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and more with
Project Management **Fun-Das**™
Project Management Quotes
& Agile Poster

## VISION

"To be recognized as the organization of choice by evangelizing Project Management".

## MISSION

Evangelize project Management across industry, academia, community and government.

Provide a forum for project management professionals to promote the principles and ethical standards of PMI.

Promote networking among professionals, sharing project experiences and best practices, imparting training and enabling PMI certifications.

Provide development of leadership skills among its volunteer leaders, members and society at large, and thereby enhancing quality of life.

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# From President's Desk

*Dear Project Management Professionals,*

**It is my great privilege to hand over this Mega Issue of Prakalp to you all!!! .**

This edition is dedicated to the theme "Project management Indispensable for Vision India", which is also PMI's National Conference 2016 theme.

**NITI (National Institution for Transforming India) Aayog** has prepared a 15-years' vision India document. The new long-term vision plan focuses on areas like infrastructure, commerce, education and health. The vision document aims to target inclusive development and eradicate poverty in India.

Government of India has started various initiatives to boost the economy and realize India's vision:

- ☑ Make in India- To boost the manufacturing leading to large number of employment opportunities
- ☑ Digital India- To connect to outreach to various parts of India to provide services across the nation
- ☑ Clean India- To provide healthy and clean cities and villages
- ☑ Skill India –To train more than 40 crores in different skills enhancing employment
- ☑ Startup India - To promoting bank financing for start-up ventures to boost entrepreneurship and encourage startups with jobs creation.
- ☑ Stand up India - To support entrepreneurship among women and SC & ST communities.
- ☑ Smart cities - To improve quality of life by using urban informatics and technology to improve the efficiency of services and meet residents' needs.
- ☑ Industrial Corridors- A package of infrastructure spending to stimulate industrial development in a specific geographical area.
- ☑ Many more such initiatives……

Use of project management processes and best practices will enable the organizations to deliver the project objectives with better planning, execution and control of projects.

The fundamental philosophy of managing any piece of work "within time-lines and cost-lines" would result in efficiency and effectiveness in accomplishing work with good quality. The benefits emanating by adopting principles of project management will be enormous and will not be limited only to timely completion of projects within costs budgets, but with resources optimized, with quality and risk properly managed, and many more as well!!

So let us be the part of this national movement and instill paradigm shift in the way the projects are managed to achieve "Vision India" goals and demonstrate that project managers can "Make a difference" to various initiatives of Government of India.

Looking forward to see you at the national conference!!!

With Warm regards,

**D.Y. Pathak, M Sc., MCA, MBA, PfMP, PMP, CISA, CAIIB**
Conference Chair & President-Project Management Institute (PMI), Mumbai Chapter
president@pmimumbaichapter.org

# Project Management Indispensable for Vision India

COVER STORY

**Pranav Vashi**

### Introduction

The PMO's role is very critical as several projects under different vertical may be inter-related and the completion of one is mutually dependent on other. For example, XYZ port is developing a world class SEZ at the existing port to harness the geographical advantages. A dedicated freight corridor (DFC) is being implemented connecting the nation's ports and industrial hubs which are scheduled to connect the XYZ port with other manufacturing zones. These two projects are totally distinct and being managed by separate entities, however their completion without co-ordination of each other will lead to major issues.



Total planned investment: INR56,316.9 billion

| Sector | Total planned investment in 12th Plan (INR billion) | Construction opportunity* |
|---|---|---|
| Power | 18,202 | 6,917 |
| Roads and Bridges | 9,694 | 6,301 |
| Telecommunications | 9,439 | 4,070 |
| Railways | 5,218 | 3,783 |
| Irrigation and Watershed | 5,044 | 1,683 |
| Water supply and Sanitation | 2,550 | 989 |
| Ports and Inland Water Transport | 1,978 | 968 |
| Oil & Gas | 1,489 | 944 |
| Mass Rapid Transit System | 1,242 | 372 |
| Airports | 877 | 368 |
| Storage | 584 | 292 |

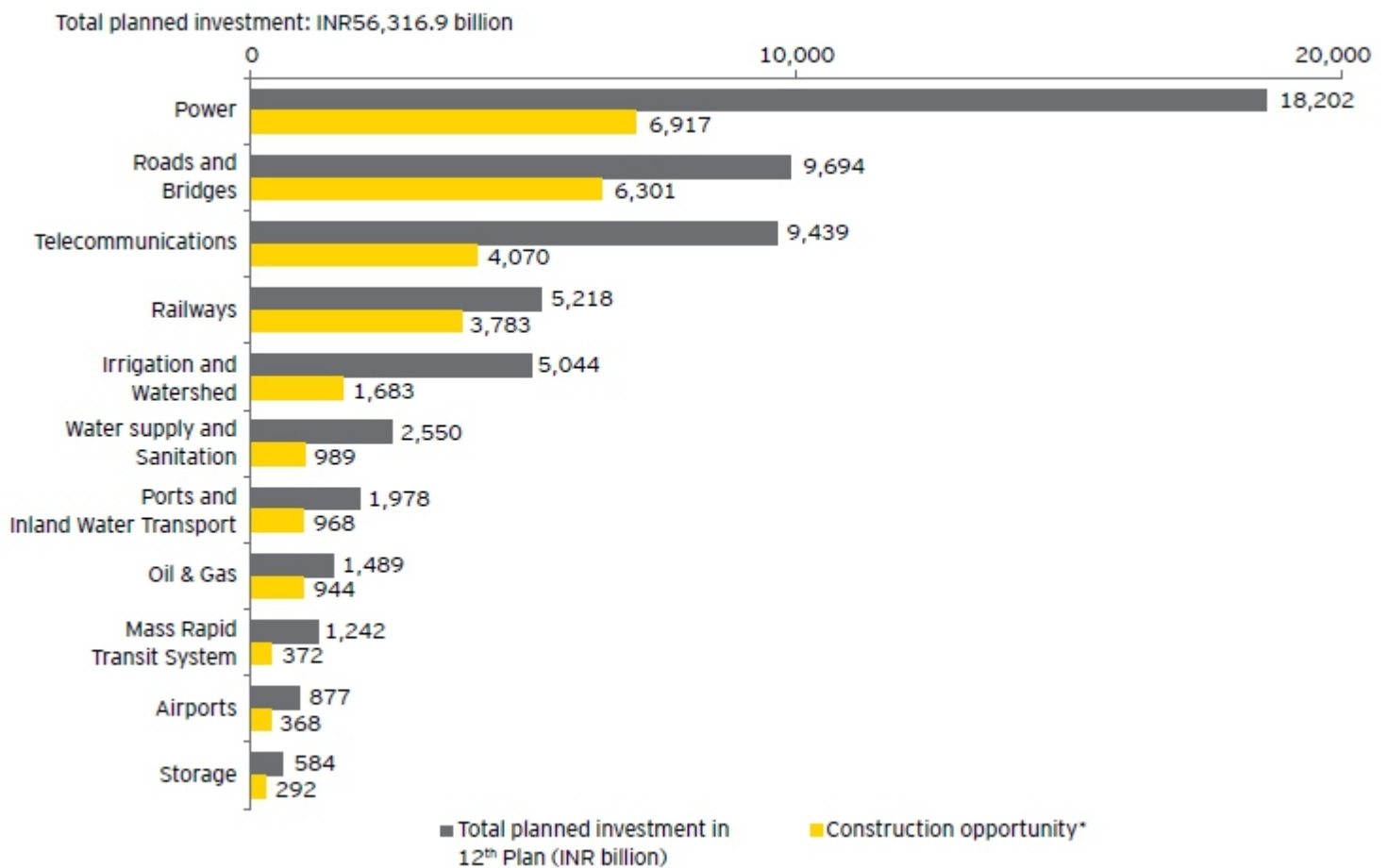Table - 1                                                                 Source – E&Y

These figures indicate that there are tremendous opportunities in India which will culminate into several hundred projects with mega volumes and complexity. (Not to mention the fact that the 13th Five year plan is expected to be even more ambitious).By fructifying these projects, India aspires to be a nation which provides proper infrastructure, 24x7 electricity, cleaner environment, digital connectivity, uninterrupted water supply,sanitation facilities, urban-rural balance and connectivity to name a few among many other important things. This is an ambitious vision set forth by the Government of India and it calls for immense dedication, meticulous planning and execution, excellent co-ordination between all the stake holders (across the nation and the globe), diligent monitoring by the GOI, state governments and all concerned authorities. But, the foremost important thing to make this mission a success is understanding the value of these projects / endeavors, which collectively form the future of our country and fellow beings – VISION INDIA.
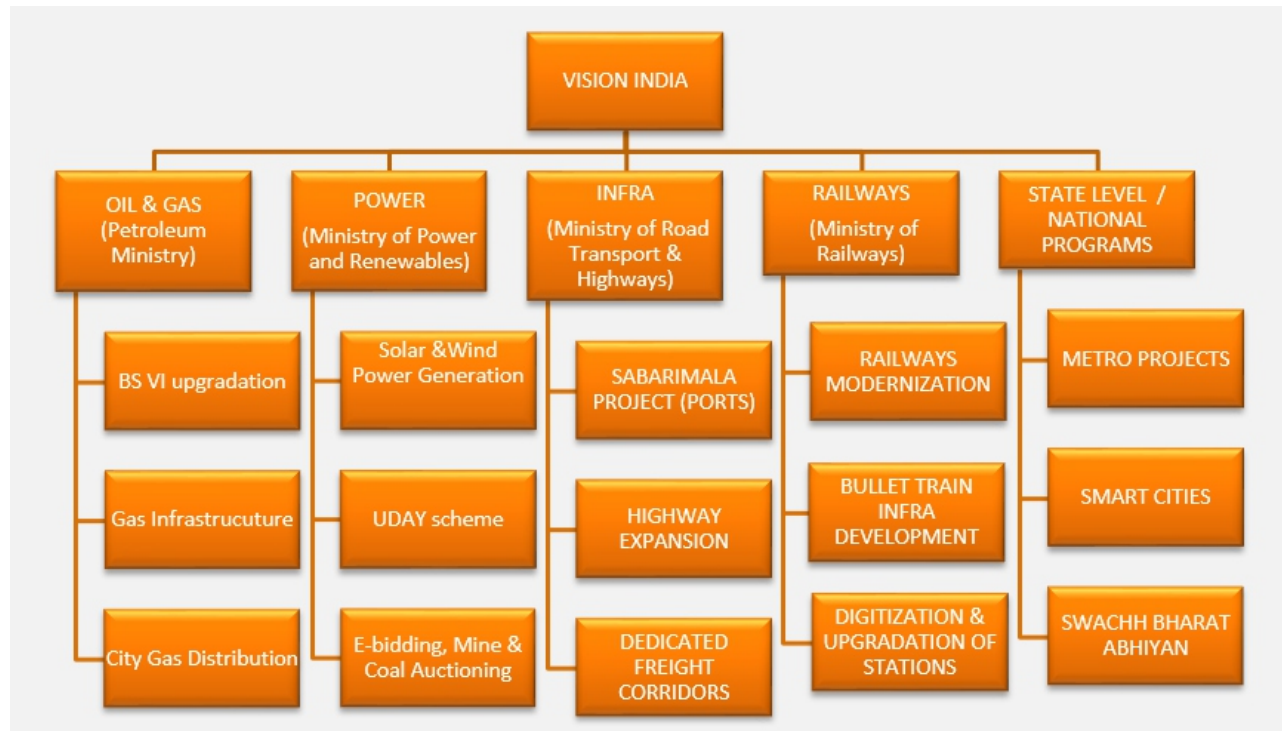
THE VISION INDIA mission is a classic example of Project Program Management, wherein there are several portfolios like Oil and Gas, Railway, Power, Infrastructure (Ports, Highways and Roads) and Smart cities. These in turn consist of few hundred projects sprawling across the length and breadth of the country and managed by respective ministries (project management teams) and monitored by the PMO (Prime Minister's Office)!!! Just like any project, the concerned ministries, statutory bodies, state governments and regulatory bodies are the stakeholders in this grand VISION INDIA project. We can assertively state that the VISION INDIA mission is indeed an excellent example of a Project / Portfolio / Program Management and hence it is indispensable to apply the best Project Management practices to sail through this mission successfully and bring it to fruition.

Historically, India's performance has been poor when it comes to effective Project Management. This is largely attributed to the business environment, delay in clearances and other geo-political reasons. Nevertheless, it has been observed that even without these constraints coming into play; the projects do suffer from considerable delay.

| Sector | Total no. of projects under monitoring | Projects with time overruns | | Projects with cost overruns | | | |
|---|---|---|---|---|---|---|---|
| | | No. of projects with time overruns | Range of time overrun (in months) | No. of projects with cost overruns | Latest approved cost (INR billion) | Anticipated cost (INR billion) | Cost overruns |
| Railways | 288 | 36 | 3-246 | 133 | 732.9 | 1,704.2 | 132.5% |
| Roads and highways | 136 | 83 | 2-120 | 8 | 29.9 | 46.5 | 55.5% |
| Civil Aviation | 8 | 3 | 7-71 | 2 | 26.6 | 29.6 | 11.3% |
| Shipping and Ports | 19 | 1 | 5-51 | 6 | 46.1 | 59.4 | 28.7% |
| Power | 102 | 60 | 0-113 | 6 | 186.8 | 223.8 | 19.8% |

Table - 2                                                    Source – E&Y

Reasons for project time overruns across project lifecycle

| Stages | External issues | Internal issues |
|---|---|---|
| Pre-planning | • Delay in regulatory approvals<br>• Unavailability/delayed availability of funds<br>• Land/site handover | • Lack of project managers/commercial managers with adequate planning skills<br>• Lack of Liasioning Officer/Planning Engineer<br>• Lack of cost managers<br>• Lack of safety officers/enviornmental practitioners |
| Planning and design | • Lack of strong R&R policies<br>• Ineffective procurement planning<br>• Design/scope change<br>• Delay in regulatory approvals<br>• Delay in decision making | • Lack of planning engineer/commercial managers<br>• Lack of liasion officer or planning engineer<br>• Lack of MEP engineers |
| Execution and monitoring | • Weak/ineffective project planning & monitoring<br>• Contractual disputes<br>• Unavailability/delayed availabiilty of funds<br>• Lack of strong R&R policies<br>• Delay land/site handover | • Lack of project managers/site managers/planning engineers/quantity supervisors<br>• Lack of awareness modern equipment & technology<br>• Lack of liasion officer and commercial officers |
| Closure and handover | • Pre-commissioning teething troubles<br>• Contractual disputes | • Lack of commissioning, project and site managers, audit and total quality management professionals |

Table - 3                                                                       Source – PMI/KPMG

It can be seen from Table-3 that lack of project / planning managers with adequate skills is one of the common and consistent reasons attributed to the delay of projects. This is a serious issue for a nation aspiring to become the fastest growing economy. The figures for cost overruns in Table-2 are staggering. This huge capital (money, workforce and equipment bank) could have been utilized for developing several other projects or upgrading the existing projects or for any other value adding initiative. These overruns could have been substantially scaled down, provided there was efficient project management team employed on these projects. Project Management is indeed indispensable for VISION INDIA.

**Delivering Excellence through Project Management**
**Given the background, complexities and sheer magnitude of the projects to be undertaken for achieving VISION INDIA, it is inevitable to develop a robust, dynamic and self-sufficient project management system to manage the task at hand.**

Needless to say, all these projects across varied industries will last for a considerable time (5-10 years), which will require a dedicated and closely knit project team effort. This is where lies the daunting task of selecting a team / members based on the various parameters like portfolio / geography / industry to manage and make sure that these endeavors see the end of the tunnel within the given time-frame.

Furthermore, to monitor and control the progress on these portfolios, a centralized team with seamless access / control over all the portfolios and projects is essential. Currently, this formidable task is being done by the Prime Minister's Office (PMO). The PMO should appoint and provide full responsibility to respective ministries / state PMO for completion of projects under their purview at state / ministry level. Finally, there should be project team members / offices deployed full time at the project location or executing agency location for ground level understanding and providing real time feedback to the state and PMO. (See Fig-1). The PMO should conduct monthly review of all projects with state PMOs to ensure sincerity from top to bottom of the project team and all stake holders.

The PMO's role is very critical as several projects under different vertical may be inter-related and the completion of one is mutually dependent on other. For example, XYZ port is developing a world class SEZ at the existing port to harness the geographical advantages. A dedicated freight corridor (DFC) is being implemented connecting the nation's ports and industrial hubs which are scheduled to connect the XYZ port with other manufacturing zones. These two projects are totally distinct and being managed by separate entities, however their completion without co-ordination of each other will lead to major issues. If the port is completed without the completion of DFC, the will not get the required reach and the potential businesses depending on this port will suffer losses.
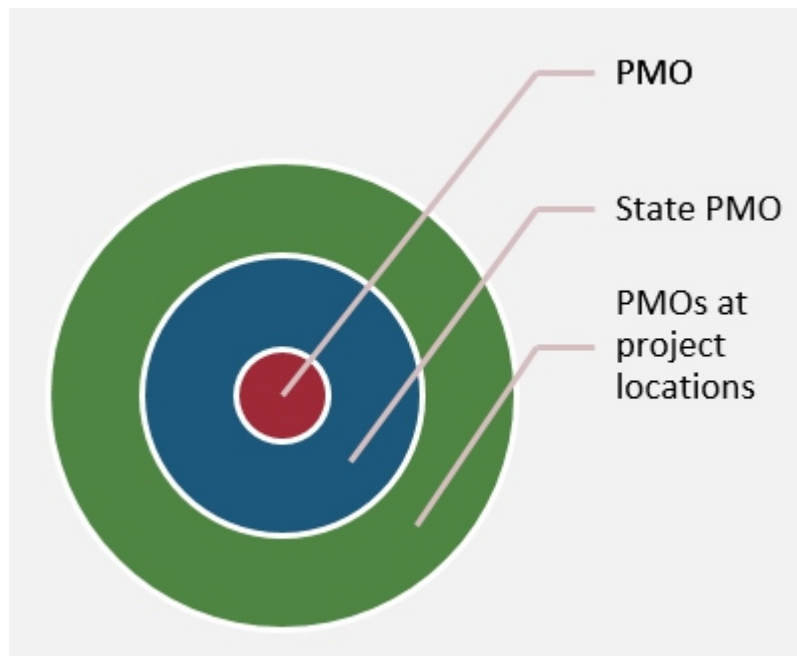


**Fig-1 PMO hierarchy structure**

The PMO manages these projects from the top level to ensure that inter-dependent projects get the required impetus. Hence, the PMO is the most vital player to ensure success in this mission.

Statistically, it has been proved that 40% projects are delayed on account of getting clearances like land, forest, environment, railway etc. Hence, it is imperative to eliminate separate window approval and creating a single window for clearances and its co-ordination is need of the hour. Hence, the PMO must regularize the process of getting approvals / clearances from various ministries / departments as these leads to huge delays and uncertainty in the project kicking-off. All the clearances for projects should be conducted through single window for multiple industries so that valuable time and resources are saved.

Risk Management is an important aspect on projects with national importance as the aftermaths of any risk fructifying can be consequential for the project and its stakeholders. To cover such risks and ensure commitment to the project, the PMO should seek guarantees from project developers with fund release terms related to pre-defined project milestones. This is a very unique initiative and has been recently practiced by one the ministries prior to allocating clearances and issuing green signal to kick start the project. Suppliers defaulting on project deliveries or found violating the quality of their supplies are black listed / holiday listed leading to significant implications. This has gone a long way in deterring defaulters and is hugely improving the project procurement management.

**Emerging trends**
Over the past few years, there has been a change in the way projects are executed in India owing to the past experiences under various sectors. There is a shift from EPC mode to PMC (Project Management Consultancy) / EPCM (Engineering, Procurement and Construction Management) mode wherein the EPCM contractor completes the basic engineering, cost estimation and finalization of

major packages. The EPC contractor is then hired to complete what is called the residual (detailed) engineering, procurement and construction under the supervision of the EPCM contractor. The responsibility of the timely completion within the budget lies with both EPCM and EPC contractor but the EPCM has a major role to play as the engineering consultant. This approach helps in checking the time delays and avoids any ambiguities in the advanced stages of project due to the presence of EPCM contractor from the beginning of the project. This approach is being applied in all government projects wherein the PMC / EPCM contractor is responsible for the technical and project management aspects of the project. Lot of international companies of repute along with indigenous organizations are now focusing strongly on their PMC capabilities. This is a welcome change for the industry striving to execute projects efficiently.

With the advent of technology, there have been significant improvements in the quality of project management techniques applied to projects. Sophisticated Project Management tools for planning and monitoring are available with provisions to link the resources with project deliverables, making it possible to accurately quantify the efforts and delay in the tasks. Document Management has also come a long way with several online and offline modules available to manage documents professionally. Communication Management has emerged with exciting new features like Video conferencing, which is being used extensively to conduct review meetings across borders. The PMO can effectively use this tool to conduct meeting with several project teams at a single time to appraise project status, resolve conflicts and ensure that all the project teams are at the same platform in deciding priority and execution of work.

The author was part of a mega project where the project members were from several countries and nationalities, working round the clock on a very tight schedule. To synchronize the work in various shifts, we resorted to creating a group on social media messaging service (communication management) to share photographs and real time updates on issues, progress, achievements and any unforeseen hiccups by any member of the group. This made it possible for a team member to reach the entire team (whom he might not meet / find difficult to communicate) round the clock and inform them about the project updates. Each function had an assigned in-charge who was responsible to ensure that the information shared on the group was utilized and required action taken to achieve the result.

Project managers across the horizon are also understanding the importance of sharing their experiences and knowledge through communities and forums at organizational, national and international level. This is helping project managers to understand problems and solutions from a 360 degree perspective, resulting into innovative practices being developed and breaking away from the traditional methods applied for a particular function / industry.

Project management is continually evolving with best practices and is proving to be the most vital factor between a project's success and failure. The statistics show that projects which are not handled with proper project management team and application of project management tools suffers considerable delays and huge cost over-runs owing to the magnitude and complexity of the factors like stakeholders, data management, risks involved, planning and monitoring, scheduling and procurement management to name a few. India cannot afford to thwart the VISION INDIA on account of poor project management of such a mammoth and critical mission for the future of the nation.

**About Author**
**Pranav Vashi** is a Mechanical engineer and a PMI certified PMP with nearly 10 years of work-experience across power, metals and petrochemical industry. He has diverse experience of working with corporations like Siemens and Essar Projects in various roles as a Project coordinator, Planner, Project Manager along with role in business development team. Having worked in engineering consultancy as well as the EPC domain, he is a strong propagator of investing in Project Management tools on a larger scale and promoting Project Management as a vital component for industry's success. He has worked on several national and international projects with cross-cultural teams and witnessed that the issues concerning projects are not local but common and need a deeper understanding and focus through best project management practices.

# Packaging Leadership to deliver the Vision

I was supposed to go to Kashmir for a trek. However because of the ground situation in Kashmir our group decided to change the location to Himachal Pradesh. In a few hours i will be packing my bags to take a morning flight as per our plan. We have a packing checklist which guides us so that we can execute our plan in an environment where changes are rapid and subtle. Whether it is small excursion of sort or a large project, some of the human qualities that we need to succeed would be definitely common.

Would adaptability, perseverance, team work and inner strength which are some of the key ingredients for success of the trek come handy to PM?

**Rakesh Gupta**

Ordinarily we associate vision with sense perception of sight. From this perspective we all would be visionary. Literally we may assume so but is that really so?

This brings me to a quote which makes our mind attempts to delve deeper into a realm beyond the sense perceptions through which we seem entrapped in, so to say.

"The human heart feels things the eyes cannot see, and knows what the mind cannot understand" - Robert Valett

Can we successfully manage in the corporate world relying on our heart would be the question that a rationalist would ask? So what do you say?

Some say why not dare to follow your heart? That's the way to go as more and more people are saying so. As some may say you are not using it and hence have fear and do not trust your own hidden abilities. Like a child you will learn when you start working with your gut and eventually develop a stronger intuitive capability beyond the limitations of sense perceptions.

Rationalist would frown at the proposal and send shivers down the spine of such a loner in the corporate world and wonder would it be sane to take decisions based on gut or intuition in 21st century where we learn to take well informed decisions backed by data.

So what is the solution? What is the really good approach as these two approaches seem poles apart?

**This brings me to another quote**

"The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function". - F. Scott Fitzgerald

How well do we perform under a stressful situation? Can we see clearly on a cloudy day? How do we navigate on such a day?

This brings me to the day when I was on a sea plane towards the end of the monsoon season in Mumbai. Because of the rainy weather the flight luckily did take off despite considerable delay like the Indian GST which is likely to take off soon. There are a lot of hopes that are rekindled once the journey begins. We were up in sky and we meet with a lot of clouds. I was sitting just behind the pilot's seat and could not help notice the pilots chatting and leveraging each other's experience to navigate. Obviously data was visible on their dashboards and there was vision of the field ahead of them which was packed with a lot of clouds. They successfully navigated their way with minimum turbulence and we have a glorious landing in a beautiful lake with a roar of cheer from the passengers. It was a spontaneous celebration.

What a celebration it was. There was flow of pure joy, something that flows directly from the heart, connect somewhere deep within. Do not be fooled when you see tears in someone's eyes as what we perceive with our senses is not the same as what we perceive with our hearts.

Each one of us had different aspirations and certain events in life culminated in fulfillment of the aspirations of many individuals. When we have the foresight to see what these aspirations are, plan to achieve whatever it takes to make it happen, and eventually make it happen, there is a sense of fulfillment like there never has been. Impact can be enormous and passion comes naturally to such a visionary who can strive selflessly for what money can't buy.

Have you seen such a bundle of infinite energy who works tirelessly and celebrating as there was no tomorrow? Why is that the joy which was in abundance when we were children seems to be shallow and far in between. Is the fountain of joy like a depleted oil well? Why does it happen that after gathering all the knowledge and experience that we have gathered to enrich our lives we have become less joyful?

We keep learning and taking courses to be relevant, to give meaning to what we do, to be valuable and ultimately reclaim the joy.

Sometimes the grind gets too much and then we take a sabbatical. Some turn entrepreneurs.

**What shackles us?**

It is said that "Mind can be your best friend as well as your worst enemy"

We learn the ways to deal technically, tactically, functionally, politically, culturally...........

If we have a make a tool, we look at the material we are going to use, then give it the shape and then polish the edges to make it sharp.

By sharpening we are improving its efficiency.

**This bring me to another famous quote**

"If Your Only Tool Is a Hammer Then Every Problem Looks Like a Nail" -Abraham Maslow

Are we not learning to deal with the world outside? Sure we are.

What we don't sometimes ask is, is this the only aspect of life that we should be looking at?

A leader looks at life holistically and expands his vision.

Its a journey where hidden potentials germinates and starts flowering.

The fragrance of the flower not only attracts the bees but also cast a spell on the beholders of its beauty.

A charisma, a joyous personality that is full of energy and enthuses the followers.

Sometimes it grows into a tree under that nurtures many a being under its shades.

Have we learned to deal with what shackles us?

Everything is mind made, our world exist in our minds.

Mind is very subtle, how to shape it to make it our best friend?

For now, i leave you with this question.

I hope you love reading it as much as i enjoyed writing this article.

■

## Project Management FUN-DAS™
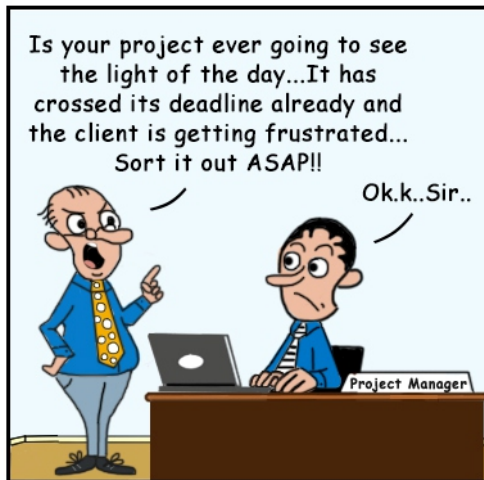


by Project Management Institutee

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## PMP CE Student Speaks

**Proficient in all five areas (5Ps)**
*- Imran Vohra (Student of Ahmedabad Branch)*
I am happy to let you know that I have earned PMP certification day before yesterday. The icing on cake was getting 5Ps. I would like to thank all the faculties for their excellent training and support and even after training.
I am really thankful to PMI Mumbai Chapter for arranging training in Ahmedabad. It was really nice experience to get trained by PMI Mumbai Chapter.

# Agile Poster for Project Managers

Download and Print



Image courtesy : Mohammed Abuzar Ansari

# Emotional Intelligence and Project Leadership

Marita Nazareth is a Soft Skills facilitator who has done over 1,000 workshops over the last 30 years on Emotional Intelligence, Interpersonal skills, Creativity, Assertiveness, Leadership etc. with Corporates, NGOs and Associations like Bombay Management Association and PMI, locally and internationally.

She has also written articles on the Right Brain and other learning related topics in Education Times.

Marita Nazareth

I once asked a group of Management students to describe the kind of "ideal team leader" when working on a project. They came up with the following: somebody who is a great listener, a person who builds trust in their team, someone who can handle difficult situations with composure, creates enthusiasm among team members, nurtures the talents of people …. The list went on…

These are typical qualities that describe a person with high Emotional Intelligence. (EI)

**What is Emotional Intelligence? (EI)**
It is the capacity to be aware of, control, and express one's emotions and to handle interpersonal relationships judiciously and empathetically.

**Importance of the subject:**
Daniel Goleman who first popularized the term, explains: "It's not that IQ and technical skills are irrelevant. They do matter, but…they are the entry-level requirements for executive positions….Without it (EI), a person can have the best training in the world, an incisive, analytical mind, and an endless supply of smart ideas, but he still won't make a great leader."

Goleman outlines the five main elements of Emotional Intelligence as:
1. Self-awareness
2. Self-regulation
3. Motivation
4. Empathy
5. Social skills

**1. Self-awareness:** "Know thyself" is clearly the first step to any transformation. Self -awareness means having a deep understanding of one's emotions, strengths, weaknesses, needs, and drives. People with strong self-awareness are honest - with themselves. It involves knowing what you are feeling at each point in time.

Few suggestions to improve your levels of self-awareness:

**Keep a journal:** It would be worthwhile to record your thoughts, feelings and what "events" trigger these. Thoughts create feelings.

It might be useful to have a record of:
  a. Typical triggers: (situations or people that cause negative feelings )
  b. Thoughts you have after this trigger
  c. Resultant feelings

Once you have recorded this data, you will be able to identify a pattern.

**Slow down:** I ask people seeking help with anger or strong emotions, to press a "pause" button. If you actually press your thumb on your hand, it's a fun way to get into a better state before responding to another person, whose behavior or communication may be unacceptable to you. Another easy way to slow down is to listen to your breathing for a while and then just observe the emotion without judgment. Alternatively, take deep breaths for a few minutes. You will notice that the brain gets sufficient oxygen and as a result thinks more rationally.

**2. Self Regulation:** is about staying centred and in control. The key to this habit is being aware of your own values and having the courage to stick by them. It also involves making mature unhurried decisions. Flexibility is another key word here.

**Know your values:** Spend time getting in touch with your values and code of ethics. If you are in touch with this, you won't find it difficult to make an ethical decision when faced with choice.

*Take responsibility:* This word is often misunderstood to mean "blame".  Responsibility as the word indicates is the "ability to respond" which helps you to keep personal power intact and make changes that would make a difference to the situation that is not going smoothly

*Hold yourself accountable*: If you tend to blame others when something goes wrong, stop. Make a commitment to admit to your mistakes and to face the consequences, whatever they are. You'll probably sleep better at night, and you'll quickly earn the respect of those around you.

*Stay calm:* Write down your negative feelings rather than saying it to someone… you can later rip it and throw away.  The advantage is that you have expressed your feelings without hurting anyone or damaging a relationship.

### 3. Motivation
Motivation If there is one trait that virtually all effective leaders have, it is motivation. They are driven to achieve beyond expectations - their own and everyone else's. The key word here is achieve.

Plenty of people are motivated by external factors such as a big salary or the status that comes from having an impressive title or being part of a prestigious company.

By contrast, those with leadership potential are motivated by a deeply embedded desire to achieve for the sake of achievement.

**What can you do to improve your motivation?**
Re-examine why you are doing your job. If you regularly get in touch with why you are in your present job, it might be useful. Your goal statements need to be phrased in a way that is fresh and exciting.

Optimism is an essential attitude that can be acquired. Nobody is a born pessimist.  Start by choosing better-feeling thoughts and you gradually build up your Positivity muscle.

The  brain has neural pathways and if you engage in repetitive positive thoughts, the brain will make a habit of moving in that direction.  I have found it most useful to always call a so-called problem – "an exciting new challenge or door way to fun".

**4. Empathy** is just about putting yourself in another's skin. Again, this is a skill that can be acquired. It involves listening for the feeling and "content" of the speaker. When one listens in

this way, one helps the other find his/her own solution.  It's probably the most effective way of building loyalty in a team.  If a person feels understood, s/he is likely to work effectively.

Put yourself in another's shoes and you are likely to see things from another angle which might even help to get a bigger picture of the situation.

**Don't forget to pay attention to body language.**

**5. Social skill i**s another key component to successful team management. We all know of people who were highly intelligent and yet when promoted into leadership failed at the job.  There are others who were fairly mediocre academically but excelled because of their human relation skills.

Leaders who do well are great communicators.  They are experts at communicating enthusiasm through word and deed and also know how to communicate bad news.

"Nothing great was ever achieved without enthusiasm," wrote Ralph Waldo Emerson. If you have love what you do, you are likely to enthuse team members.

It's always useful to attend Courses in soft skills like Interpersonal skills, Conflict Management, Assertiveness, Change Management….

Praise your team members regularly. This works like magic when your intentions are genuine you're your communications are clear, concrete and timely.

The good news is that developing your emotional intelligence by following the simple steps outlined above costs little compared to the huge dividends that you receive.

■

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## PM Quotes

Project management is like juggling three balls - time, cost and quality. Programme management is like a troupe of circus performers standing in a circle, each juggling-three balls and swapping balls from time to time...

The project would not have been started if the truth had been told about the cost and timescale.

# Leveraging Returns on Project Success

With a Doctorate in Project Risk Management and over 18 years of experience in Project Management and Decision Support Systems, Dr. Vanita Bhoola serves as a Professor at S.P. Jain Institute of Management & Research (SPJIMR), Mumbai. Apart from teaching at SPJIMR across programs, mentoring students and publishing in leading international journals, she offers tailored courses across different programs at the Institute and customized management development programs (MDP) in Project Management based on prior research about company, sector and the immediate business environment that impacts business. She currently heads the Center for Project Management at SPJIMR. The Center offers PMP® Training and Certification in Advanced Project Management.

**Dr. Vanita Bhoola**

Organizations measure project success in terms of cost, time, scope and quality, if a project manager is asked to display examples of failures, it might be at her fingertips. However, if asked to recall the last successful project, it may take a while. Project failures are common; project success is not. Question is whether meeting the quadruple constraints necessarily implies project success? Harold Kerzner author of several books in project management opines, "If management doesn't see how a project will deliver a value, that project will be canceled even if it's meeting time and budget constraints." Kerzner says, "Time and cost used to drive all decisions…. Now we're saying, wait a minute, are we providing value?"  True indeed! Unless project managers focus on understanding the organizational vision, the business environment and the parameters that drives value to customers, the project may fail to deliver value. In order to ensure project success, today we are forced to ensure alignment of project goals with the overall objectives of the firm and top management engagement. Today we are forced to look beyond project success Kerzner's view on value-driven project management that was proposed in 2008 is still so true! Analyzing project failure through the lens of cost and time overruns, continue to be a practice, in India. Of course, we still have a long way to go.

The VUCA world has posed daunting challenges to traditional project management practices. Life is no longer simple. Projects are highly complex with greater exposure to risks, which is oftentimes unforeseen. Even at the stages of evaluating feasibility or approvals of projects, it is important to consider the dynamic nature of risks, changing nature of complexities and ambiguous customer needs, among various other factors. Often, deadlines take the driver's seat and project managers are forced to speed up the process, thereby neglecting the inherent risks. This is not only true for short IT projects but also equally true for long duration projects especially infrastructure development projects.  Often defining the project scope follows traditional myopic procedure and completely irrational and unrealistic, purely based on assumptions. Learning from previous mistakes hardly happens. Periodically reporting estimates of time at completion and cost at completion are traditional practices. But, reporting of value at completion seems an ideal situation in textbooks. Much of it can be attributed to aversion to change and the fixed mindset that project managers demonstrate, despite knowing what is good and what is bad. Today we manage business by projects; project management has evolved into a business process – unfortunately the change in mindset of people who implement it is yet to happen.

**Why bother about value?**

Today's challenges in successful project implementation has spanned beyond people and processes. It is beyond the quadruple constraints. In the VUCA world, chances of project success originates from project selection, its alignment with organizational goals, competence, emerging market opportunities, and above all,  value proposition to all stakeholders.

The values that project management should derive cannot be isolated from the business values and project outcome. Value-driven project management includes internal and external values as much as financial values and future prospects. Merely creating financial value by providing attractive revenue streams may not be a sustainable model for the long run. Here comes the significance of customer focus. Did the project and its implementation positively impact the customers' life? Was it successful in addressing customers' needs? Is the customer satisfied? Will the project ensure customer loyalty and be willing to reorder or order a new product? These are important questions to be answered. As customers' needs often change, they are generally not paranoid about meeting time, scope and budget limits. It's the value that matters at the end of the day.

While external customers are important, creating an impact of the project on internal stakeholders to generate internal values, can't be ignored. Unless a project has a favorable impact on project team and other allied members, including top management, it would fail to generate internal value. Good project leaders energize and inspire their team members and make the project a memorable and exciting experience. Other projects, in the non-VUCA world, may be remembered as a demanding and exhausting experience, though. Last, but not the least, is the ability of the project to create future values. This dimension addresses the long range benefits of the project. It reflects how well the project helps the organization prepare its infrastructure for the future and how it creates new opportunities.

**So, how to deliver value?**
Capturing best practices is a need of today's business world. The role of project management has to be strategic development and inputs on project selection rather than just planning, executing, monitoring and controlling. It is certainly not a wise proposition to start project management after the project is being awarded. Even today project management consultants are selected or brought on board after the scope of project is defined or during the preparation of the proposal. This is an ad hoc approach to meet short term deadlines. Unless Inputs of project management are incorporated during the concept development and at the stage of bidding, there could be lapses in creating value. Customers expect business solutions that create value, and not just deliverables. Unless the role of project management is focused more on generating business value and less on technical skills/knowledge, i.e., understanding and applying technology, a quantum jump in this direction seems arduous. This is the key to moving towards value-driven project management.

**Price is what you pay. Value is what you get – Warren Buffett**

■

## Project Management FUN-DAS™
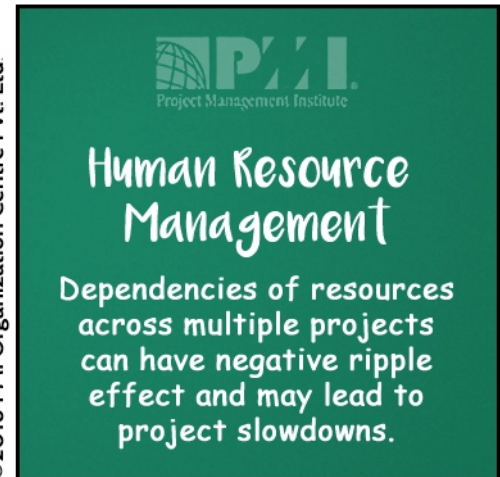


All characters appearing in this work are fictitious. Any resemblance to real persons, living or dead, is purely coincidental.

## PMP CE Student Speaks



### Motivational Trainers
*- Shivam Nagar (Ahmedabad Batch- May, 2016- 196th PMP Preparatory Course)*
I am thankful to Mumbai Chapter for having conducted the training session in Ahmedabad. I am really grateful to Bharat Sir and Baiju Sir for their exceptional guidance and motivation during the training sessions and beyond. Before the training I was just "Thinking" of getting PMP certification, but these great teachers motivated me to study, apply, appear and finally clear the exams. The training material is well structured to clearly understand the subject and guides you well for the exam. This training programme is highly recommended for future PMP aspirants.

# Intellectual Property Rights (IPR) *and* It's relevance in Projects

Prof Viswanath Seshadri

**Background:** The concept of a Patent System has its origin in 1450 AD in the Italian state of Venice in the form of the first patent law. King Henry II of France introduced the concept of publishing the description of an invention in a patent in 1555. On February 28, 1856, the Government of India promulgated legislation to grant what was then termed as "exclusive privileges for the encouragement of inventions of new manufactures". On March 3, 1856, a civil engineer, George Alfred DePenning of 7, Grant's Lane, Calcutta was granted the first Patent in India for his invention — "An Efficient Punkah Pulling Machine". Since then, the country has travelled a long way and encompasses all forms of intellectual ownership such as Patents, Trademarks, Copyrights and Design registrations and Geographical Indications into one single entity under the administration of the Controller General of Patents, Designs & Trade Marks (CGPDTM). Patents are governed under the Indian Patent Act 1970 as amended from time to time and the latest Patent Rules 2016. The government has come out with a new Patent Policy 2016 ushering in the digital era. Today the Indian Patent laws are fully compliant with the World Trade Organization (WTO) agreement on "Trade Related Aspects of Intellectual Property Rights"(TRIPS). The new policy aims to push IPRs as a marketable financial asset, promote innovation and entrepreneurship, while protecting public interest.

A patent is a Monopoly Right granted for an invention by the government to the inventor or his assignee for a limited period (20 years) and It is valid within the country of grant. An invention must be novel, must have an inventive content and must have a clear application in order to qualify for grant of Patent. The grant of a Patent, therefore, can provide the inventor with a clear advantage for 20 years for commercial exploitation without fear of illegal copying and also enables him to license other interested parties to utilize his invention for a certain fees. However, in return for this privilege, the inventor is obliges to make a full disclosure of his invention in his patent application and post the protection period of 20 years the world, is free to exploit the invention. This is the primary purpose of IPRs – to ensure that the Society at large gains from the innovations, while the inventor is also compensated for this.

Patents are essentially legal contracts between the inventor/assignee and the Government. There are several well laid down procedures for applying and granting of Patents. In the corporate world, the patent is assigned to the company/organization though it is in the name of the inventor. All the rights of the patent rests with the Assignee, who is the "owner" of the patent. Hence the "inventor" and the "owner" need to be clearly defined (unless it is an individual application). While considering the relevance of IPR in Projects, it is clear that the two mesh well; since Projects often require the application of unconventional, untried solutions since they operate in "uncharted waters". Since time and resources are always at a premium in Projects, the project personnel are called upon to "innovate" and find "out of the box" solutions. These are ideal grounds for patents, which require novelty, inventiveness and practical application as the three pillars.

However, in the case of Projects, the invention usually takes place in the course of the project work which is executed by the contractor for and on behalf of the owner. Hence whatever is created by the contractor usually belongs to the owner, which includes the intellectual property too unless otherwise specified in the contract. The owner may be unaware of the new process or a new product being employed in the course of the work by the contractor and hence may not apply for any patent. The contractor may have little incentive to "educate" the owner on the possibility of an IPR arising in the project. It is here that the "conflict of interest" arises and this may be the root cause of fewer patent applications from projects in India.

So, what are the steps that can be taken to remedy this situation?
1)      Of Course, the first and foremost action is to create the awareness on Patents within the company and ensure it reaches the grass root level (that is the Project Team members).

2)      Management should ensure that there is a clear stipulations in the Contract agreement between the owner and the contractor, specifying the ownership of IPRs arising in the course of the projects.

3)      The major cause of low generation of patents in projects is the lack of awareness of the importance of patents for a company. Also, the project personnel are so busy with the hectic time pressure that they have little spare time to think of patents. The third common problem is the general impression that application of patent is a rather time consuming and costly affair. This is further complicated by the "temporary" nature of projects.

4)      It is therefore important that management should establish the system of managing the creation of IPRs in projects and leveraging these for long term benefits.

5)      Organizations should have dedicated IPR cells to constantly monitor and assist personnel to file and prosecute patent applications. The IPR cell can serve as bridges between the company, the owner company, the Controller of Patents and the Patent Attorneys.

6)      The cell should conduct periodic surveys of IPRs in the field in which the company operates so as to take advantage of new technologies and to file "opposition" petitions against competitors who seek patents in non-novel, non-inventive areas. The above steps will ensure that the company fully benefits from the IPR assets.

**Conclusions:**
Intellectual Property Right (IPR) is a valuable tool for any organization dealing in Projects. IPR can build a sizable asset base which can provide a competitive edge in business and create wealth through licensing and trading of the IPR. Besides it can create a technological edge for the company and foster innovation.

In view of these benefits, management should take steps to create awareness and establish systems and formulate clear strategies for managing and benefiting from IPRs.

**About Author**
Prof.V.Seshadri is a Visiting Faculty in Management with several B Schools and a Consultant in the areas of Project Management, Innovation, IPR and New Product Development.

Prof. Seshadri is an Alumni of IIT Bombay (Batch of 1969) and Mumbai University-Management ( Batch of 1976)  He has 41 years of Industrial & Academic experience . He was Professor (Technology Management); Faculty In Charge: Project Management and General Manager –R&D Crompton Greaves Ltd . He is active with Project Management Institute –Mumbai Chapter and heads their Academic outreach cell.

Prof.V.Seshadri has authored 18 publications and his Case Studies and Papers on Project Management have been widely published in reputed journals. He is the Inventor of 3 patents and recipient of MECON Award of GOI –Ministry of Mines for outstanding contributions in Process Metallurgy.

# PMP CE Student Speaks

### Right and Focused Training
*- Pinakin Rao*
I am feeling lucky to receive right and to the point education that I have got during my four day's PMP certification sessions. In-depth knowledge, short and focused study material provided by PMI Mumbai Chapter has helped me a lot for clearing PMP exam in my first attempt.

I am very greatful to the faculties of PMI Mumbai Chapter who guided me with practical examples and case studies that helped me a lot to understand PMP concepts in detail.

# Big Data = Big Opportunities

**What is Big Data?**

According to McKinsey, Big Data refers to datasets whose size are beyond the ability of typical database software tools to capture, store, manage and analyze. There is no explicit definition of how big a dataset should be in order to be considered Big Data. New technology has to be in place to manage this Big Data phenomenon. IDC defines Big Data technologies as a new generation of technologies and architectures designed to extract value economically from very large volumes of a wide variety of data by enabling high velocity capture, discovery and analysis. According to O'Reilly, "Big data is data that exceeds the processing capacity of conventional database systems. The data is too big, moves too fast, or does not fit the structures of existing database architectures. To gain value from these data, there must be an alternative way to process it."

Dr. Sachin Deshmukh

Information has gone from scarce to superabundant. Business organizations are entering a new era of computing that is fueled by big data. Today, with enterprise data volumes increasing in geometric progression, from petabytes to zeta bytes to yotta bytes, business and IT leaders have unique opportunities to capitalize on this data for developing competitive advantage for their organizations. Companies aligning their processes and operations to embrace big data will have the advantage of timely differentiated insights; those that do not, shall face the risk of falling by the wayside.

The advent of hyper connected digital economy, powered by Internet of Things is creating a new economy where data is the new commodity. Big data and its analytics will create opportunities for organizations to get insights and take accurate decisions. Many organizations have realized the importance of big data and are using it to achieve a better understanding of their customers, employees, patterns and operations with an eye towards improving every aspect of business. Big data will provide productivity boost to the enterprise and has the potential to redefine business.

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**Characteristics of Big Data**

Big Data is not just about the size of data but also includes data variety and data velocity. Together, these attributes form the four dimensions of big data.
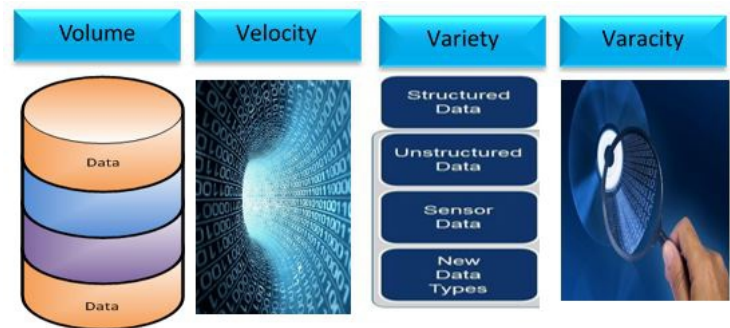


**Fig: 1 Dimensions of Big Data**

**Volume:**

Volume is synonymous to 'Big' in the term 'Big Data". It is a relative term – small size organizations are likely to handle data in gigabytes or terabytes while large organizations may have the capacity to receive and process data in petabytes or exabytes.

**Velocity:**

Velocity refers to the speed with which the data is growing. Growing numbers of internet connections and internet of things such as sensors, RFIDs, mobiles, vehicles, machines, and buildings embedded with electronics, software, and network connectivity generate huge amounts of data at a very high

speed. The term describes how quickly the data arrives and is stored and how quickly it can be retrieved.

**Variety:**
It depicts different types of data that are floating on the net such as structured, semi-structured and unstructured data.

A.          Structured Data:
These are standard data sets with data points arranged in rows and columns. Standard processes can be used to analyze these data sets.

B.          Unstructured Data:
Files containing images, videos, and audio fall in this category. Analyzing and querying such data may be difficult with standard processes.

C.          Semi-structured Data:
This includes weblogs and data feeds from social media websites. This is a type of structured data which do not confirm to a fixed schema.

**Veracity:**
Veracity refers to uncertainty or inaccuracy of data. At instances, data will be inaccurate; hence filtering and selecting the data which is actually required for analysis can be a cumbersome activity.

Internet firms are using advanced techniques and technology for processing and analyzing large volumes of data. In fact big data and its analytics in these organizations constitute a major source of productivity. Internet firms earn more than USD 1 million in revenues per employee. Beyond internet firms, many ICT firms have embraced big data and analytics as a new business opportunity and are doing quite well at the revenues front.  For many non-ICT firms, exploitation of big data has created value addition in a variety of operations ranging from optimizing value chain, production processes, to more efficient use of labor, to improved customer relationships and development of new markets. Empirical studies have suggested firms are able to improve productivity ranging between 5% and 10%.

The use of big data and analytics is serving manufacturing and low tech industries (sportswear, footwear textiles and agriculture). In Japan, manufacturing companies using big data and analytics generate an annual cost savings of JPY 5 trillion in maintenance and more than JPY 50 billion in electricity. Agriculture is another area where use of big data and analytics

can give a better yield by monitoring real time activities from seeding, to watering, use of fertilizers, and harvesting.

Other sectors of business where big data and analytics have a huge impact are the financial sector, education, health services, aviation, pharmaceuticals, medicine and governance. Potential benefits in these sectors include (i) in health services, one can gain information about the outbreak of epidemic in some region (ii) education where teaching can be personalized. (iii) Government organization can open up their data; can increase transparency and accountability to build public trust.

**Big Opportunities from Big Data Technology**
Big data technology can bring cost reduction, substantial improvement in the time to perform analysis, help in improving the existing product or developing a new product development. The technologies and concepts behind big data allow organizations to achieve a number of objectives.

1.          **Cost Reduction**
Big data technologies have helped organizations to store data at a low cost. UPS tracks 16.3 million per packages per day for its 8.8 million customers, with an average of 39 million tracking requests from customers per day. UPS stores 16 petabytes of data per day. The data is not only used to monitor daily performance, but to redesign the routes for its vehicle drivers so that packages can be delivered at a reduced cost and time. In 2011, UPS was able to save more than 8.5 million gallons of fuel by cutting 85 million miles off daily routes. The company is also utilizing big data to optimize efficiency of its 2000 flights per day.

2.          **Innovation & New Product Development**
Organizations are looking at big data and analytics for product innovation. Ford considers big data the next frontier for innovation, competition and productivity. Data scientists at Ford collect about 250 gigabytes of data per hour which leads to increasing of fuel economy and reducing vehicle emissions. With big data analytics, Ford offer vehicles that are world class in safety, quality, green performance and smart technology.

Online firms like LinkedIn use big data technologies to develop array of product offerings like "People You May Know", "Jobs You May Be Interested In" and "Who's Viewed My Profile". Google is another example which uses big data technologies and is best at developing new products and services.

3.          **Time Reduction in decision making**
Big data technologies enables organizations to take quick decisions. A big chain of departmental stores provides an

example of reducing the cycle time from complex analytical calculations from days or hours to several minutes or seconds. The store is able to reduce the time to optimize prices of 73 million items for sale from a day to one hour. Through big data technologies, the stores is able to reprice its items more frequently to adapt to changing marketing conditions.

**4.      Support to internal decision making process**

Insights provided by big data can help to understand the kind of offers to be made to customers, or which customers may shift to competitor's brand or how much inventory should be kept in the warehouses. Customer satisfaction levels can be studies through big data technologies. Many banks are collecting data through sources like web-clicks, transaction records, and voice recording from call centers to understand the mindsets of the customers. Such information can help a bank to develop personalized digital advertisements which can be then sent on the customers' communication gadgets.

**5.      Achieving Environmental Sustainability**

Today, environmental issues are a global problem. Business organizations across the globe are making conscious efforts for sustainability of the environment. Automotive companies like Ford, has a team of analytics comprising of mathematicians, scientists, computer modelers and other researchers who continuously work to minimize the environmental impact of its vehicles. The team has developed a science based model that projects $CO_2$ emissions generated by the vehicles world-wide for the next fifty years helping Ford to set its fuel economy targets, yet remain eco-conscious. Other manufacturing firms too are following the path of such organizations and are making conscious efforts to reduce the environmental impact.

Many organizations are joining the big data revolution by combining traditional analytics and big data analytics. Big data technologies are becoming an important source that can lead to building competitive advantage for an organization, create new knowledge, foster new products and services, and create new markets.

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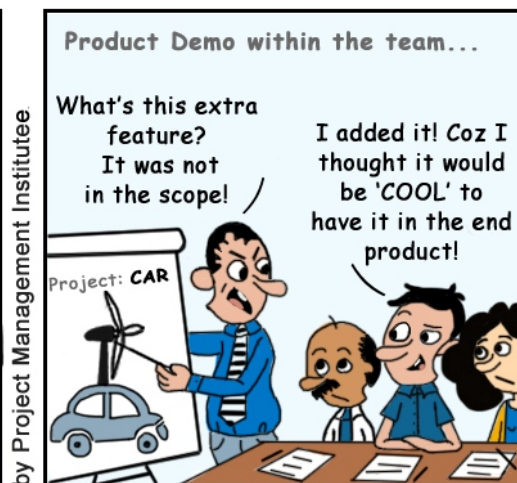


Team, here is a new project that starts from tomorrow... and make sure we meet its deadline

Project: CAR

Product Demo within the team...

What's this extra feature? It was not in the scope!

I added it! Coz I thought it would be 'COOL' to have it in the end product!

Project: CAR

by Project Management Institute

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### Scope Management

'Gold plating' means the addition of feature not considered in the original scope plan & is considered a bad project management practice.

All characters appearing in this work are fictitious. Any resemblance to real persons, living or dead, is purely coincidental.

PM Quotes
Too few people on a project can't solve the problem - too many create more problems than they solve.

# Sense & Essence of Q factor in Project Management

### C. G. Prakash

### Introduction

As per the President of a manufacturing company "Our scrap and rework costs this year were five times our profit. Because of these costs, we have had to increase our selling price and we subsequently lost market share. Quality is no longer a technical issue, but is a business issue."

Even the lift man in any company is familiar with the Q word but I wonder how many comprehend its significance. I would presume Q is just a means to an end; period.

The final inspector is the customer and quality ought to make life easier for everyone .. .the seller and the buyer.

If one refused to be intimidated by the jargon, Quality is essentially a simple thing. An organisations quality thrust could be defined as -

A business must have a comprehensive documented policy and procedures for all operations; guidelines for each job, a defined business process and records that prove that the company is following its policies and procedures as laid down

If it is as simple as that, then what is the fuss about?

The problem is most businesses solve problems intuitively without committing anything to paper; without any documentation whatsoever.

Like the medicos say this often leads to focussing on symptoms without ever realising the malaise. The journey ought to be from the symptoms to the causes and the causes to the remedies.

### Common causes of Project failure

Project management is all about developing appropriate frameworks and then putting systems and procedures to work. An undisciplined approach to schedule commitment during project planning, execution and control contributes to every one of the most common causes of project failure

### Unrealistic Schedules

You might think that pushing for an aggressive schedule would accelerate the work, but it actually delays it. When faced with an unrealistic schedule, engineering teams often behave irrationally. In an IT project, they race through the requirements, produce a superficial design and rush into coding. This mad scramble to build something results in poor quality product that has the wrong functions, is seriously defective and is late.

### Inappropriate Staffing

The only way to complete an engineering project rapidly and efficiently is to assign an adequate number of people with the right skill sets and then protect them from interruptions and distractions. This helps build the motivation and effective teamwork needed for quality results. When managers fail to provide timely, adequate and properly trained resources, their projects will generally fail.

### Changing Requirements During Execution

To start designing and building products, engineers must know what product to build. Unfortunately Management, marketing and even customer often don't know what they want. Worse, they think they know and then change their minds partway through the job. While the requirements ( or objectives ) normally change in the early phases of a job, there is a point beyond which change will waste time and money and disrupt the work.

### Poor Communication

"There has been one thing that consistently shows up on every project gone bad — poor communication. The other factors vary, but communication issues are always at the core of failed projects." —Tom Atkins, Founder, Quarry House

Everyone knows how vital it is to proactively share information and knowledge during a project if you want to succeed; yet poor communication continues to trip teams up time and time again. If you and your team haven't set aside any time to focus on improving your communication skills recently, don't wait until the next project disaster to convince you that it's necessary.

### Underestimated Timelines

When you underestimate the timeline for a project, the result is

more than just a missed deadline on the calendar. Workers have to be paid for more time, so your estimated budget goes over. Sales teams were relying on your timely product release, and now they've lost big deals. It's important to accurately predict your timeline — and Jazmin Truesdale does that with excellent risk management.

"Projects fail due to underestimated time. Now, when I create projects I estimate 3-5 situations that could delay the project and how to deal with those situations and allot time for whichever would take the longest time to recover. Now 75% of my projects finish ahead of schedule." —Jazmin Truesdale, CEO, Mino Enterprises

### Unhelpful Teams And Technology

We're talking about teams and tools that cannot deliver on the expectations. Stop the madness! Fix your broken processes quickly — even if you eat the cost from ending a contract early. Trevor Ewen told me about a client project gone wrong when his consulting firm was charged with breathing life into a failing project:

"In an effort to preserve an existing vendor relationship, we were forced to work with that vendor. In reality, we would've been much better off telling [the client] to pay the vendor to walk away. It was a win-lose. They delivered a broken product: we were required to fix it." —Trevor Ewen, Senior Software Engineer, Neosavvy

Keeping yourself locked in with teams that create more problems means you're going to spend extra time and money hiring additional teams to fix their mistakes. Bail early, before they create more problems than they're worth.

And the same goes with technology. If the tools you're using to run your team and projects are making work harder, then find a new solution immediately. There are many types of tools your team can use to make work easier: project management, document management, content management, portfolio management, client relationship management… the list goes on.

### Management Attention

As the project manager, you are the symbolic parent and champion of progress. And just like a child, projects need regular health check-ups to make sure everything is growing as it should be. It's important to check in frequently with your team and offer your assistance when things are slowing down. Trevor Ewen's unfortunate failed project struggled without proper

support from the project manager ."He was shirking his duties to better plan for a product release. This persisted for months, and with a remote team, it's never a good idea to put your head in the sand." —Trevor Ewen, Senior Software Engineer, Neo savvy

### Poor Quality Work

"The nitty gritty is what is going to make you or break you. [Projects] start out strong and start to break down as we get closer to the deadline." —Jennifer Mansfield, Head of Customer Support

Are you a big-picture thinker, or do you have a detail-oriented mind? Usually we only excel at one or the other, but if you want your projects to be successful, you need both. (I know, not your favourite answer.) If you're still missing part of the picture, then start reviewing past projects to see where your common oversights have been, and take those lessons learned to plan more accurately in the future.

Consider the case of Greg, manager of a manufacturing software project that had to meet an accelerated delivery date set by his boss . Greg unmercifully pushed his engineers,who rushed through the design and coding and skipped all of the quality reviews and inspections. Testing found many defects ,but Greg argued for delivering the software and fixing defects later. Greg met the deadline, but the system was a disaster. It was so unreliable that the software has to be fixed every time change was made in the product or product mix. Excessive factory downtime and repairs cost the company over $ 1 million. When executives push for unrealistic schedules ,the project either will be late in delivering a working product or will produce a product that doesn't work. There is a saying about quality "If it does not have to work , we can build it really fast ".

### Believing In Magic

Subcontracting , procuring commercial off–the -shelf software or engaging in joint development partnerships are all attractive ways to accelerate projects and thus save development time and money . However , it can be a disaster if not properly managed thru proper project methodologies , tools and skill sets .

### Conclusions

Quality in Project Management is all about identifying processes and then documenting them, putting systems into place and working by them. Eg : In the IT industry a quality certificate is like the conduct certificate you get when you leave school . Given the fact that our software companies rely

excessively on the west for business, quality assumes great significance.

The countries of the west although at the forefront of the wired world movement is obsessed with documentation and have a major paper fetish. They have adopted policies in favour of quality certification and assessments eg ISO 9001, SEI – CMM / PCMM at an organisational level and accord due weightage when these are complemented with project and individual level certifications like Six Sigma, CAPM, PMP, CQA and others.

Anyway the quality drive is a good thing. We are a process-less country and anything that forces us to get disciplined should do us some good. A quality certification does not come easy or cheap. The company has to dedicate resource, time and money. There is a dire need for a change in mind-set i.e a paradigm shift of focus from Effects to Causes, Execution to Planning, Final Inspection to Monitoring, Development to Design, End product to System Design, Supplies to Suppliers and Complaints to Survey / Feedback. We talk of Quality nowadays because customers are choosy, there is increased competition in the market place, and resources are getting scarce and costly.

If we need to equip ourselves to handle more prestigious assignment we also need to appreciate the importance of documenting best-of-class quality processes and effective deployment of the same. Our various quality initiative viz. ISO 9001, CMM / PCMM, Six Sigma etc.. are all indeed welcome, which will elevate our stock in the world market significantly and make the market place more competitive.

It is also imperative to note that the Q factor in any project management endeavour is just not a standard but an attitude.

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He has over twenty seven years of corporate experience and has worked for reputed companies like Godrej, TATA Steel, TCS and Accenture. He is a certified project management professional (PMP) from PMI, a certified quality professional (CQA) and a certified assessor for EI Assessment EQ-I and EQ -360. His research interests are in the areas of Youth Development, Talent Supply Chain, Emotional Intelligence, Social Entrepreneurship.

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PM Quotes

Projects progress quickly until they become 95% complete; then they remain at 95% complete forever.

# Key points for succeeding in government projects

**Devesh Upadhyay**

**Abstract**

Working on the government project and its completion within specified budget, time and quality is real challenges for industries. For grand success of MAKE IN INDIA, it is quite essential to understand the unique requirement of the advance technology and implementing the same efficiently.

The term & condition of the government order is almost one sided and acceptance is mandatory without condition by private companies. Approval cycle, building relation and engaging with government official is equally important to succeed in the government projects. Aligning our organizational culture to the customers system will always help to plan the activities and expedite the project activities.

It will be very surprising that almost 1/4th time of the projects are wasted in the approval of the project documents, correspondence, updating, revising the documents, follow ups, witness and convincing  on the acceptable deviation .

Therefore the solution to the above points are key focus area for success in government projects and most of the time success also lies on relationship with officials, speedy correspondence, fast approvals and enforcement.

Project management having the edge over understanding the system and sequential project progress, helps us to eliminate many undesired activities. Most of the key points for succeeding in government projects with the help of project management skill- Knowledge, Leadership and other management skills is quite practical.

## I.  INTRODUCTION

MAKE IN INDIA a grand initiative by Government of India for strengthening Indian economy by promoting manufacturing sector in India. In other words, it is chance for entrepreneur to improve the product and market all over the world. This seems to be perfect idea but performing consistently for the result is not so easy.

## PROGRAM

The Make in India program was launched as part of a wider set of nation-building initiatives. Devised to transform India into a global design and manufacturing hub, Make in India was a timely response to a critical situation: by 2013, the much-hyped emerging markets bubble had burst, and India's growth rate had fallen to its lowest level in a decade.

The promise of the BRICS nations had faded, and India was tagged as one of the so-called 'Fragile Five'. Global investors debated whether the world's largest democracy was a risk or an opportunity. India's 1.2 billion citizens questioned whether India was too big to succeed or too big to fail. India was on the brink of severe economic failure.

## PROCESS

Make in India was launched against the backdrop of this crisis, and quickly became a rallying cry for India's innumerable stakeholders and partners. It was a powerful, galvanising call to action to India's citizens and business leaders, and an invitation to potential partners and investors around the world. But, Make in India is much more than an inspiring slogan.

It represents a comprehensive and unprecedented overhaul of out-dated processes and policies. Most importantly, it represents a complete change of the Government's mindset – a shift from issuing authority to business partner, in keeping with 'Minimum Government, Maximum Governance'. But for success of this program, project success through project management is essential.

## PLAN

To start a movement, you need a strategy that inspires, empowers and enables in equal measure. Make in India needed a different kind of campaign: instead of the typical statistics-laden newspaper advertisements, this exercise required messaging that was informative, well-packaged and most importantly, credible. It had to (a) inspire confidence in India's capabilities amongst potential partners abroad, the Indian business community and citizens at large; (b) provide a framework for a vast amount of technical information on 25 industry sectors; and (c) reach out to a vast local and global audience via social media and constantly keep them updated about opportunities, reforms, etc.

## II. CASE STUDY

### 1. Defence ministry concludes deal with Larsen & Toubro

India is set to award its largest order for military equipment to the private sector, with the Ministry of Defence concluding negotiations with Larsen & Toubro for 100 new mobile artillery guns that may be deployed along the western border to blunt the edge that Pakistan has with US-supplied weapons. The Rs 4,500-crore contract for the K9 Vajra-T howitzer, which had been under price negotiations since the beginning of this year, has been finalized and the defence ministry is set move it to the Cabinet Committee on Security for approval.

Besides being the first artillery gun to be made by a private firm in India — only the Ordnance Factory Board has produced howitzers in the past — the value of the contract makes it the largest to be entrusted to the industry.

The deal has now been frozen as the price negotiations have been completed. A Cabinet approval for the contract is expected to come through over the next month or so, following which the order will be placed.

L&T, which has Samsung as its technology partner for the contract, will produce the guns in India under a JV company. Close to 50% of the gun will be indigenised and manufactured in India at L&T's Strategic Systems Complex at Talegaon near Pune. The 155-mm artillery guns are specially designed for operation in the desert areas bordering Pakistan and have been a long-standing requirement of the Indian Army.

The mobile artillery guns will take on a Pakistani battlefield edge on the back of artillery guns supplied by the US. Concerns over Islamabad acquiring a conventional edge heightened in 2009 when the US supplied it 115 of the modern M109A5 cannons as a 'reward' for its assistance in the war on the Afghanistan border.

While the initial order is for 100 guns to be delivered within four years of signing the contract, the number may double as the deal has a follow-on clause. L&T won the bid for the army's contract last year in a global competition against a Russian company, which failed to clear technical trials.

Industry experts said the contract would boost the private sector, which has been scouring for orders from the defence ministry.

"This proposed contract, which could well be the single largest inked by an Indian private sector player, will have a multiplier effect not just on the revenue but also on the confidence of the relevant tiered participants of the indigenous defence industrial base.

### 2. Key Challenges

In case of government projects more challenges are faced. Challenges listed below are as follows.

a) Contract is fixed type.

b) Term and conditions are unilateral.

c) Samsung as technological partner is also stakeholder. Communication gap, relationship between two giant company and decisions are affected accordingly.

d) According to the order bank guarantee of equivalent amount against every stage payment block major fund and non-liquidity.

e) Expected major delay for approval of any administrative decisions.

f) Even change request for minor DCR (Design change request) may take enough time for schedule overrun.

g) Due to development project there is major chances of several changes which will cause delay and budget overrun.

h) Little miss-communication and failure in convincing government official leads to project failure.

i) Maintaining the international quality and technological transfer is major challenge in this project.

j) Lack of coordination and unhealthy relation between L&T and Samsung will adversely affect the project.

k) Human resource long and consistent performance is required for project success. Employee turnover may have adverse effect on special project.

l) Operating environmental factors and political system may be threat for project objective in case adverse situations arises out of it.

**Conclusion of the challenges –** Above challenges may cause schedule and cost overrun.

### 3. Key points for succeeding in managing government project

**MAKE IN INDIA** program can be considered successful if project undertaken under this program is successfully managed. But the challenges are multiple when government projects are handled. The reasons are relation with bureaucrats, policies and corruptions.

Project management triangle in any way proves to be efficient and effective tool for increasing the possibility of project success.

## 4. Critical success factor-Technology, Leadership & Management skill

### A) Technological Factor

From the case study it is very clear that the new development project is closely associated with technology part and Russian vendor is disqualified in technical round. Samsung as a technology partner covers all the risk related to technology partner and JV is qualified for such big order. Even company like L&T or Samsung alone cannot qualify the technical round alone. Particularly for this project technology transfer between two parties is not only critical but also very strategic.

Both partners should earn mutually agreed benefits from this project and failure to this may cause very negative consequences not even on technology part but also on overall cost and time. Maintaining mutual relationship and doing the agreements is one of the key success factors.

Apart from above point intermediate challenges are more influencing. Engineering Phase will decide the further course of action as all phase are interdependent. Following challenges or risk will be managed while designing and engineering.

a) Details understanding of the project need and requirement in order to fulfill the overall functionality test at the closing stage. This will give the clear picture and parameter for measuring the performance quite from the initial stages.

b) Incorporating the design changes wherever required. Initially the changes should be analyze and mandatory requirement incorporated with approval of CCB (change control board).

c) If project is not undergone Prototype stage, simulation on the software should be demonstrated for any critical operation related to safety.

d) Implementation and application procedure for executing the technological inputs to the product should be defined under the guidance of expert and experience professional.

e) Any changes while technological transfer should be analyze, approved by CCB, partner and customer.

f) Every stakeholder should be taken into confidence initially and should follow the protocol of changes, in order to minimize the communication gap and approval after commissioning stages.

g) For continuous improvement, project requirement should be reviewed and for minimal solution. Cost feasibility study should also be kept under consideration and put for further approval.

### B) Leadership Factor

In PMI triangle- technical, leadership and other management skill, leadership skills are always critical for success as there is no define rules to induce leadership skills. There are many project management and technical software which process the data, align to the phases, interact between phases, plan the activities according to WBS and conclude the matter for decision making. Therefore, leadership skill is the critical success factor over here. In execution/ monitoring and controlling phase only leaders can take appropriate decisions Maintaining good relationship with vendors, subordinates and customers for getting out positive result (at Indian location where relationship matter), even though lot of management pressures is there. Of course other management skill is also critical factor but not explained, it is too vast. Main leadership skills required for this project are as listed below.

1) Keep the team Motivated.
2) Communicate about organizational goal and objective.
3) Engaging JV partners, Manager/team, personal growth, project and objective together.
4) Details discussion and creating the common agreement among stakeholder by mutual engagement and convince for project positive objective.
5) Prepare the road map for the success.
6) Trained the team with case studies and real life problems of projects.
7) Think and act out of the box for projects obstacle fearlessly.
8) Maintaining good relation for approval and coordination with customer.
9) Even though contracts are fixed type and T&C are unilateral, there are ways out to settle the extra work. This can be only possible through healthy relation with bureaucrat. Even change request for minor DCR (Design change request) may take enough time for schedule overrun.

## 5. Expected benefits to business

The project is not yet started at L&T and quantifying benefits to business can be realized on completion only. The order term and conditions, profit margin is confidential. Property rights are reserved up to the company and sharing of confidential information is not possible in this article.

But expected benefits based on experience are mentioned below.
a) Successful technology transfer
b) On time delivery of product.

c)    Improved quality product

d)    Within budget completion

e)    Hassle free acceptance of product by customer

f)    Satisfactory functionality test

g)    Performance of product is as per standard

h)    Easy qualifying for future orders

## 6. Conclusion

Most of the government projects are very challenging and need lot of patience to handle the situation. Sales drastically decrease, convincing stakeholders and maintaining harmony relationship with customers and vendors is very critical. All critical issues can be addressed by using tools and techniques of project management. Therefore smooth progress of activities and delivering excellence through project management may increase the achieving objective.

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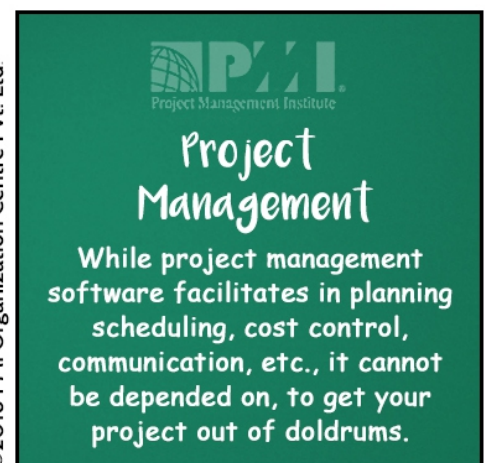
## PM Quotes

Project management is like juggling three balls - time, cost and quality. Programme management is like a troupe of circus performers standing in a circle, each juggling three balls and swapping balls from time to time..
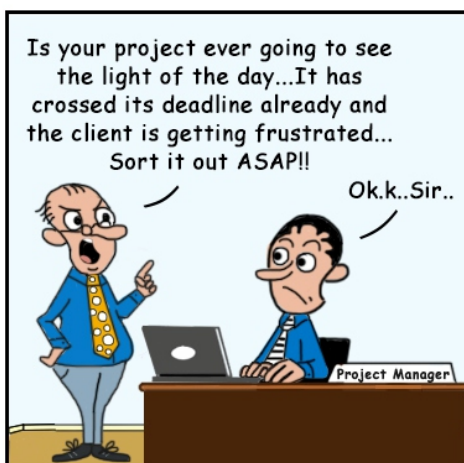


All characters appearing in this work are fictitious. Any resemblance to real persons, living or dead, is purely coincidental.

# Going Agile with Bi-Modal IT

### Introduction

Agile is an attractive model, it fosters iterative Development, rapid delivery and quick value to business. I have been writing and presenting in different forums on Agile and how it can help to respond to Digital and Business Agility.

Almost in all of these sessions / forums I have been asked how do we bring about agility in an Enterprise system that already exists.

Priya Patra

Let us start by looking at the enablers of Digital Agility in today's era of digital disruption

1. Agile/ Flexible Architecture
2. DevOps
3. Cloud

If we ponder we realize that all the above are directed towards newer systems, systems which we will consciously design or the systems that we have control on, but what happens to the giant IT infrastructure, architecture that already exists in the enterprise. ? Can we make systems that were not designed to be updated, weekly, daily and sometimes even hourly to be Agile or to move towards continuous delivery? Well may be not, apart from not being technically compatible there are cultural challenges to get this going.

In this article we will check out a very interesting concept evangelized by Gartner in late 2014 –

**The Bi-Modal IT**

Gartner Research states that "forty-five percent of CIOs state they currently have a fast mode of operation" and predicts that "75% of IT organizations will be bi-modal in some way by 2017", so soon we will be well along the adoption path.

**Bi-Modal IT - Enterprise Bestriding on Fast Lane and the Slow Lane**

Bi – Modal IT may be the solution for such an enterprise to move from moving from the slow lane to the fast lane, to being Agile.

It is an approach in which an enterprise operates in two modes:

- Mode 1 is a linear approach to change, mainly in the waterfall model, emphasizing predictability, accuracy, reliability and stability. This is typically is for the core business of the enterprise, critical business processes and sensitive data. Reliability, availability, serviceability (RAS) and security are the most valued attributes.

- Mode 2 is a nonlinear, agile approach that involves learning through iteration, emphasizing agility and speed and, above all, the ability to manage change and uncertainty.



Gartner compares this with Marathon runners Vs Sprinters. Both are differently trained, but are essential as depicted below:



**Bimodal IT = Marathon Runners + Sprinters, Deeply Different, Both Essential**

| Think Marathon Runner | Mode1 | | Mode 2 | Think Sprinter |
|---|---|---|---|---|
| | Reliability | Goal | Agility | |
| | Price for performance | Value | Revenue, brand, customer experience | |
| | Waterfall, V-model, high-ceremony IID | Approach | Agile, Kanban, low-ceremony IID | |
| | Plan-driven, approval-based | Governance | Empirical, continuous, process-based | |
| | Enterprise suppliers, long-term deals | Sourcing | Small, new vendors, short-term deals | |
| | Good at conventional process, projects | Talent | Good at new and uncertain projects | |
| | IT-centric, removed from customer | Culture | Business-centric, close to customer | |
| | Long (months) | Cycle Times | Short (days, weeks) | |

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**Gartner**

## Bridging the Gap between the 2 Modus Operandi

So how do we bridge the gap between the two lanes? How do we mobilize the entire enterprise to be Flexible or Agile?
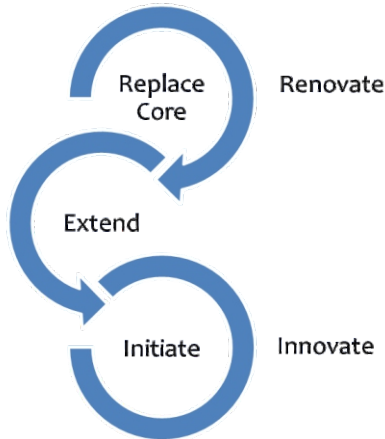


### 1. Initiate

Start with smaller Greenfield projects, initiatives in Mode2, this could be projects which have less impact on Mode 1, and through Iterative, Agile, DevOps or Innovation Labs.

### 2. Extend

Once we observe success in these areas, we challenge the IT core of the organization in Mode 1 take up Brown Field projects to extend these best practices for improved Agility.

### 3. Replace

Replace mode 1 core projects by more flexible mode2 core.

A constant cycle of Innovation in Mode2 and Renovation in Mode 1 has to be practiced to bring about the Agile and a Flexible Enterprise.

Let's look some Fortune 10 organizations as an example. These organizations have been both on the slow as well as the fast lane. Fastworks and MVP principles based on lean startup are some examples of Mode 2 strategies, whereas the core strength still lies on the slow lane--their commercial industrial products.

The real strength of the spin off lies where in the results of these Mode 2 strategies the digital product are fed back or re-integrated to their original products to provide improved agility to the existing customers while maintain the strengths of the traditional business.

### What does it mean to us?

As Agile Practitioners and Enterprise Architects, Bi-Modal IT changes the way we look at Enterprise Applications or Projects

### 1. (Re)/ (In)novation

a. Enterprise Architects will need to be more innovative – play vanguard and as well foundation roles

b. The architects should be thought leaders, to be able to run, innovate and differentiate the entire enterprise

c. Enterprise architects need to diligently to choose mode 1 apps which can be renovated to mode2 as mini Greenfield projects

### 2. Integration

a. While deciding on integration policies, focus is required on seamless "As a Service" microservice integrations

b. Security and integration issues while going for an "As a Service" solution

c. Re-use and Refactor the enterprise service or solutions

### 3. Agile Project Management

As Agile practioners we got to look at common shared goals between Mode 1 and Mode 2, which will form a framework for empowered and collective decisions

To conclude the "Future is Agile". Bi-Modal is the just the path to transformation, it is not the final state of the IT organization's evolution. It is a step forward to being future ready of being Agile!!!!

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# Geopolitical Risks in Oil and Gas Megaprojects

Vidhi Raj, PMP          Vidyesh Alve, PMP, PRINCE 2

### Introduction

The Oil and Gas industry is an intriguing one. Hydrocarbons, hidden under the tectonic layers of the earth, invisible and sometimes invincible, have the energy to drive the economy of the world and in turn the global political dynamics, economics, topography, climate, demography and natural resources drive the hydrocarbon industry.

## MEGAPROJECTS

The era of 'easy oil' is approaching its end. The industry players are eagerly looking to diversify their portfolios by tapping Shale gas, Coal seam gas, Light tight oil, LNG liquefaction, Oil sands, Ultra-deep water exploration as well as the Arctic. To commercialise these opportunities, companies are increasingly engaging into multibillion-dollar, technically and operationally demanding ventures called MEGAPROJECTS.

Elaborating on the huge investments therein; the International Energy Agency (IEA) estimates a cumulative investment of US$22.4 trillion in the global Oil and Gas sector between 2014 and 2035, equivalent to an average annual spend of more than US$1 trillion.

In the World Energy Investment Outlook 2014, the IEA mentions that they expect oil and gas spending to increase sharply, by almost 50% from its average of US$678 billion per year over the 2000 – 2013 period. Industry spending will continue to be dominated by the upstream segment accounting for about 77% of total industry spending. Midstream or transportation-related spending, in particular for pipelines and storage, will account for about 13% of total spending.

Downstream spending will account for the remaining 10%, with cumulative spending in oil refining of US$1.4 trillion and Liquefied Natural Gas (LNG) projects of about US$0.7 trillion. Oil related spending will account for about 61% of total spending, with the remaining 39% made up of natural gas.

And now, it is not just stopping at MEGAPROJECTS, the Ichthys project (as an example) coming up in Australia is three MEGAPROJECTS rolled into one with companies like Total, Tokyo Gas, Osaka Gas, Chubu Electric Power, Toho Gas, Kansai and CPC being project partners.

## Performance of MEGAPROJECTS

An Ernst & Young (EY) report analyses the cost data for 205 projects and time data for 242 and concludes that 64% of the projects face cost overruns and 73% of the projects report schedule delays. Further this information can be categorized segment-wise as depicted in the following graph:
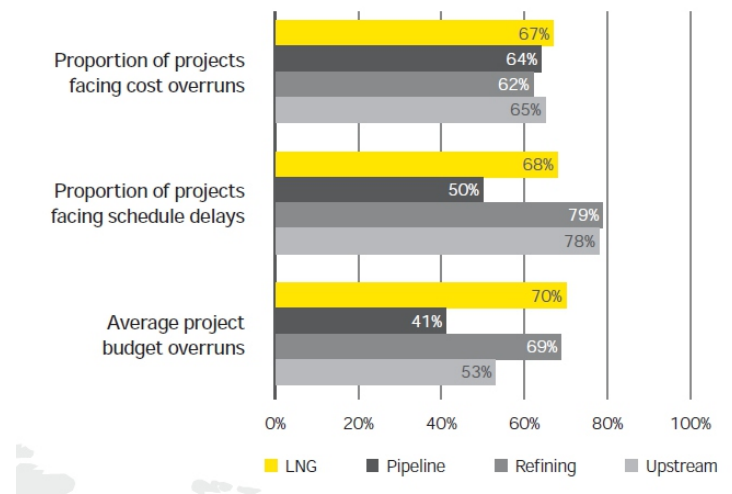


Source: Ernst & Young Report 'Spotlight on oil and gas megaprojects'

The graph clearly indicates that more than 50% of the projects in Oil and Gas sector are over budget and behind schedule.

These cost & time overruns are attributable to the following 4 major root causes that are performance busters of MEGAPROJECTS.

### 1.       Inadequate Project Development

**1.1.     Inadequate surveys in identifying and developing the scope:** Communication gap is likely as the initial surveys are generally done by a different organisation (specializing in this domain) and the execution is done by the Engineering Procurement Construction (EPC) contractors, both contracted

by the project owner. There are gaps in expectations and results, attributed to lack of clarity in the scope at inception.

**1.2. Inadequate planning leading to scope creep and increased costs:** The scope CREEP in itself proclaims that as the changes 'CREEP' in, the cost and schedule starts getting affected. Scope creep might arise if the detailed scope of the project is not understood due to lack of meetings during the planning phase, absence of focus group discussions or facilitated workshops. Also, inaccurate cost estimation along with insufficient contingency and management reserves leads to unplanned cost escalations.

**1.3. Procurement strategy:** Absence of a good procurement strategy only increases the waiting time during execution especially if the long lead time material / equipment / raw materials are not procured well within schedule.

**2. Unplanned Project delivery**
**2.1. Ineffective organisational structure:** Especially in case of matrix organisations, which allow different stakeholders to attempt to control rather than support and reporting to multiple heads can lead to confusions in project execution. Further, ineffective decision making and incoherent communication of decisions lead to cost overruns and unplanned delays.

**2.2. Inadequate testing and commissioning plan:** The delay in preparing and ratifying a testing and commissioning plan is fodder to project failure. Unable to allocate sufficient resources to the closeout phase leads to an extended closeout period.

**3. Regulatory challenges**
Timely approvals of the MEGAPROJECTS are a major concern and is region & country specific, subject to their policies governing the Oil & Gas projects. Obtaining approvals from multiple governing bodies under multiple governing laws chews away substantial time. Since the Oil & Gas projects are not city based projects, developing last mile infrastructure connectivity for the project is a time-consuming activity.

**4. Geopolitical Risks**
**4.1. Diplomatic & security risk:** The drop in oil prices below US$40 per barrel at the end of 2015, down more than 60 % from their high in the summer of 2014, reflects rampant supply and weak global demand amid concerns over slowing economic growth around the world. This imbalance deepened further in 2016. Saudi Arabia continued to pump oil at full swing, least concerned about propping up oil prices and foot holding the market share, hoping to drive out marginal producers,

particularly in the United States. Also, the flow of Iranian oil is on the increase adding to the glut. Instability in the Middle East, tension between Russia and Turkey in Syria are all adding to price uncertainty.

The Oil & Gas companies are hence forced to delay and in some cases, even withdraw investments in MEGAPROJECTS. This is leading to project delays or even project postponement. The climate change and carbon legislative framework, delays in project approvals and compliance to norms affect large scale exploration, transportation, refinery and LNG projects.

**4.2. Global Economic downturn:** The turbulence created by the global economic crises of 2008 and 2012, decline in the demand and drying up of new credit has added to difficulty and uncertainty of the hydrocarbon projects. MEGAPROJECTS cannot operate in silos and economic downturn influence them in minor or major ways.

**4.3. Commodity market uncertainty:** Increased demand for raw materials like steel, concrete and other construction material feeds through to higher prices to the project. Organizations need to be aware of how the lag between investment case preparation and project construction can impact project commodities spending and incorporate well calculated price escalations into the project cost. Since hydrocarbon projects are long gestation MEGAPROJECTS, they have to be shielded from raw material price fluctuations.

**4.4. Exchange rate fluctuations:** Major fluctuations in local currency exchange rates can influence project costs especially when the projects are importing supplies / exporting finished goods from / to countries with different currencies. Despite their magnitude project, MEGAPROJECTS do not absorb the exchange rate fluctuations.

**4.5. Development of new energy sources:** Development of shale gas fields from North America and US gearing to become the net exporter of gas has led to a paradigm shift in the hydrocarbon industry. Further renewables as solar, wind & hydro, popularly known as the cleaner fuels, are contributing to the energy industry and are competing with the conventional hydrocarbon MEGAPROJECTS.

International Energy Agency (IEA) expects renewables to globally account for 25 % of power generation in 2018, up from 20% in 2011. The renewables are getting cheaper and currently have regulatory and government support through tax benefits. The technology for cost reduction and improving efficiency is on

the rise with research in several pockets of the world challenging the age old well established Oil & Gas business.

## Risk Mitigation

The Oil & Gas business is a risky one. For those still in the business can stay put because the Geopolitical risks can be managed and mitigated using following measures even though these risks cannot be eliminated completely.

Each project should be in good standing to answer the questions below:

- Have the risks been assessed well? (Business Analysis)
- Is the performance metrics biased? (Shareholders' expectations)
- Money being used optimally? (Cost Efficiency)
- Is project based on lean scoping? (Lean Project Management)
- Learning from prior projects incorporated to current project? (Lessons learnt)

## Business Analysis

The business analysis helps to understand the risks (including Geopolitical) better by using simulation techniques to identify which parameter is most sensitive and Monte Carlo simulation to analyse the parameter over a wide range, their results hence lays the ground for effective decision making and forecasting.

- **Sensitivity Analysis**
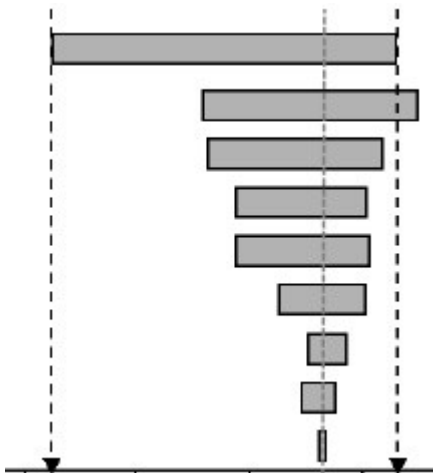


Sensitivity analysis can be performed through simple one-at-a-time perturbation of a parameter, followed by multiple simulations to analyse the change in the response with the change in the parameter. The result then is plotted as a tornado diagram (refer figure) with response on x-axis. Each horizontal bar shows the change in the response for the change in the parameter which is perturbed.

Sensitivity Analysis helps prioritize the importance of the factors being considered for decision making. e.g. oil price, oil volume, gas price, gas volume, capital expenditure & operating cost. The top most parameter shows the most sensitive and bottom most shows the least sensitive parameter.

- **Monte Carlo Simulation**
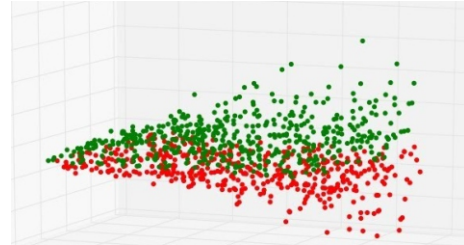


In Monte Carlo Simulation, multiple values of the same parameter are considered. The parameter values for each run are sampled from a probability distribution. The response of each run is plotted with respect to the parameter value. The correlation between the response value and the parameter value is then plotted as a scatter diagram which gives an indication of the importance of the parameter. This helps to understand the correlation of the parameter and response over a wide range.

## Shareholders' expectations:

Several published studies agree that the industry is prone to overestimating production attainment and underestimating cost and schedule. Independent Project Analysis (IPA)'s evaluation of production attainment shows the too narrow range of expectations and failure of the results which fall within the P10/P90 range.

For Oil and Gas companies the pressure to meet expectations like analysts' and shareholders' expectations, annual performance promises, executive performance goals and annual metrics like cash delivered to the finance ministry are silent motivators to overestimate the production attainment, underestimate cost and target overoptimistic schedules. Elimination of this bias can make a huge difference in absorbing geopolitical risks.

## Cost Efficiency:

The need for cost efficiency in capital projects has not gone away. It is crucial for Oil and Gas Companies to increase the capital effectiveness of their projects. To improve cost efficiency the owner companies engaged expert and experienced EPC contractors who are based on lowest bids & are able to get best

quality in the market at competitive prices. EPC firms recognize that cost reductions are the key to projects being sanctioned. The firms in turn have multiple suppliers & vendors. Today there is a need to shift from the prominent "zero sum game" to building "supplier ecosystems." Building a supply chain by acknowledging that suppliers & vendors are the stakeholders is the need of the hour. The cost efficiency which is targeted at the owner level should percolate deep down. Cost efficiency leads to better preparedness for facing Geopolitical risks.

### Lean Project Management:

Lean system emphasises the reduction of the wastage of the resources (labour, material and money). It is not just an exercise but a change in the mindset. It requires project managers to think about a minimum acceptable scope / a scope clearly defined through a project charter and by cost and schedule benchmarking and maintaining the project execution against such benchmarks. Clearly chalked out WBS, RACI chart, including buffers through critical chain method are some of the project management concepts that need to be included in the management of Oil & Gas projects. Adapting to a lean system helps the project to be better prepared against the risks.
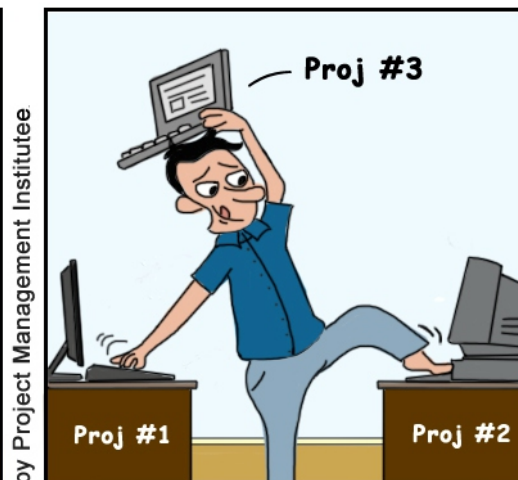
### Tabulate lessons learnt

Lessons learnt from previous projects need to be tabulated and used through the next phases or further projects. Lack of documentation of lessons learnt leads to missing out or repeated errors. Lack of sharing of lessons learnt among the competing companies leads to duplication of errors and slows down the pace of growth of the sector. Workshops conducted by consultants and institutions for knowledge sharing shall go a long way in improvising the sector growth. Application of lessons learnt of how the project sailed through the various Geopolitical risks goes a long way in Geopolitical risk mitigation
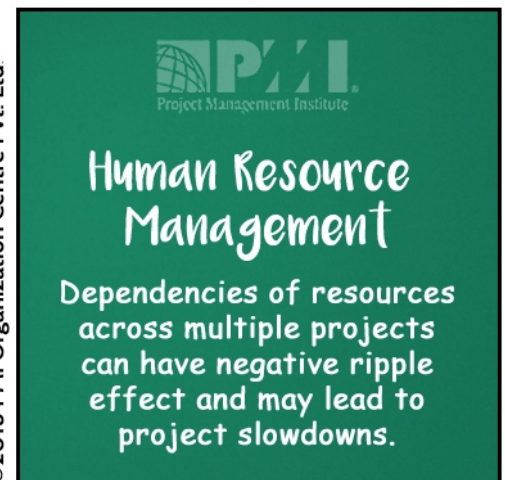
### Conclusion

The geo in GEOpolitics, as the dictionary suggests covers aspects and occurrences globally. But the impact differs regionally. Oil & Gas companies need to resist the temptation to generalise and assume that the behaviour of one geography will be mirrored elsewhere.

THERE IS LOT OF ENERGY IN GEOPOLITICS… ENERGY TO CHANGE THE FACE OF OIL & GAS MEGAPROJECTCS!

■

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You are in high demand for your special expertise..and so I want to put you on a new project.

But....err... I am already on a couple of projects.

Project Manager

Proj #3

Proj #1   Proj #2

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PMI. Project Management Institute

### Human Resource Management

Dependencies of resources across multiple projects can have negative ripple effect and may lead to project slowdowns.
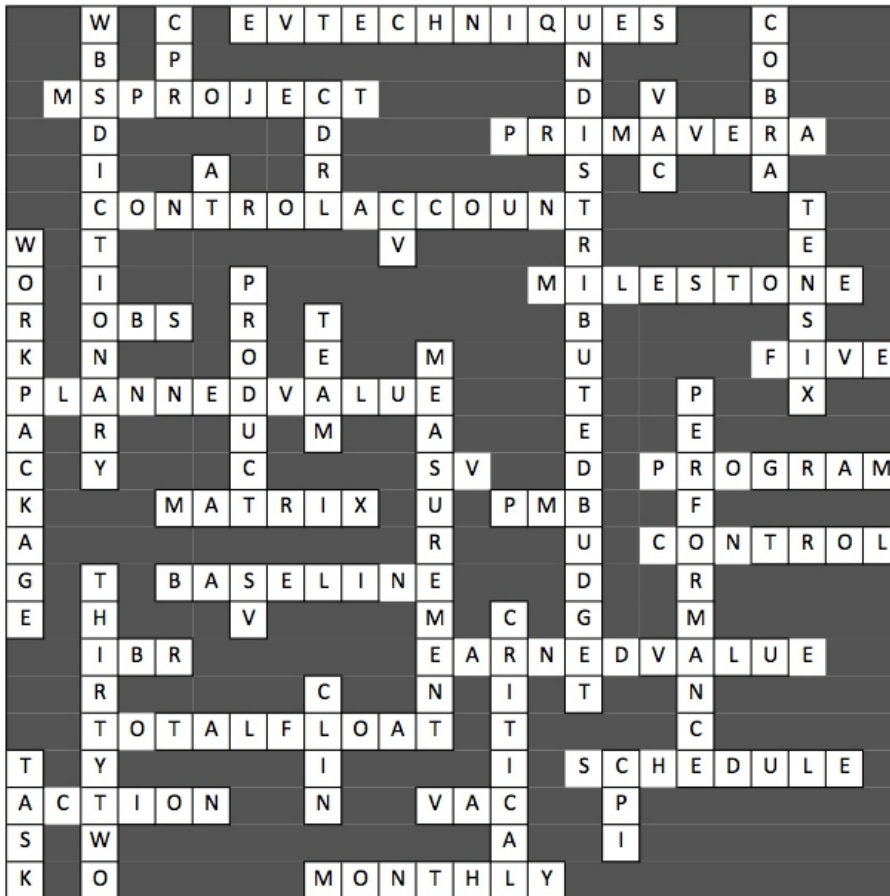
All characters appearing in this work are fictitious. Any resemblance to real persons, living or dead, is purely coincidental.

## PM Quotes

Project management is like juggling three balls - time, cost and quality. Programme management is like a troupe of circus performers standing in a circle, each juggling-three balls and swapping balls from time to time..

# Project Management Crossword - Earned Value (Answers)



**DOWN**

1. A document that describes the technical and cost content of each WBS element
2. Standard reports defined by the U.S. government that may be contractually required and that provide EV performance information on current, cumulative and projected contract performance
4. The budget that has been identified for a specific scope of work in the WBS, which has not yet been distributed to a control account
5. Popular EV tool
7. A compilation of all data requirements--including technical publications, engineering data, support data, management data, etc. as specified in the contract which the contractor is obligated to deliver to the government
8. The difference between budget at complete and estimate at complete
10. Part of VAC
12. EV - AC
13. First choice in implementation partner
14. Detailed short-span job, or material item, identified by the contractor for accomplishing work required to complete the contract
15. IPT piece
18. Part of a cross-functional group of individuals organized for the specific purpose of delivering a project or product to an internal or external customer
19. The middle of PMB
22. Part of CPI
28. The number of guidleines in the ANSI/EIA 748 standard
30. The difference between the EV and PV at any point in time
31. This route in the network has tasks with the longest total duration
34. Numbering system used to reference contract items for administrative and reporting purposes
36. An element of work performed during the course of a project or program that has an expected duration, expected cost and expected resource requirements
38. Ratio of work accomplished versus work cost incurred for a specified time period

**ACROSS**

3. Method used to record performance for work accomplished within a work package which must be consistent with those utilized in the planning of the work
6. Worlds best selling PM tool
9. Enterprise PM tool
11. Lowest WBS/CWBS element assigned to a single management "focal point" technically qualified to plan and control scope, schedule and budget for the purpose of performance measurement
16. A specific definable accomplishment in the program, project or contract schedule, that occurs at a specific point in time
17. A hierarchical structure designed to pinpoint the area of funcational responsibility
20. The ANSI/EIA Earned Value Management Standard guidelines are grouped into this number of categories
21. Previously BCWS
23. EV – PV
24. Summary of many projects
25. The end of RAM
26. The time-phased budget plan against which the contract performance is measured
27. Part of CAM
29. Establishes the scope to be achieved by the program
32. A program review conducted to assess the project integrated baselines (technical, schedule and cost), review risk mitigation plans and assess additional baseline risks to ensure that the program baselines are achievable
33. What does EV stand for?
35. The meaning of TF 37
37. Start of SPI
39. CAR part not found in a dealership
40. BAC - EAC
41. Interval in which a program variance is conducted

# PMP CE Preparatory Course Schedule 2016-17

| Month | Mumbai | Ahmadabad |
|---|---|---|
| **Year 2016** | | |
| October | 15, 16, 22, 23 | |
| November | 12, 13, 19, 20 | 26, 27 Nov |
| December | 10, 11, 17, 18 | 03, 04 Dec |
| **Year 2017** | | |
| January | 14, 15, 21, 22 | |
| February | 11, 12, 18, 19 | 18, 19, 25, 26 |
| March | 11, 12, 18, 19 | |
| April | 15, 16, 22, 23 | |
| May | 13, 14, 20, 21 | 20, 21, 27, 28 |
| June | 17, 18, 24, 25 | |
| July | 15, 16, 22, 23 | |
| August | 12, 13, 19, 20 | |
| September | 09, 10, 16, 17 | 16, 17, 23, 24 |
| October | 07, 08, 14, 15 | |
| November | 11, 12, 18, 19 | |
| December | 09, 10, 16, 17 | |

Learn from the faculties who have contributed for PMBOK 3rd Edition, 4th Edition & 5th Edition. All our faculties are industry experts in their respective field.

This PMP CE Preparatory course schedule is tentative and may be changed without notice. Please contact PMI Mumbai Chapter office for updated schedule.

Session to commence at 9.00 am and close by about 7.00/ 7.30 pm.

**We will be shortly announcing dates for PMI-ACP and PgMP courses.**

**Course Fee in INR:**

| Category | Regular Course Fee | Special Discount (before 5th of Month) |
|---|---|---|
| PMIMC-Members | INR 12,500/- | INR 11,500/- |
| Non-Members | INR 13,500/- | INR 12,500/- |

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Unit # 642, Mainframe 1, Royal Palms India, Near Aarey Colony, Goregaon(E), Mumbai - 400065

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You can also visit our registration partner and register online.

**EXPLARA**

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**Program Breakup in detail**   (Day wise schedule will be revised for PMBOK 6th Edition.)

**Day 1**
Introduction to the 'Guide to PMBOK'
Project Management Context
Project Management Processes
Integration Management
Scope Management

**Day 3**
Risk Management
Communication Management
Quality Management

**Day 2**
Time Management
Cost Management
Human Resource Management

**Day 4**
Procurement Management
Stakeholder Management
Professional Responsibility
Exam Overview
Candidate Feedback

## Prepare for success (Quick Tips)

- Read the applicable certification handbook from www.pmi.org website.
- Review certification's Exam Content online.
- Read the associated PMI Body of Knowledge or standard, along with other applicable reference sources.
- Seek additional educational opportunities through PMI, a PMI component, a PMI Registered Education Provider (R.E.P) or other provider.
- Form a study group with colleagues or friends.

# Project Management National Conference, India 2016
## *Project Management Indispensable for Vision India*



THANK YOU
FOR THE OVERWHELMING RESPONSE!

Project Management National Conference, India 2016 is a three day professional development event, organized and hosted by PMI Mumbai Chapter and Co Hosted by PMI Pune-Deccan Chapter from 17th to 19th November 2016.

The conference theme Project Management- Indispensable for Vision India… builds on enhancing project management skills to realize India's vision to become a developed nation with world class institutions, infrastructure, products and services. There is a real need to execute and follow through on plans in order to fulfil the true growth potential of India. The conference will present industry views, case studies, invited speeches and technical papers that focus on how Project Management practitioners:

- Play a key role in redefining the way India builds its capabilities
- Help create the climate for growth
- Enable the country to move towards an economy focused on innovation & product development

## Catch the highlights in our next issue of Prakalp.

'Be Aware of yourself to connect better with people.' - *Kevin Kelly - International Speaker and Best-Selling Author*

Making project management holistic and truly digital - *Raj Kalady - Managing Director, PMI India*

Market dominance, not market share dictates the new economy. - *Mahesh Murthy - Founder, Pinstorm and Co-founder, Seedfund*

Purpose, a guidepost to achieve Vision India - *Prashant Ranade - Executive Vice Chairman, BOD, Syntel*

Raise your game when it matters most. - *Harsha Bhogle - Cricket Commentator and Columnist*

Making way for a ship shape Navy - *Homipal Singh - Director General of the Indian Navy*

People Management Key to project delivery - *Achyut Godbole - CEO, Softexcel Consultancy Services*

Ways and means to tech India forward - *Amit Jadhav - Founder and CEO, Modelcam Technologies*

Calling Charismatic project managers to engage better with clients - *Anuj Puri - Chairman and Country Head, JLL India*

# Are we thinking right?

**'I Think, therefore I am' .....Rene Descartes**

Society successful in protecting its core values always gets backup of strong supporting pillars in the form of family, government, religion and eco-system. Difference between a good and decayed society therefore is not the colour or race of its people, nor the financial or geographical advantages. The difference is often in the thinking ability of its people who take it to greater heights.

All that is required is the right thinking. Are we thinking right?

Mihir Sheth

A Unique trait that distinguishes human race from other species is its ability to think and choose between the right and wrong. This divine gift from God is often the basis of different cultures that human race adopts to sustain as a collective group that we call "Society". These cultures manifest themselves as a pattern of behavior that emanate from set of certain values. Value is a code of conduct that an individual or a group sets for itself to co-exist and live in harmony despite differences in socio-economic strata. By inference therefore, society which one lives in is reflection of its constituents and thinking.

Time and again, values and the thinking behind it gets challenged by the positive and negative forces. Society in its quest for finding bonding factor to co-exist is then forced to evolve and transform. While change is a natural phenomenon that needs to be accepted, quite often the core values that are fundamental to the very existence of the society are put to severe stress test by the negative forces or complacency factors which can result in collapse of the society. It can only be saved by perceptive thinking of a few enlightened citizens. Perceptive thinking therefore is a very potent weapon in the hands of members of the society to restore and preserve those core values.

In light of above it will be pertinent to examine what these core values are, challenges that they face in Indian context and how they can be protected by taking a few positive actions originating from perceptive thinking. Following paragraphs discuss the core values and issues thereon.

1.      **Ethics and Integrity:**

Ethics is a code of moral values which guide choices and actions of individuals or group to determine destiny of society which they are part of. Ethical values beget from the understanding that one can still progress without depriving other from his legitimate share. Integrity on the other hand is an act of affirmation to uphold the ethical values. It is in essence a conviction to do right even when no one is watching.

Societies with a strong ethical values produce very progressive citizens who leave footprints on civilization. Countries like Singapore, Germany, Finland are a few examples. Can you ever think of paying a bribe in Singapore? Will any German jump the traffic signal even in the middle of night despite there being no traffic on the road? Small things these may be, but they are the biggest test of character of the society and their ethical values.

Sadly in India, there is a significant decline in ethical values and integrity in recent years. When greed and lust for power and possessions override sense of righteousness, society pays very dearly. When a parent proudly proclaims how cleverly his child cheated in the examination, he is unconsciously making himself the future victim of a failed value system.

How does one inculcate ethics in citizens? It is true that common man is often coerced in to submission to unethical demands for which he has no control. However he could always make a small beginning by taking a pledge to be ethical on matters which are fully under his control. For instance, he could resolve not to shortchange his client, or travel ticket less or use unauthorized cable connection. Such list could be endless. However such small but intensely positive actions will kindle right thinking in generation in making and eventually make them better citizens with strong ethical values and integrity.

**2.      Respect of laws and assurance of justice:**

Laws and regulations in society are meant to keep the society integrated. They are a social necessity which gives every citizen protection to safely pursue chosen goal. There is an underlying assurance that those who break laws will be punished. No society can function without such assurance. It is most terrible when a few privileged break laws and get away without being punished. When citizen is denied quick justice, society corrupts and anti social elements come to rule the roost.  Courts are reduced to merely rendering judgment and not justice. Unfortunately, that is the prevailing state in India. Increasing number of citizens not only break laws but take pride in the act. Effect of this could be devastating. If law abiding citizens of the country are denied fairness and equity, society will multiply criminals.

It is therefore extremely important that as citizens and particularly as a coveted group, we do not encourage unlawful practices. It is appreciated that in a country with plethora of laws, to be on right side of every law is always a question mark.  However, any potential breach of law can be always weighed against benchmark of fairness and justice. Is it not obligatory to pay right taxes? Must we watch pirated DVD? Can we not make truthful affidavits? When citizens make a small beginning and a firm resolve, respect for law becomes a norm and society rises to the new order.

**3.      Concern for fellow Citizens:**

In most developed societies one observes concern for fellow citizens. Citizens there do not spit or litter on the road.- Not because there are laws against them. They do this out of concern for fellow citizens. They talk- do not shout, don't block neighbors' access or leave their pet's waste on the road.  This is not out of fear of social embarrassment but because of a genuine concern to be on the right side of social etiquette.

As a society, India fares very poorly on this count. We drive and park our cars such that others worry. We do not stop the car when we see helpless senior citizen, pregnant woman or children cross. In fact, we accelerate the speed. Our measure of successful celebration whether for a marriage or religious festival is how much noise we make and how much traffic we hold up.

Can any society sustain with such attitude? Certainly not. A small gesture on each citizen's part to think how his action will affect his fellow beings can bring about a slow but certain change. For instance, one can decide not to play loud music, jump the queue, or park the car so as to cause nuisance to others. These may be simple gestures but do translate in a caring society ultimately.

**4.      National Pride:**

National Pride to any society is what soul to the body is. National Pride is an aphrodisiac that fuels the society's desire to perform better. There are numerous examples in the history where national pride of citizens has enhanced the sense of their belonging to the society and helped them achieve greater heights. Germany, Japan, Switzerland, USA.... Examples are in plenty.

National Pride does not happen overnight. It is an end product born out of a strong state and faith of citizens in its governance. When citizens are assured of protection of their families and property, when they are treated as equal and enjoy unfettered right to earn and spend money legitimately, when they have right to pursue their religion fearlessly, they develop a national pride that bind them as society.  Any society without or with diminishing national pride will be lifeless.

When we look around in India we find that we are losing our national pride because of a failing state and weak governance. If we do not think and act proactively to participate in the eco-political system to bring about a change, we may face serious threat of disintegrating. Participation can be direct by being the change agent ourselves or indirect by helping the right people to govern us. A simple exercise in thinking "How I can make my country a better place" and "Where can I make my contribution" can do wonders in long run.

**5.      Gratitude/ Repaying to Society:**

A mark of a matured society is the measure its citizens take to repay all that they have taken from the society. Einstein rightly said "Every day I remind myself that my inner and outer life is based on the labour of other men living or dead and that I must repay them in the same measure"

Many developed societies have a large number of citizens who seriously pursue this as a goal in their life. However, no country other than India can be a shining example of glory on this fine value. Barring a few, there are a large number of people, who reach out to the underprivileged by making huge personal sacrifices. One only needs to travel across the country to experience this phenomenon. It is not that they are the most privileged; often they are not; but yet they take pleasure in giving back whatever they can.

One of the sound methods of giving back is to help the underprivileged educate themselves and make them right thinking citizens. Our constant thinking and efforts to proliferate this goodness can yield rich dividends. There is no better way to express gratitude to the society.

Society successful in protecting its core values always gets backup of strong supporting pillars in the form of family, government, religion and eco-system. Difference between a good and decayed society therefore is not the colour or race of its people, nor the financial or geographical advantages. The difference is often in the thinking ability of its people who take it to greater heights.

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**About Author**
Mihir Sheth is a Chartered Accountant, Company Secretary and CISA (Certified Information Systems Auditor) with more than 25 years of experience in profession and industry as an entrepreneur.

He is a core group member of BCAS and a member of HR Committee. He has been a visiting faculty at prestigious management and engineering institutions like Narsee Monji Institute of Management Studies and NITIE.  He has contributed articles in Economic Times, other newspapers and BCAS magazine.  He is a frequent speaker on Rotary circuit on various topics of common interest.

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