark A. Langley, president and CEO, PMI, and Mr. Ricardo Triana, director, PMI Board, for their support. I thank our sponsors and hope to see their continued support in the years to come.

The fourth national conference will be held in Chennai and will be jointly hosted by PMI Chennai Chapter and PMI Kerala Chapter. We will take forward the lessons learned during this conference to bring more value to you in next year's conference.

Best regards,



Raj Kalady  
Managing Director, PMI India



# What the Organizers Have to Say

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The PMI National Conference 2011 was a picture-perfect, well-planned project. It started and concluded on time. The content for the theme of the conference, Architecting Project Management for National-Building, was aptly structured. Dr. A.P.J. Abdul Kalam's opening remarks, Mr. Sam Pitroda's insights on the current level of expertise, and Mr. N.R. Narayana Murthy's interactive session were well-participated.

Our team of volunteers organized and delivered a memorable conference. An early, over-subscribed closeout audience of 1,160 is a sign of achievement for the event. The success largely goes to the executive committee of Bangalore Chapter and PMI India team that worked closely and coordinated the entire planning and execution.

## **P.S. Ravindranath**

President, PMI Bangalore Chapter

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This national conference had the allure of having Dr. Abdul Kalam, the technical challenge of videoconferencing with Mr. Sam Pitroda, and the smooth summation from Mr. N.R. Narayana Murthy. The challenge was to satisfy the expectations of over 1,000 practitioners. We met the challenge more than creditably. It took teamwork from all the volunteers and executive committee members and extraordinary leadership.

## **Venkataraman S. Subramanian**

Head, Project Management Office, PMI India National Conference 2011

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# Conference PMO Members

**Mr. S.S.V. Raghavan:** The credit for the success of the entire conference goes to the voluntary work by a group of committed people. Inspiring addresses by thought leaders like Dr. Abdul Kalam, Mr. Narayana Murthy, and Mr. Sam Pitroda, and the huge attendance for every session added to its success.

**Mr. M.S. Hiremath:** The conference was fantastic in terms of the participants' takeaways. Each program was planned in great detail, and the entire event proceeded on time. The role and responsibility of all the volunteers were clearly defined. The synergy of the team helped in making the conference successful.

**Mr. Murali Santhanam:** The conference demonstrated two aspects: we were able to plan and prepare for the conference with teams distributed across locations, and a conference as complex and large as this one could be managed almost entirely by volunteering professionals. As far as content is concerned, we were fortunate to have had excellent speakers who made the conference a grand success.

**Mr. Vijay Paul:** PMI National Conference was a confluence of project management professionals from India, SAARC countries, and other parts of the world. Delegates could listen to thought leaders. The conference enabled mutual learning and provided practitioners networking opportunities. Everyone had a great time enjoying the hospitality in the garden city of Bengaluru.

# Manage Projects end to end



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# Project Nation-Building: Practitioners Can Lead the Way

Conference speakers focus on the need to have a strong foundation on project management to take the country forward.

Project management goes much beyond technology, processes, and methodologies, and rests largely on the people who tie it all together and make it happen. A

Management for Nation-Building, formed the backdrop for knowledge-sharing and discussions on how project management is the much-needed catalyst for change in India. The powerhouse of speakers, including Dr. A.P.J. Abdul Kalam, former president of India; Mr. Sam Pitroda, the man who envisioned the telecom revolution in the country; Mr. N.R. Narayana Murthy, co-founder, Infosys; and Mr. Arup Roy Choudhury, chairman and managing director, National Thermal Power Corporation, gave the audience insights into project best practices and leadership. Panel discussions brought to the fore divergent views on current topics of interest, including one on “Driving Value in Turbulent Times” moderated by Mr. Mark A. Langley, president and CEO, PMI. Practitioners had a lot to choose from—whether it meant getting hands-on with agile practices to solve today’s project woes or applying the wisdom of ancient Indian thinker, Chanakya, to the 21st century corporate world.



*Dr. A.P.J. Abdul Kalam lighting the lamp at the inauguration. The others present (from left) Mr. P.S. Ravindranath, Mr. Ricardo Triana, Mr. Mark A. Langley, and Mr. Raj Kalady.*

Addressing practitioners at the inaugural session, Dr. Kalam said, “What worked yesterday won’t work today.” He asked project managers

trained project manager, who brings in the right mix of knowledge, technical and soft skills, and passion, can be the change agent for our country. Leaders from public and private sectors asked practitioners to answer the call for change, look beyond the project, and train their efforts at the endgame. And the endgame is nation-building.

The PMI India National Conference 2011 that took place on 8–10 September in Bangalore overtook the previous two years’ record with over 1,100 attendees. The theme for the conference, Architecting Project



*A section of the audience at the inaugural session.*



◀ The audience warming up to some drumming with percussionist group, D'frens.

to “not let problems defeat you but instead be the captain of the problems.” A surprise twist to the evening came from a Bangalore percussionist group, D'frens, which had the audience join them in an impromptu jamming session. Delegates turned into instant drummers performing ‘drum circle,’ ‘Mexican wave,’ and ‘causing rain with sound effects.’

The coveted PMI India Awards were presented during the conference. The PMI India Project of the Year 2011 Award went to Gas Authority of India for its Vijaiapur–Dadri–Bawana pipeline project. The runner-up was Cairn Energy India for its Mangala Development Pipeline Project. The PMI India Award for Contribution to the Community 2011 went to Infosys’ Sneham Shiksha Trust in Chennai.

PMI India presented a Hindi translation of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. The Hindi edition was unveiled by Mr. Ajay Sawhney, IAS, president and CEO, National e-Governance Division, Department of Information Technology, Government of India, and Mr. Craig Killough, vice president, organizational markets, PMI.

An addition in this conference was a parallel set of tracks on “Project Management in e-Governance” on 9 September that



(From left) Mr. Raj Kalady and Mr. P.S. Ravindranath applaud as Chennai Chapter president Mr. Karthik Ramamurthy and Kerala Chapter president Mr. Rajeev Panicker receive the banner for the PMI India National Conference 2012.

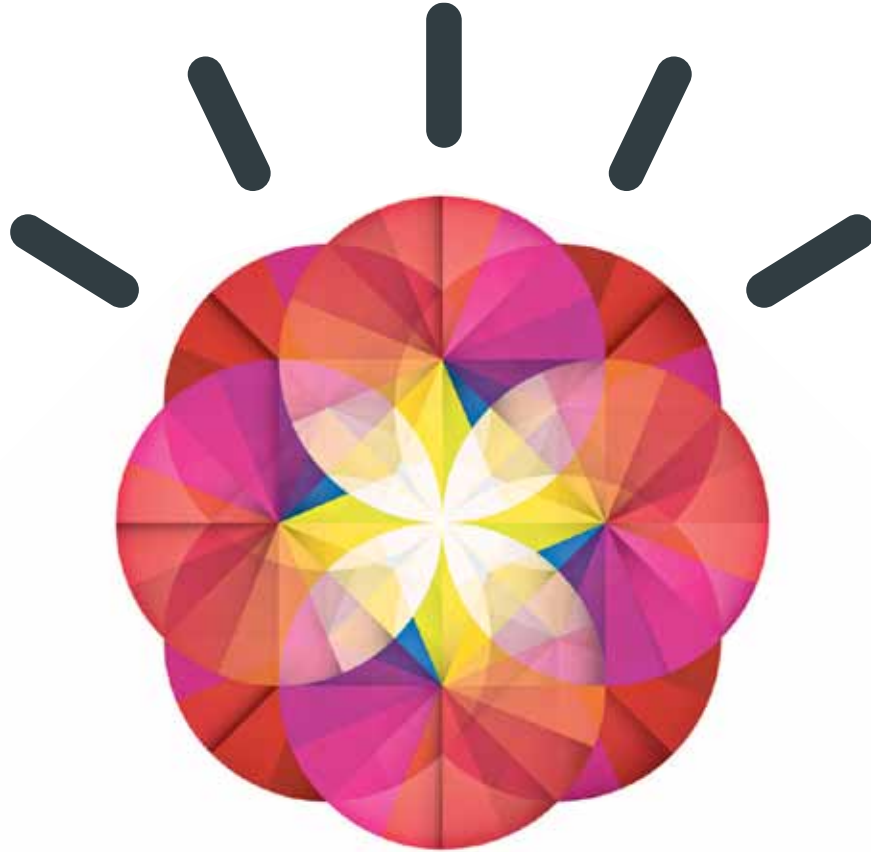
attracted several policy makers and influencers. The sessions covered challenges of today’s e-governance practices, dynamics of project management in e-governance, creating an environment of high-performance project management, and governance and accountability.



Chapter presidents and board members of PMI Bangalore Chapter with Mr. N.R. Narayana Murthy (center top row).

As in past conferences, this year’s PMI India National Conference was the result of the tireless efforts of PMI volunteers. Mr. Venkataraman S. Subramanian, head, Conference PMO, said, “We had 55 volunteers for review of technical papers who were spread across India. During the conference, we had 23 volunteers from Bangalore Chapter for several on-site duties. Hosting responsibilities in the track halls were shared by chapter presidents and Bangalore Chapter executive committee members. The two pre-conference workshops had the support of 13 session handlers.” There were groups to manage registration, conference sessions, technical paper review, award nominations and selection, pre-conference sessions, awards presentation, the PMI stall, e-governance sessions, VIP reception, sponsors, conference collateral and vendors, and delegate kits.

The lessons learned, the confidence gathered, and the vision acquired will go to build even more exciting events in the future. Practitioners can now look forward to the PMI India National Conference 2012 in Chennai that will be jointly hosted by PMI Chennai Chapter and PMI Kerala Chapter.



Smarter computing builds a Smarter Planet.

## Smarter comes to computing.

Today, everything computes. Intelligence has been infused into things no one would recognise as computers: appliances, cars, roadways, clothes, even rivers and fields. This is the daily reality of a Smarter Planet.

Realising its promise, however, will require more than infusing computation into the world. We also have to make computing itself smarter.

Remarkable levels of computer intelligence are being reached - with inventions such as Watson, the IBM system that defeated the two all-time champions on America's biggest TV quiz show Jeopardy! But most organisations' computing infrastructures were simply not built for zettabytes of data (A zettabyte is a 1 followed by 21 zeros), global connectivity and advanced analytics.

Thankfully, a new, smarter computing model is emerging. It is designed for data. It is tuned to the task. And it is managed in the cloud.

**Designed for data:** Organisations of all kinds need to manage streams of text, images, sensor-generated impulses and more. They need to apply sophisticated analytics to the real languages of commerce, including

social media. Which is why today's leading companies are building new systems and processes that locate, recognise and interrogate big data.

**Tuned to the task:** Transaction processing is different from business analytics, with multiple data types and complex queries, which is different from the need to integrate content, people and workflows in a company's processes. That's why leaders are moving to architectures optimised for specific purposes, and built around their own deep domain knowledge - in whatever field.

**Managed in the cloud:** The need to manage these large data-driven workloads is driving broad adoption of cloud computing. By infusing clouds with security and manageability we can make them smarter, providing companies with the agility to move quickly in highly competitive environments; to activate and retire resources as needed; and to manage infrastructure elements in a dynamic way.

When major computing models change, they unleash enormous productivity, innovation and economic growth. So the good news is that smarter computing is now shifting from theory to reality.

Let's build a smarter planet. Join us at [ibm.com/smartercomputing/in](http://ibm.com/smartercomputing/in)

## DR. A.P.J. ABDUL KALAM

He is known for his passion, integrity, and leadership. During the inaugural address, former president of India, Dr. A.P.J. Abdul Kalam, brought all these elements to the fore, infusing a sense of zeal in the audience of over 1,000 project managers. The drive of this 80-year-old man, diminutive in appearance, was unmistakable as he roused the audience throughout his 45-minute speech with calls for nation-building and character-building.

Dr. Kalam set out to define the characteristics that make up a leader with illustrations of great leaders he had worked with during his career as a space scientist. "A leader must have a vision, a passion to transform the vision into a mission, be able to handle failures, have the courage to take decisions and do not allow a problem to defeat him or her, possess nobility, take transparent actions, and work with integrity," he said. He then asked the audience

to take an oath with him to "work with integrity and succeed with integrity."

Recalling his tenure at the Indian Space Research Organisation (ISRO), Dr. Kalam said, "I was the mission director during the launch of Satellite Launch Vehicle (SLV-3). The project was unsuccessful at the second stage of the launch. Mr. Satish Dhawan, who was the chairman of ISRO, took the responsibility of the failure on him. But after the success of the Rohini satellite launch, he pushed me into the limelight. That is a true leader, who takes all the blame and shares the credit with his team," he recalled.

He exhorted practitioners to look toward the future with new ideas. "What worked yesterday, will not work today. Yesterday natural resources defined power; today knowledge is power. Yesterday leaders commanded and controlled; today leaders empower and coach. Yesterday



shareholders came first; today customers come first. Yesterday employees took order; today teams make decision. Yesterday value was extra; today value is everything," he said.

## SAM PITRODA

Mr. Sam Pitroda, the man credited with launching the telecom revolution in India in the 1980s, is an inventor, entrepreneur, and policy maker, who now serves as the adviser to the prime minister of India on public information infrastructure and innovation. As a part of the Government of India's technology think tank, he advises the government on designing

and implementing complex, nationwide projects. The packed conference hall on the third day of the conference, when Mr. Pitroda spoke through a video link from New Delhi, showed the interest that practitioners have in understanding how government projects are managed.

Mr. Pitroda used a couple of key projects to illustrate the complexities involved in mega government projects. "The National Knowledge Network is a multi-gigabit pan-India network that will connect universities and colleges to a high speed network to enhance research and collaboration. We have an optical fiber network of millions of kilometer but it is under-utilized. We need to collaborate with groups of providers of infrastructure services, applications and tools, and con-

tent. It involves thousands of people. How do we manage it, monitor time and costs, bring stakeholders together, or measure success? We do not have the right project management expertise or tools to manage such projects well," Mr. Pitroda said.

The other project involves connecting 250,000 panchayats (village councils) for better governance and delivery of services. "It needs additional network, connectivity, applications, and training. Considering that we are a country of 1.2 billion people, the complexity grows multiple-fold. Such complex projects have not been tried anywhere else in the world. But they are critical for nation-building and we are still figuring out how to manage them," he commented. He called on the project management community to come forward to help the government with the right techniques and tools for the successful execution of such projects.



N.R. NARAYANA MURTHY

It was the last session at the conference, and going by the packed conference hall, it was clear that delegate interest had not waned. After all, it was an interactive session with Mr. N.R. Narayana Murthy, chairman emeritus, Infosys. The interest in Infosys stems not just from the company's success as a business but also from the values that its co-founders preached and practiced at work and beyond. And now was an opportunity for project managers to interact with Mr. Murthy, the man who was its CEO for 21 years.

Drawing from his experience of working with people from different cultures, Mr. Murthy said there is a significant influence of culture in managing large

projects. Partly, the "less than glorious" history of large projects in our country is due to this cultural factor. "We are not a disciplined nation; it is visible in the way people drive on the road. We have an oral culture and do not believe in documenting. We are reticent about losing face. We don't tell people if they have not done the job well. We are comfortable with vagueness; we don't use data much. We equate hierarchy with the licence to break norm. We will not succeed to bring our capabilities to bear unless we change these aspects of our culture," said Mr. Murthy.

In the interactive session that followed, Mr. Murthy responded to questions with examples from his life, quotes



from philosophers and writers, and lessons from history. To a question on what he rates as most important for India today—entrepreneurs, leaders, or project managers—he said, "To remove poverty, we need to create jobs. For that we need entrepreneurs. But to be a successful entrepreneur, you need to be a leader. And you need to have project management qualities to run a successful enterprise."



DR. CHANDRASEKHAR SRIPADA

that can be applicable to any other organization.

"Long-term success is the product of managing for the long-term," said Dr. Sripada, "if you think long-term, you will manage for the long-term and survive long-term." He broke this large idea down to how tackling each project with the long-term angle in mind creates a paradigm for success. "The task of managing a project is time-bound, but the results should be timeless," he added. He went on to warn against the lure of short-term gratification in project management: "A problem with today's project managers is the inability to negotiate for the appropriate time. Take your time; get away from the pressure of 'short-term,' IBM views

itself as a lasting institution because of its desire for tomorrow's benefit."

Another powerful building block for long-lasting success is adaptability. Under a "built to sell" umbrella, companies should be ready to tailor their capabilities to the changing times without losing their unique selling points. "Adapting to change in a global economy, adapting to technological change, and retaining an organization's essence and culture are three key lessons. It's possible to change without changing the basics," he advised practitioners.

On innovativeness, he said, "Don't just respond. Create. Research gives rise to change and investing in research is a long-term gain."

With over three decades of managerial and leadership experience across sectors, Dr. Chandrasekhar Sripada, vice president, human resources, IBM India, has firsthand knowledge of what it takes to achieve lasting success in a corporation. In his presentation, "Reinventing the Modern Corporation," Dr. Sripada shed light on the "built to last" practices at IBM

NIRANJAN MAKHA

India is marching ahead with strong economic growth, but several key social growth indicators have not changed much. Social inequities prevail both in rural areas and among the urban poor. Cloud computing has the potential to become a catalyst in nation-building and help in bridging some of the gaps. Mr. Niranjana Makhia, managing

site director, VMware India made a strong case for adopting the cloud as a platform to bring positive change and inclusive growth.

"The Internet democratized content; the cloud democratized access. The promise of the cloud is enormous for a country like ours.



We can use this platform to improve people's access for financial services, education, and healthcare. We have the technology but to make full use of the opportunities, we need to focus on its management," said Mr. Maka. India today has 61 million Internet users, with a fast-growing base in rural areas where access to basic facilities has otherwise been poor. With the adoption

of the cloud, the efficiency of service delivery can be improved.

"We need better transparency, governance, and reporting capabilities in the services that are delivered. We need robust programs that leverage technology to build, deploy, and maintain services, and be able to accommodate scale and flexibility.

Cloud-based technology is just right for India as it enables all of the above requirements," said Mr. Maka.

However for a provider of cloud-based services, the biggest challenge is to understand the market requirements. Mr. Maka stressed on the need for project managers in this space to continuously learn and innovate.

## ARUP ROY CHOUDHURY

Nations are built when projects are made, but who builds projects? Human beings deliver projects, not any books or magic formula. Arup Roy Choudhury, chairman and managing director, National Thermal Power Corporation offered delegates insights into the management of projects from his practical experience of handling large public sector projects.

Mr. Choudhury said it's important to understand what makes a project manager a leader. "A project manager who leads a project, explains and gives the team a roadmap is a good leader. Every project, like every individual, is unique. Most of our large

public sector projects are delayed because of disputes (over land acquisition). A good project manager is one who can anticipate possible causes for delay and take proactive action. It's like driving; if you watch three cars ahead of you, you can drive without applying brakes," Mr. Choudhury said. Mr. Choudhury stressed the need to manage people to achieve project success. "What motivates one person does not motivate another. In India, where people tend to be sentimental, it's particularly important to understand individuals in a team. Some of the attributes for effective project management are motivation, innovation, the ability to manage



change, leadership and discipline," he added. The leadership qualities that Mr. Choudhury has learned from his personal experience are: walk the talk, lead from the front, stand up when the going gets tough, integrity beyond doubt, stay away from gossip and rumor-mongering, forget and forgive, and be a father figure to the team.

## RADHAKRISHNAN PILLAI

India had deep roots in management, going as far back as 350 BC when a great king backed by a statesman ruled the country. History textbooks in India talk about the many successes of Emperor Chandragupta Maurya and the role that his shrewd teacher and political thinker Chanakya played. Chanakya wrote the *Arthashastra* and *Chanakya Niti*, which are considered as the economic and political treatises much ahead of their time that apply even to this day.

Mr. Radhakrishnan Pillai, author of *Corporate Chanakya*, culled out management lessons from the *Arthashastra* for today's corporate world. He played a short video on the role that Chanakya played in uniting the small kingdoms

in India against Alexander, paving the way for Alexander's defeat. The video showed an important aspect of management: the power of communication to change stakeholder perceptions to achieve a common goal.

Some of the *sutras* (formulas) in the *Arthashastra* relate to project management. "The *Arthashastra* is a book of total management that gives the reader an all-round perspective of economics, politics, law, and foreign affairs. Today, as a project manager you cannot confine your knowledge to your project. From macroeconomics and geopolitical conditions to local law and administration,



the project manager should be familiar with it all," said Mr. Pillai.

Some of the project management principles that Chanakya talks about are documentation, making optimum use of people and materials, making provision for failure, understanding the human intellect, and prioritizing.

## Harness the Power of Project Management in e-Governance

PMI Bangalore Chapter organized a daylong conference, Project Management in e-Governance, on 9 September that ran parallel to the PMI India National Conference. It was organized in coordination with the National Institute of Smart Governance (NISG), an organization set up by the Government of India and the National Association for Software and Services Companies, to promote e-governance excellence in India.

A report, *Project Management in e-Governance: Issues & Challenges in Navigating to the New Normal*, was released during the occasion. Policy makers and PMI executives participated in panel discussions. Below are excerpts of the discussions:

### Inaugural Session

MR. PIYUSH GUPTA, Senior General Manager, NISG

Mr. Gupta set the tone for the conference by stating the thrust areas for discussion through the day: dynamics of e-governance, the current environment for planning and executing e-governance initiatives, and using project management for better governance structure and accountability. “E-governance is not about technology, people or processes. It is about transparency in delivery. There is a strong thrust for the private sector to participate in e-governance initiatives and help in inclusive growth,” Mr. Gupta said.

MR. SANJIV MITTAL  
CEO, NISG

Mr. Mittal outlined the role of NISG as a consulting body to government organizations in implementing e-governance projects. “We have come a long way from the time when people resisted computerization of government departments because they feared computers would replace people. So far, we have got limited success, and are still on our way to achieving our goals,” said Mr. Mittal. E-governance will enable better flow of information so that the country can utilize its resources well, for example in foodgrain distribution.

MR. AJAY SAWHNEY  
IAS, President and CEO,  
National e-Governance Division,  
Department of Information Technology, Government of India

Mr. Sawhney said a public project in India is highly complex because of the sheer number of people a project caters to, its scale, and multiplicity of partners. “For example, the criminal tracking for the police department involves developing a common tool that can be used by all the state police forces. But a common police platform means being flexible to accommodate state policies as policing is a state subject,” he remarked. He stressed on the need to get the ecosystem in place for successful e-governance.

MR. MARK A. LANGLEY  
President and CEO, PMI

“There’s a difference between e-government and e-governance. It’s a matter of utilizing authority, accountability, transparency, and decision-making to move from e-government to e-governance,” said Mr. Langley. He added that e-governance has the ability to remove inefficiency and corruption in the system. He cited successful e-governance projects, like the 2009 Panama presidential election and Uruguay’s “one laptop per child program” by Laboratorio Tecnológico del Uruguay. Mr. Langley exemplified the power of emerging e-governance practices around the world.



Mr. Mark A. Langley inaugurating the “Project Management in e-Governance” conference. The others present are (from left) Mr. Brajesh C. Kaimal, Mr. Sanjiv Mittal, Mr. G. V. Subrahmanyam, Mr. Piyush Gupta, and Mr. Raj Kalady.

MR. G. V. SUBRAHMANYAM  
Partner, Government & Infrastructure, Grant Thornton India

Mr. Subrahmanyam presented some of the key findings of the project management in e-governance report for which Grant Thornton was the knowledge partner. He said the country needs strategic shifts and not incremental shifts in project planning and execution.

## Session 2: Dynamics of Project Management in e-Governance

MR. AJAY SAWHNEY, IAS

President & CEO, National e-Governance Division, Government of India

Mr. Ajay Sawhney focused on service outcomes of government projects emphasizing on implementation strategies for better Public Private Partnership (PPP) models. There is a need to design project plans and mechanisms to enable replication of successes. He said,

“There are very few national level successes but there are many local level success stories.” He spoke about bringing in enterprise architecture and interoperability for common services, like payment gateway and mobile services delivery.

MR. RAJEEV CHAWLA, IAS

Special secretary, Revenue Department (Bhoomi Urban Property Ownership Records), Government of India

Mr. Rajeev Chawla outlined the problems and challenges in e-governance project planning and management. “In Karnataka, the main challenge was to enter 100 crore data into a central system,” he said. There is an acute shortage of skilled human resources in implementing government projects. Mr. Chawla noted that the project implementer should break projects into smaller components and create project management units with resources from all stakeholding departments. This helps to closely monitor project successes in different stages.



Mr. Piyush Gupta welcoming the panelists (from left), Dr A. K. Nigam, Mr. Ajay Sawhney, Mr. Rajeev Chawla, and Mr. Mahabaleshwar Hegde.

MR. MAHABALESHWAR HEGDE

Furin Consultants

Mr. Mahabaleshwar Hegde talked about large-scale e-governance projects and several award-winning pilot projects. He emphasized the need to give visibility to projects that are successful implementation stories.

DR A. K. NIGAM

Adviser, Indian Railway Board

Dr. Nigam highlighted the social and behavioral influences on project teams and processes. He discussed the evolutionary stages of the Indian Railways. He noted that competition, customer expectations, technological advancements, and re-

source crunch have been the drivers of change. “The success of a project depends on its planning, organized approach towards execution, and monitoring progress at different stages,” he said.

## Session 3: Creating an Environment for High-Performance Project Management

DR. M. RAMACHANDRAN, IAS

Former Chairman, Delhi Metro

Dr. Ramachandran, who worked closely on the successful Delhi Metro project, discussed the road map used to complete the project within budget and time. He drew out the challenges faced, project planning, management methodologies, and how the budget was handled. He spoke about using a ‘countdown clock’ at work sites to keep the workforce motivated and concentrate on the task at hand.

Panelists (from left) Mr. Srinath Chakravarthy, Dr. M. Ramachandran, and Mr. Craig Killough. ▶



MR. CRAIG KILLOUGH  
Vice President, Organizational Markets, PMI

With his understanding of changing markets and the complexities involved, Mr. Killough gave a broad overview of changing trends. “Now, public program stakeholders demand transparency, engagement, speed, cost controls, and innovation.

Studies show that 84 percent of executives mention innovation as very important,” he said. He spoke about the different types of innovation: ambidextrous innovation, customer-first innovation, and open innovation.

MR. SRINATH CHAKRAVARTHY  
Vice President, NISG

Mr. Chakravarthy spoke at length about multisourcing and its impact on e-governance. “E-governance is seeing many high impact projects in both government-to-consumer and government-to-business domains. Earlier focus was

hardware-centric,” he said. Mr. Chakravarthy outlined the challenge areas, pointing out that inadequate project management is at the top of that list.

## Session 4: Project Management Governance and Accountability

MR. R. SRIKUMAR  
Vigilance Commissioner, Central Vigilance Commission



As a self-declared ‘cop’ on monitoring accountability, Mr. Srikumar introduced the session thus: “When you talk about project management in government, you are talking about something that does not exist. Project management or portfolio management is heavily needed in government to monitor accountability. This is a priority going forward.” He said all public projects above ₹ 2 crore will soon be online to enable better accountability and trackability of projects.

◀ *Panelists (from left) Mr. Parminder Jeet Singh, Mr. R. Srikumar, and Mr. S. Prabhu.*

MR. S. PRABHU  
Principal accountant general, Government of Karnataka

Mr. Prabhu began his presentation by talking about Chennai’s efficient water supply project. “The right use of e-governance to create transparency and efficiency ensures that the public private

partnership of Chennai’s water supply project is a success,” he said, adding, “The leaders have made a commitment so it is being monitored, controlled and action is taken.”

PARMINDER JEET SINGH  
Executive director, IT for Change

Mr. Singh said that problems in e-governance are a result of project management failure. “Stay focused on your roles. Don’t get distracted by the TLAs (Triple Letter Acronyms in IT techniques). If you ask the people in charge in Karnataka what

is the most powerful e-system is, they will say e-procurement. But this has not been a high priority initiative. Second generation computerization with a mind-set on people information systems is a necessity.”



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# Driving Value in Turbulent Times



*Mr. Mark A. Langley (left) moderating a session with Mr. Ricardo Triana (center) and Mr. Sanjay Manchanda.*

**Panel anchor:** Mr. Mark A. Langley, president and CEO, PMI

**Speakers:** Mr. Ricardo Triana, director, PMI Board

Mr. Sanjay Manchanda, director and Group Head, Microsoft India

**Mr. Langley:** We are seeing several new trends in project and program management during these turbulent times. There is a need to do more with less, budgets are tighter, and resources are limited. The average number of projects that a project manager handles has gone up from 4.5 in 2006 to 5.9 in 2010. The impact on the austerity mind-set is on training, budgets, and hiring. A positive trend during this downturn was that organizations did not cut down on innovation. Moreover, organizations realize that project management and innovation complement each other.

At the project level, there is need to manage change beyond schedule and budget. Project managers must be familiar with go-to-market strategies and strategic business decisions. The project manager must also possess soft skills, leadership qualities, negotiation skills, and conflict resolution capabilities.

**Mr. Manchanda:** Historically in an economic downturn, we had seen longer cycles of volatility. Now the highs and lows are more pronounced and the cycle much shorter. Because of the high level of unpredictability, the decisions of a project manager can have a far-reaching impact. Now the project manager needs to act with greater speed and at a more strategic level. The project manager needs to understand the company's business goals and align the project accordingly. He/she needs visibility to the entire business and that makes portfolio management critical. Besides process, time, and resources, the project manager needs collaboration tools.

**Mr. Triana:** Companies are today interested in portfolio management to get indicators of stability and manage risks better, and understand the complexities in the market. Forecasting was easy in simple projects with well-defined resources and a predictable outcome. Now we have moved from simple and complicated to complex projects. These projects that happen over different geographies, cultures, and time zones do not have predictable outcomes. Project teams today need to be prepared for change as the project progresses.

# Project Management Talent Building

## Panel anchor:

Mr. B.G. Jayaram, secretary, PMI Bangalore Chapter

## Speakers:

Mr. Vijay Prasad, director, PMI Board

Mr. Srinath Batni, member of the board, Infosys

Ms. Aruna A. Padmanabhan, director, HR Area South, India/South Asia, IBM India

Dr. Sanjeevan Bajaj, CEO, Federation of Indian Chamber of Commerce and Industry (FICCI) Quality Forum

Prof. Vasanthi Srinivasan, associate professor, Indian Institute of Management (IIM), Bangalore

**Mr. Jayaram:** What does nation-building involve? Large projects. And to build these large projects we need people. The question is: Are we as a nation building talent to manage these projects? Do we need talent management?

**Mr. Prasad:** Talent management has been taken very lightly in our country. The project manager is taken as a task manager. We need a transformation of skills.

**Mr. Batni:** Project management is about teamwork, an amalgamation of skills, experience, and attitude. The country needs stability to maintain growth, hence project management skills are a must.

**Prof. Srinivasan:** At the heart of the project manager is the ability to analyze. In a multi-project environment, the project manager needs the capability to synthesize the information and provide the right orientation to the project team.

**Ms. Padmanabhan:** Project management is a culture in IBM. We don't do it in just services but also in HR and finance. Our project management strengths have come to the fore in talent management, particularly in today's diversified environment.

**Dr. Bajaj:** Our projects involve a lot of stakeholder management. We have launched a program called "Credible India," taking off on the tourism slogan of "Incredible India." We are trying to develop the country's credibility as a business destination. Here we cannot talk about tools and methodologies, but about managing perceptions and expectations.

**Mr. Prasad:** Project management should be taught at a young age. For instance, in the alphabet, the letter 'C' earlier stood for cat and now computer. Then why should 'P' still be parrot and not project?

**Mr. Batni:** A project manager should now take responsibility for the business outcome of the project. He or she needs to manage skills, understand project risks, and know how to handle change.

**Prof. Srinivasan:** The project manager today needs training to do stakeholder management and understand the organization beyond the project. The right mix of skills is competence and temperament.

**Ms. Padmanabhan:** We can build talent in three ways: top-down through initiatives from the government, bottom-down with each one inculcating habits at home, and by academia by bridging the demand-supply gap that currently exists.

**Dr. Bajaj:** Developing talent alone will not serve the purpose. We also need to develop the environment where this pool can be absorbed and nurtured.



Panelists (from left) Mr. Vijay Prasad, Prof. Vasanthi Srinivasan, Dr. Sanjeevan Bajaj, Mr. B.G. Jayaram, Mr. Srinath Batni, and Ms. Aruna A. Padmanabhan.

# Development of National Assets

## Panel anchor:

Prof. Krishna Moorthy, dean, Institute of Project Management, Larsen & Toubro

## Speakers:

Col. (Retd.) H.S. Shankar, CEO, Alpha Design Technologies

Mr. M. Nageshwar Rao, project director, Indian Space Research Organisation (ISRO) Satellite Centre

Mr. Tanmoy Chakravarthy, vice president and head, India Govt. Business, Tata Consultancy Services

Mr. Rakesh Barik, director, Deloitte Consulting India

Mr. Jeremy Lambert, program director, Larsen & Toubro EPC

**Prof. Moorthy:** A country can create two types of assets—economic assets like telecom network and satellites, or social assets like hospitals and railways. These investments are long-term and massive and returns cannot be expected before 20–30 years.

**Mr. Shankar:** A crucial asset-building is in research and development. When I was with Bharat Electronics Ltd., we developed the Electronic Voting Machine that is now a national asset, a product of innovation and passion.



Panelists (from left) Mr. H.S. Shankar, Mr. Rakesh Barik, Mr. M. Nageshwar Rao, Prof. Krishna Moorthy, Mr. Tanmoy Chakravarthy, and Mr. Jeremy Lambert.

**Mr. Rao:** ISRO has built many national assets that enable us today to communicate across regions, and navigate ourselves anywhere in the world. We're second to none in the world today because of these projects.

**Mr. Barik:** Talent is the biggest asset for a nation. It's not the project per se but the people behind the projects.

**Mr. Lambert:** Two examples come to my mind of great asset creation—the Hong Kong Government's new airport project to accommodate the increase in air traffic and the UK Government's Channel Tunnel that connects UK with France. Both are fantastic projects but the first project gave economic and social benefits, and the second is considered uneconomical but it created a positive social impact. Mega projects have to create a balance between social and economic benefits.

**Prof. Moorthy:** The National Knowledge Network that the Government of India is setting up is a project that may not give economic benefits but has tremendous possibilities of creating social benefits.

**Mr. Chakravarthy:** The tsunami early warning system and the MCA 21 portal of the Ministry of Corporate Affairs are perfect examples of national assets with great social benefits. The first project has helped fishermen in improving their trade besides providing the country an early warning system against a natural disaster. In the second project, by cutting down the time to set up a business in India from 80 days to two hours, we have improved the country's rating among global investment destinations. For a project to be successful, the focus should be on the final outcome and not the inputs.

# PRE-CONFERENCE WORKSHOPS

## Agile Project Management: Learning Through Games

The simplest of ideas may be the hardest to execute. Cut down a large project into several subprojects and reduce your delivery cycle. Sounds wonderful, but not easy to implement. Mr. Jesse Fewell, PMP, CST, and managing director, RippleRock India, explained and demonstrated in a four-hour “crash course” how agile project management practices can resolve some of your time and cost concerns in projects.

“The biggest problem in following agile project management is often the project manager. Project managers with half-baked knowledge spread misinformation about how agile works. The definition of agile is inspirational but it’s important to understand how it works. To do business in the real world, you need both agile and the traditional approach,” said Mr. Fewell.

Probably the most misunderstood aspect about agile is regarding planning. “Project managers say they are agile and don’t need to plan. That’s incorrect. Agile involves more planning but the nature of planning is different. Instead of detailed planning at the start of a project, an agile project manager prepares a wireframe that forms the basis of the understanding. As the project manager learns more about the project, he or she

adds more details with feedback from the customer. In this approach, the project manager can see and manage risks as they unfold. It means the project now involves many smaller cycles of requirement-architecture-development-testing as the project progresses,” Mr. Fewell explained.

The games that followed gave participants a clearer idea of the concepts. One such game involved passing a batch of 20 coins along a desk with six participants. The coins represented a project and each participant a stage in the project life cycle. By reducing the batch size and changing activity schedules, like sequencing, the total project time changed. “Waiting is the biggest reason for delay. Instead of waiting for one activity to get over and then begin the next, process sequencing helps reduce time,” he said.

In the next activity, through a game of making paper planes, participants learned about the need to estimate correctly and re-baseline projects based on variations in the estimate after iterations. By the end of four hours, project managers had picked up some handy tips on applying agile practices to their projects, besides brushing up their skills at paper plane making!

## Orthogonal Arrays: Changing the Face of Business Systems Testing

“Orthogonal arrays” may sound foreign to even an experienced practitioner, or at the very least, daunting and highly technical. In a way, it is both. The origins of this statistical tool lie with Swiss mathematician, Leonhard Euler. However, after Mr. Kedar Phadke breaks it down, even a novice project manager can get a basic understanding of its functions. Mr. Phadke, vice president, Phadke Associates, is a leading expert on orthogonal arrays, a statistical way of testing through pair-wise interactions. In a four-hour workshop, he leveled the playing field on the subject to illustrate its benefits.

“Orthogonal array testing reduces cost while maintaining efficiency of testing; it’s functionally sound, provides agile responses to requirement changes and ensures consistency of test planning,” said Mr. Phadke. Its applications are used in many industries. “Our clients in IT, defense and aerospace, financial services, automotive and manufacturing use it,” he added.

Although most of the participants had not used orthogonal

array testing before, several hands-on exercises had everyone actively participate. From deriving the correct number of test cases from different variables and combinations using “levels” and “factors,” and discussing practical considerations on how to retain “orthogonality,” Mr. Phadke effectively conveyed that orthogonal array testing improves data analysis.

He used examples of tangible, real-world applications to explain the benefits. “Imagine a Rubik’s cube is a body of water and you have to protect it from all sides from enemy ships, how many mines does it require?” His visual aids showed the participants how orthogonal array formulations kept the number of “mines” low while ensuring covering all faces. He also discussed the value-adding applications his firm had developed for the weapons fire detection system division of the U.S. military.

“The use of orthogonal arrays does not just increase profit, but also improve productivity, which leads to nation-building,” he remarked.

# The Role of Space Exploration in Nation-Building

*Dr. B.N. Suresh, Vikram Sarabhai distinguished professor, Indian Space Research Organisation (ISRO)*

India's space program has withstood the test of time to blossom into one of the world's most successful, top-tier space programs. Dr. B.N. Suresh spoke about how the ongoing investments in the cutting-edge space program give India a great technological advantage in nation-building.

"Space technology helps determine a lot of critical national issues, like the rate of depletion of natural resources and climatic change. Application-driven, well-structured space projects like communication networks, remote sensing, meteorology navigation, and disaster management can be better handled through space technology. Also, important national interest areas such as food and water supply, the environment, and ecosystems that affect society can be monitored," Dr. Suresh said.

He went on to present a demonstration of electro-optical imaging systems, a "location and tracking tool" that can pinpoint areas in varying topographies across India from space. It enables macro-level monitoring of national assets and progress of programs. "Applying space technology produces visible impacts. For example, cropping intensity has gone up 30 percent and crop yield has increased 24 percent, resulting in a 30 percent increase in the household income of farmers. We are improving quality of life through space exploration," he said.

"Space is expensive business, but space programs have the ability to solve many problems of society," Dr. Suresh concluded.

# Light Combat Helicopter (LCH) for the Indian Air Force and Indian Army by Hindustan Aeronautics Limited (HAL)

*Dr. Prasad Sampath, general manager, Rotary Wing Research and Design Centre, HAL*

**Key project requirements:** The LCH has to work as an air defense vehicle against unmanned aerial vehicles and slow-moving vehicles. It should be able to destroy enemy air defense operations, provide escort service for heli-borne operations, carry out air offensives against urban warfare, support combat operations, support search and rescue operations, have antitank capabilities, stealth capabilities, survivability, crash worthiness, high maneuverability, and high reliability. It should be able to carry missiles. It should support and provide advanced technology, like an integrated dynamic system, anti-resonance vibration, glass cockpit, and data links to other vehicles.

**Project management in LCH:** The design process, which involved thousands of drawings, was done through sequencing. There was a master schedule and several subschedules to accommodate the interplay of paths in the design and development stages. There was a dedicated team who shared resources with other teams in

the organization. Designing was done in 3-D that helped the team assemble parts more easily later. Upgrading of software tools has been a continuous process. Key infrastructure included a testing facility. Manufacturing of parts was outsourced. A part of the design process was outsourced to the Indian Institute of Science (IISc) and Indian Institutes of Technology (IIT), Bombay and Kanpur. It involved a collaborative effort and concurrent engineering to save time and avoid duplication of work. An elaborate review mechanism was set up.

**Iterations at the testing phase:** Some features were modified or removed to minimize drag. Design of the armament carrier changed to reduce weight of the vehicle. Cockpit ergonomics changed after pilot reviews. New requirement of gun turret, instead of a fixed gun, accommodated.

**Current status:** The first flight of LCH conducted in March 2010. Flight trials are on.

## Delhi Terminal 3

*Mr. Sujit Kumar Nag, Vice President, Terminal3 (T3), Engineering & Projects, Delhi International Airport Ltd.*

**Key project requirements:** The need for a larger, more efficient airport terminal and outlying airport areas at Delhi's Indira Gandhi International (IGI) Airport to handle increasing domestic and international passenger traffic while providing state-of-the-art airport amenities and functions to travelers.

**Design and development:** The Public Private Partnership (PPP) endeavor was to be completed in phases. Phase IA: new runways and new taxiways by February 2009. Phase IB: modification of domestic terminal, new taxiways, new T3 terminal building, land works, and main aprons by March 2010. In staying in line with "construct as designed, commission as constructed," it was imperative to organize the design management, (480 designers from L&T and 600 other contracted designers) and develop a contractor's works package and a subcontractor's works package. Additionally, to support the overall project the following were planned and developed on site: roads (22 km); offices (project, construction, and site offices); camps to accommodate 27,000 workers; a 10-bed hospital, sewage treatment plant; and laydown areas (laboratory, material laydown).

**Project management in Delhi T3:** Initiated project on the Operation Management Development Agreement (OMDA) for precise project and budget planning. Key targets, project schedule, contractor and subcontractor management, stakeholder management, construction management were all part of the OMDA process. Diligently adopted the building information modeling approach which allows: encapsulation of entire life cycle of project, definitive pre-construction planning, elimination of conflicts during construction, accurate fabrication and installation, and the ability to deliver ahead of schedule. Moreover, the planning and practice of proper construction safety and quality minimized any additional cost.

**The outcome:** Delhi's IGI Airport T3, a two-level building with an energy conservation management system in effect, is the only airport in the world with an ISO 50,000 certification. Delhi T3 is also the largest public building constructed in India since Independence. The terminal can now handle over 34 million passengers annually.

## AWARDS



*Mr. Mark A. Langley (left) presenting the PMI India Project of the Year 2011 Award to Gas Authority of India.*



*Mr. Vijay Prasad (left) presenting the PMI India Project of the Year 2011 runner-up award to Cairn Energy India.*



*Mr. Ricardo Triana (left) presenting the PMI India Award for Contribution to the Community 2011 to the team from Infosys' Sneham Shiksha Trust (Chennai).*



Conference delegates with other dignitaries.

**LEIGH MOYLE**

Past President, PMI Sydney Chapter

"I have come for all the three PMI India National Conferences. This is an opportunity for me to show support to my colleagues in India and meet people."

**BADRINATH RAMAKRISHNAN**

Project Manager, Societe Generale

"This is my first PMI conference. I'm a follower of PMI methodology and the conference provides me an opportunity to update my knowledge and find out what's going on in the industry."

**VASANTHA KANDIKUPPA**

Program Manager, Yahoo

"What drew me to the conference were the keynote speakers. These sessions give you food for thought. You also realize that you're not the only one facing challenges in a project."

**SABITA PRASAD**

Behavior Specialist, SABCONS

"This is the second time that we presented a paper in a PMI India National Conference. Our session on the effects of stress at work was very well-received."

**ZOYA NAYARA FATEHALLY**

Technical Manager, Alcatel-Lucent

"Dr. Abdul Kalam is one of my favorite personalities and I came here to draw inspiration from his talk and that of Mr. Narayana Murthy. I feel I am recharged now."

**SMITHA JACOB**

Project Manager, APC by Schneider Electric

"This is the second time that I've attended the conference. I found all the sessions highly informative."

**DR. DEVENDRA VERMA**

Deputy Director General

Ministry of Statistics and Program Implementation

"This is a good forum for us to interact with people. I enjoyed Dr. Abdul Kalam's inspiring talk. PMI has been forthcoming with technical support to the ministry. I'm happy to be part of the conference."

**ROHAN DAVID**

Senior Business Analyst

Life Technologies, Australia

"I make it a point to attend one PMI Congress a year. I spoke on Passion in Projects in 2009 in Australia. This year's conference in India has been great."

**ANURADHA MUKHEDKAR**

Commissioner of Pensions

Government of Madhya Pradesh

"The e-governance conference has been a good start in throwing up problem areas. The next conference should be longer."

**SANTOSH VITHAL DAWARE**

Deputy Accountant General, Karnataka

"We need to keep exploring the definition of e-governance in the next conference so we can integrate better. This conference really introduced the topic well."

**ASIF MASOOD K.P.**

Executive Department of Information Technology

Government of Lakshadweep

"This is my first PMI India conference. The sessions have helped me understand how to handle a crisis with limited resources. I'm now keen on pursuing project management training."

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