

# IPM Prism

A Learning Journal from L&T Institute of Project Management

Vol. 02, No. 02

January 2019



# INDEX

• Leadership Message .....	03
• Dean's Desk .....	04
• Narratives on New Initiatives	
– CEPM 2019. ....	06
– K@W .....	07
– AACE Membership .....	08
– OutThink .....	09
• Pages from Project Success Stories	
– Apollo Proton Therapy & Cancer Care Hospital Project ..	10
– Kudgi Transmission Line Project. ....	11
– South 24 Parganas Water Treatment Plant Project .....	12
• Look-out in the Library .....	16
• Reflections on Real Life Project Problems .....	20
• Programme Panorama	
– Role based Programme .....	21
– Flying high on Flagship programmes .....	21
– Ikons of IC-Specific Programmes .....	22
– Snapshots of SCDMs .....	25
• From the "World of Webinars" .....	27
• Programme Calendar .....	27
• Watch-out box .....	27

## From the Editor's Desk

We are coming forth with the second issue of IPM's Quarterly Learning Journal -PRISM.

We are grateful to Mr. S. N. Subrahmanyam, for guiding our efforts to offer L&T's programmes which support their journey towards project management excellence.

We are excited to highlight various new initiatives by IPM in securing AACE Corporate and Organizational membership, supporting L&T Corporate HR's OutThink 2018 through case write-up, and more importantly, in launching Project Management conclave - Connected Excellence in Project Management.

In the new initiative section, we have detailed various ways to leverage the knowledge@work IPM's Knowledge Management portal. Also, we have identified three success stories, one each from B&F IC, WET IC and L&T-IDPL which we hope will inspire other practitioners to emulate in their project performance.

We are happy to include a reflection by Mr. S. K. Gupta (General Manager & Project Director - Malwa, L&T Power) on understanding and resolving challenging project execution problems. We hope the 4-step methodology adopted - See it, Own it, Solve it, Do it - will be useful for grappling with challenging project situations.

In the "Look-out in the Library" we have expanded to include three sections: New Book Arrivals, Book at a Glance (Managing Complex Construction Projects: A System Approach by John K. Briesemeister) and a Book Review (Project Resilience: art of noticing, interpreting, preparing, containing and recovering by Elmar Kutsch, Mark Hall, and Neil Turner).

We are hopeful that reading the PRISM would be rewarding as it would serve as an exposure and expansion to verdant mind-scape of IPM's new initiatives, programmes panorama, L&T's achievements and Project reflections.

Happy Reading and please do provide your feedback on contents and coverage.

IPM PRISM is now quarterly publication of L&T Institute of Project Management. IPM can be seen as a PRISM that converts the white light of L&T experiences in projects and the global best practices into structured programmes for participants to learn the various aspects of project management signified by the colours generated by the PRISM.

### Editorial Team:

Ms. S. Thivyapriya, Ms. G. Janaki, Ms. Vandana B., Mr. Amit Tiwari, Mr. Sajesh Thomas,  
Mr. Dharmendra Trivedi, Dr. Chakradhar Iyyunni

# Leadership message



**Mr. S. N. Subrahmanyam**  
CEO &  
Managing Director

Hearty congratulations to L&T Institute of Project Management for completing 10 years of providing high quality project management education!

Being a project-based organization, our continued growth depends largely on how good and efficient we are in project execution and am happy that IPM has been playing a significant role in enhancing our inherent capabilities.

As the competitive world evolves and demands of our customers increases, the onus is on us to be more agile, flexible, and smarter in our delivery of projects to quality and time. Only then will we be able to continue successfully executing the biggest, largest, tallest, smartest and most complex of projects which is our key differentiator.

The world as we knew it is rapidly evolving with multiple disruptions and one that is changing the face of our industry is digitalization. Today, we are in possession of the means to track productivity, optimize costs, enhance efficiencies, reduce execution time; in essence introduce intelligence into our construction methods. Geospatial technologies like drones, LiDAR, photogrammetry, remote satellite sensing are rewriting the rules of the game. Building Information Modelling (BIM), Virtual Reality, Augmented Reality and Mixed Reality are taking engineering and design to the next level. Digitalization has already made project monitoring 'real time' and precise. We are not far away from having the truly 'connected' project site. With analytics, we are able to mine all this rich information and convert them into meaningful data to suggest trends, arrive at inferences and take informed decisions.

At L&T, digitalization is a serious commitment that we have made in recent times to transform ourselves using technology and make a significant impact to the way we do our business. We plan to take digitalization into every key activity to engineer the desired change. IPM can definitely play a vital role in this area.

Strengthened by your international collaborations with SDA Bocconi, Cranfield University and University of Texas and the upgraded contents for long-term flagship programs, we look forward to IPM to lead L&T to greater expertise in project management in the years to come.

All the best!

Message from SNS during the IPM Decennial event.



# Dean's Desk: Complementarity Code



**V.T. Chandra Sekhar Rao**  
Dean - L&T IPM

Dear Project Professional,

IPM has been taking several actions to propagate internal and international best practices through the long term flagship programs and specific competency development programs. Our relationship with several ICs have grown stronger and our programs have gone deeper in content and have become focused on business value creation.

We have also taken initiatives to promote knowledge sharing such as creating a Project Management

Knowledge Management Portal - Knowledge @ Work and conducting first ever Project Management Conclave at Chennai in January 2019.

Moving from Competition to Collaboration has delivered positive results in several businesses and our collaborative programs are no exception. We our new collaborative programs with University of Texas and Cranfield School of Management are coming to successful conclusion this quarter. Feedback on these programs has been excellent. Our Collaborative programs with ICs on the capacity building initiatives have proved to be a highly effective.

Talking about Collaboration, it is often contextual to a project execution or business venture where partners agree and deliver as per the DOR (division of responsibility). Unfortunately, several collaboration projects do not deliver as per the expectations of stakeholders. It is probably because key people see it as an opportunistic act or sometimes a business imposition than an strategic imperative for succeeding. What if each party sees that collaboration makes them better than as they were before? This is where complementarity comes into picture.

Complementarity as per oxford dictionary is "A relationship or situation in which two or more different things improve or emphasize each other's qualities". I think the definition is coming out of the work by Stanford economists Paul Milgram, John Roberts and their co-authors where they define **"complementarity as a relationship between two or more elements such that one element enhances the value of the other one."**

When we apply this principle as the key ingredient in delivery of brick and mortar projects or business execution of partnerships, business execution will be more collaborative and less confrontational or competing.



## Complementarity and its application

we use the term complementarity - derived from the Latin word complete in many disciplines, with different meanings. It found its way into the language of economists in the 19th century. In collaboration context , the notion of complementarity gives greater specificity to the closely related ones of 'synergy' and 'fit'.

In mathematics, one requirement for complementarity is that the inner product of the two vectors must equal zero, i.e. orthogonal. Extending it to business, the collaborating parties should have some distinct specialities which other party does not own. Where the operational domains are very similar and not complementary, then the

business relation starts with suspicions or fear on loss of IP, skilled manpower or systems and processes to the other collaborating party (which might compete next time). Such JV or Partnership will operate in **silos** and business objective of JV/ Consortium gets dissipated in innate competition. The collaborating parties should at least have clarity in the beginning, sustained by commitment to combined business results and business value demonstrated by congruence in actions by their managers.

### **Complementarity in JVs or Consortium**

A review of the empirical literature on complementarities by Edgar Ennen et. al has demonstrated that complementarities can be powerful performance drivers, in particular when they involve many diverse elements.

If the partners in JVs and Consortia focus on leveraging their individual strength and support the partnering organisation to be successful in execution, the behaviour is likely to be reciprocated and thus making the partnership deliver the expected positive results. In a EPC environment, if the design engineering firm or division involves the construction firm in constructability reviews, it is likely that construction firm does not hesitate giving exposure to design team to construction aspects. Thus they strengthen each other's business value and effectively delivering the project with no rework problems. If they work in Silos, neither organisation benefits.

### **Project Management Team of Engineering and Construction Projects**

Expecting a project manager (PM) to be expert in all domains, defeats the definition of management itself, but still some organisations tend to think so while making the project manager accountable for complete project delivery. I believe in creating a strong project management team (PMT) than strong omniscient project manager. If the PM is a great execution guy, but lacks strong commercial sense, I will attach a business manager with him in a large capital project. In a similar way, they could apply complementarity code to all members of PMT such as engineering manager, project controls manager, project procurement manager and construction manager. If each functional leader treats other function as complementary, not competing, collaboration spirit improves.

Thus, complementarity thinking goes an important step beyond conventional "best practice" approaches. When many strategic or organisational choices are closely related, just seeking to optimize one without adapting the others may not yield the hoped-for performance gains, or may even backfire. Implementing Complementarity code in a firm also makes any imitation by competitors more difficult, thus offering an additional competitive advantage

### **Implementing complementarity elements in collaboration**

When an organisation is collaborating with another company, the basic question to ask is **"whether one element enhances the value of the other one?"**. Through our collaboration with ICs, we got more insights and knowledge about IC's businesses and project execution challenges and ICs got the help in design and delivery through right choice of the pedagogy and contents specific to their business. In project execution, project management team needs to supplement softer aspects of complementarity by activities of business prudence such as equitable risk allocation, continuous alignment and improvisation of business interfaces and seamless integration.

# Narratives on New Initiatives

## Connected Excellence in Project Management

### 1<sup>st</sup> Project Management Conclave 2019

The Conclave is an opportunity to listen to Thought leaders and a platform for cross learning across L&T ICs.

#### Why Conclave?

L&T IPM is now embarking on another important initiative to connect project management professionals across the organization and promote knowledge sharing among them. We intend to conduct a Project Management Conclave every year as a platform where project success stories and methods employed to achieve it, are shared across ICs/ BUs.

The case studies scheduled under 5 themes for presentation in the conclave grand finale bring out multiple dimensions of successful project execution.

#### The Themes explore the following aspects of Project Management:

- Execution efficiency and Operational effectiveness achieved using digitalization and technology adoption
- Successful risk management strategies employed and Profit improvements achieved through strategic decisions and effective use of opportunities
- Process Improvements and efficiency achieved across the functions and their interfaces to support value drivers for business
- Value Engineering, Optimization, Standardization and similar initiative employed in projects to achieve speed and value in engineering delivery
- Successful planning and implementation of effective commissioning and start-up and also profitable commercial close-out in large projects.



These case studies discuss the best practices followed in exemplary L&T projects for early completion, improving project margins through incentives, achieving PCOD in short period, effective positive cash flow management, enhanced supply chain efficiency and record level production rates.

Apart from the L&T project Presentation, there are key note addresses by eminent external speakers on the emerging trends in project management. There will also be panel discussion as key conclave sub themes.

#### The Invited External Speakers:

Speaker	Designation	Organisation
Mr. Raj Kalady	Managing Director	Project Management Institute (PMI, India)
Dr. Kalidindi N. Satyanarayana	Director	Indian Institute of Technology Tirupati
Prof. M. Hastak, PhD, PE, CCP	Head of Construction Engineering and Management	Purdue University, USA
Mr. Gordon Torp-Petersen	Deputy Project Director	AECOM India Private Limited
Mr. Pawan Maini	Country Manager	Mace Group



L&T IPM's Knowledge Management Portal called "PM Knowledge @ Work" was launched by Mr. Yogi Sriram, SVP Corporate HR & Member of ECom on 22nd Oct 2018 in the presence all HR Heads of L&T. The new portal launch is available and the URL is [www.kb.Intipm.org](http://www.kb.Intipm.org).

Through the knowledge portal, L&T IPM provides a common platform for individual to get associated with employees of common interest and contribute towards enhancing the profession. On joining the community of Practice, any practitioner can contribute or benefit from one of the many possible activities.

Below is the list of some key activities that can be performed by joining a community of Practice to develop knowledge communities.

***"Ask an Expert" is an important feature of K@W. It is a Knowledge Directory of L&T employees which provides opportunity to map knowledge areas with employees. K@W allows employees to declare themselves as expert in their area. Using this feature the employees can also perform problem solving and discuss about new developments.***



To develop strategic and crucial skills for managing mega construction contracts or construction of mega EPC projects.

Discussions Artifacts

### Discussion

Ask Expert Ask Everyone

Choose an expert

- Arjunan
- Dr. Chakrabarti, Sanyal, Ch
- 100
- 102
- 4200

Title

Description

Attach File

Choose File No file chosen

Post Discussion

#### Problem Solving:

Can we work on this Proposal and brainstorm some ideas; I'm stuck

#### Discussing Developments

What do you think of the new system? Does it really help?

#### Mapping Knowledge and Identifying Gaps

Who knows what, and what are we missing? What other groups should we connect with?

Best Practices are managed as artefacts in the K@W portal. Artefact sharing at a community of Practice level is a latest feature of K@W. Using this the same artefact can be shared across many community of practice and it is sufficient that the update is made to a single base document and its reference get updated across all CoP instantly. These artefacts aid in reusing the Assets.

An example shall be "I have a proposal for a Mega project which I wrote for a client last year. I can send it to you and you can easily tweak it for this new client."

IPM Faculty

To share your knowledge with IPM Faculty

Discussions Artifacts

Search

Artifact Title	Knowledge Type	Created By	Action
Application of Statistical Techniques in Project Decisions	Prescribed	Arjun V	View
Guidelines Risk Analysis using @Risk software	Prescribed	Shreyas	View
Project Risk Rating Financial Performance Analysis in EPC Projects	Prescribed	Shreyas	View
Control Management	Prescribed	Shreyas	View
Project contract risk management	Prescribed	Shreyas	View
Challenges in Mega Projects	Prescribed	Shreyas	View
Release in Project Cost Contingency	Prescribed	Shreyas	View

IPM Version 2018 for Rights Reserved - Version 1.0



**Any need idea has to be validated before implementing to understand the risks and benefits of the idea. The Dashboard feature of K@W helps employees to grow their confidence on a specific idea/ best practice and seeking feedback. K@W provides an option to rate any artefact in a 5 point scale. Novel Best Practices can be validated using this feature.**

For example "Before I do it, I'll run it through my community first to see what they think."



**K@W has structured the knowledge into "Knowledge Assets" for employees, seeking information and these knowledge assets could be reference for building an argument as well. Below are some examples of the same.**



#### Request for information

Where can I find the country wise Risk breakdown Structure specific for my line of Business?

#### Building An Argument

How do companies in other domains do this? Armed with this information it will be easier to convince my business leaders to make some changes.

**K@W allows the employees to start a new discussion and seek past experience**

For example "Has anyone dealt with a customer in this situation?"



## IPM's AACE International Membership

AACE International will enhance your skills and knowledge to improve the predictability of cost and schedule performance across the entire life cycle of your assets, programs, and projects. This provide technical guidance, educational products, events and eight professional certifications to address the diverse needs of our institute.



AACE's COMP (The Corporation & Organizational Membership Program) helps employees stay informed about the complexity of total cost management profession - plus gain knowledge, find access to networks and obtain resources.

Being a member of AACE will help you increase your knowledge through the information that they provide Total Cost Management (TCM) framework, AACE International Recommended Practices (RPs), Cost Engineering journal and Source magazine can be viewed and read.

AACE's COMP membership helps IPM to identify that it is committed to staff development.



# Prism – a Learning Journal Volume 2 Launch

L&T IPM 's Learning Journal "PRISM Vol. 2, No. 1" was launched on October 22nd 2018 by Mr. Yogi Sriram, at Lonavala in the presence of the HR Heads of various L&T ICs.

Mr. Yogi Sriram congratulated L&T-IPM's continual efforts in its endeavours to provide value to L&T businesses. These will be in the form of new professional certifications most suited to L&T's major businesses, further collaborations with professional bodies and expanded offerings to international locations where L&T operates.



## Case Study Competition

L&T's annual Case Study Competition, OutThink 2018, had some of the best brains from India's leading B-School campuses diving into the deep waters of strategy and business innovation.

This year, there were 3540 participants from 34 institutes across India vying for recognition and 1.75Lacs INR prize money.

- The theme for OutThink 2018 was strategic project management pertaining to challenges, trends and strategies relevant for Water and Effluent Treatment IC.
- This year's case study was written by L&T-IPM faculty, Dr. Hariharan Subramanyan with inputs from Mr. Colin Nonis and Mr. Ramakishore, HR Head- WET IC
- The case was based on EPC Company, competitive bidding for a Government project for water supply and distribution in 3 major districts of Rajasthan.
- Students had to evaluate in bidding successful strategies in selection & execution of work packages.



- The Finale, held at L&T's campus in Mumbai on November 28, 2018, saw 8 finalists making their presentations to the expert Jury consisting of Dr. Hariharan, Mr. Colin Nonis, Mr. B.S. Saluja, taking on sharp questions and winning recognition for their college.

Winners were:

First place - Team Nexus from IIM-Lucknow,

1st Runner Up - Team Miracle Mets, Indian Institute of Foreign Trade (IIFT).

2nd Runner Up - Team Devil's Advocate from IIM Indore.

Winners were felicitated by Mr.Yogi Sriram Senior Vice President - Corporate HR & Member of ECom.

# Pages from Project Success Stories

## Success story: 1

### B&F Commercial Complex - Apollo Proton Therapy & Cancer Care Hospital, Chennai Project Overview

The Apollo Proton Cancer Centre is the first of its kind centre in South East Asia, housing state of the art technology, superior infrastructure and a research facility to develop cancer control strategies which will include newer modalities of prevention, early diagnosis and treatment of cancer at Chennai. Proton Therapy carries significant advantages over traditional radiation therapy with reduced side-effects, better precision, better quality of life during and after treatment, lesser dosage to name a few. The treatment provided is highly precise and the radiation is focused directly into the tumour, without causing any harm to the adjoining tissues. The Facility is scheduled to be commissioned in January 2019.



### Key Challenges

1. The structure of Proton therapy is designed to confine the radioactive radiation for which the thickness of structural elements like walls & slabs varies from 1.6m to 4.6m. Hence temperature controlled concrete was used to reduce the maximum temperature generated at the core of the structure due to the heat generated in hydration process. Concrete temperature is controlled by using ice, chilled water, cooled raw materials and higher use of supplementary cementitious material. The pour sequences were planned & executed in such a way that the major pours were completed during night hours. De-shuttering was done only when the internal peak temperature is reduced to 40° C, so that variation of temperature between the core temperature and ambient temperature was less than 19° C.
2. High level of coordination was required between various teams/services since the facility has to be built with utmost precision of  $\pm 3\text{mm}$  accuracy as required for equipment operations. Conduits for electrical, HVAC & compressed air services summing up to 10Kms were also embedded into the concrete elements. It was achieved with the implementation of digital initiative BIM360.
3. Confined excavation in adverse soil condition (Marine clay) was completed with tremendous hardship. In-spite of initial delay the hospital block was completed on schedule.

### Timelines

L&T B&F commenced the project on 14th August 2015 with an interim milestone of Handing over the Proton Therapy for equipment installation by 01st Oct'17.

The milestone was achieved 5 Months ahead of schedule on 5th May'17.

### Awards & Recognitions

1. Royal Society for the Prevention of Accidents (RoSPA) GOLD AWARD
2. Innovative Application of Special Concrete Award 2018 from Indian Concrete Institute
3. Quality Trophy 2017-18 for B&F IC - Health BU



## Project Appreciation:

"It is amazing how this Proton Therapy Installation has come to this level ahead of schedule. My special compliments to the entire team and pleased L&T the country leader has played a Proud role to this state. Congrats many appreciations from future patients" - Dr.Prathap Reddy (Founder-Chairman of Apollo Hospitals)

"I Feel a proud Indian to see what L&T is achieving in the service of nation" - Mr.S.ABharadwaj (Chairman - Atomic Energy Regulatory Board)

"Great work being done by L&T and Apollo team to bring together world class facilities in India. Very good Safety standards" - Mr.Harshad Reddy (Director - Apollo Hospitals)

*Contributed by*  
**Mr. A Chandran**  
Project Manager, B&F IC



## Success story: 2



### Kudgi Transmission Line Project

Kudgi Transmission Limited (KTL), a 100% Subsidiary of L&T Infrastructure Development Projects Limited, is a special purpose vehicle (SPV) established to construct the dedicated power transmission infrastructure to evacuate power from Kudgi Thermal Power Station (KTPS) to meet increased power demand in southern India.

#### Project Features

Kudgi Thermal Power Station is a 4,000MW supercritical thermal power plant that is developed by National Thermal Power Corporation (NTPC), at Kudgi village in Bijapur District of Karnataka. It is NTPC's first 800MW supercritical project and is being developed in two stages. The first stage has a capacity of 2,400MW (3 x 800MW) and the second stage will have a capacity of 1,600MW (2 x 800MW).

The brief scope of work involves development of the Transmission Lines for evacuation of Power from Kudgi Thermal Power Station (3 x 800MW in Phase-1) of NTPC Ltd which includes:

**Element 1** : 2 Nos. of 400 kV D/C Transmission Lines from Kudgi to Narendra (New) - 9 KMs each

**Element 2** : 765 kV D/C Transmission Line from Narendra to Madhugiri - 380 KMs

**Element 3** : 400 kV D/C Transmission Line from Madhugiri to Bidadi - 95 KMs

In August 2013, L&T IDPL was awarded the Letter of Intent (LOI) by REC Transmission Projects Company Limited (Bid Process Coordinator) for developing the Power Transmission line project on Build, Own, Operate and Maintain (BOOM) basis through TBCB process. The project was awarded to L&T IDPL at levelised tariff of Rs. 179.58 Crore i.e. annual revenue of Rs. 196.29 Crore for 35 Years from Commercial Operations Date (COD) i.e., September 2016. KTL has entered into Transmission Service Agreement (TSA) with 11 Long Term Transmission Customer's (LTTC's). These LTTC's are Distribution Companies (DISCOM's) of Karnataka, Andhra Pradesh, Kerala and Tamil Nadu. Kudgi Transmission Limited is a AAA (SO) certified company by CRISIL and ICRA.





## Project Achievements

**Stable Revenue** - KTL's revenue is delinked from demand, supply, and volatility in the price of electricity. KTL has maintained average line availability over 99.94% in the 20 months since commissioning, which is in line with the sector average. Further KTL has received incentive of Rs. 8.2 Crore for FY 2016-17 & 2017-18 for maintaining higher line availability.

**Cash flow stability** - As an Inter-State Transmission System (ISTS) licensee, KTL's billing and collection is under the Point of Connection (PoC) mechanism. Under this, Power Grid Corporation of India Ltd (PGCIL) acting as a Central Transmission Utility (CTU), collects monthly transmission charges from all users of ISTS (that is, state distribution companies), and pays each ISTS licensee, its respective share of the transmission charges. Shortfall in payment by any user is shared by all ISTS licensees in proportion to their share in the pool.



## Appreciation and Awards

Kudgi Transmission Limited has been awarded by Dun & Bradstreet under Best Project in the Power - Transmission Category for its Design, Uniqueness, Management, Execution and Longevity.

*Contributed by*  
**Mr. Ojes C. Madappattu**  
Project Manager - L&T IDPL

## Success story: 3

### South 24 Parganas Water Treatment Plant Project

The project area situated in a highly politically sensitive area in West Bengal – South 24 Parganas Dist. There is one existing Water Treatment Plant of 34MGD Capacity, which was constructed in around 5yrs and few serious incidents has happened for material supply & pressure to engage local persons. Initial contractor left the contract due to the local issues and the client PHED split the job & executed with their contractors.





Our present scope is to construct a new 52MGD (236MLD) Surface water based Water Treatment Plant which is 1.5times more than the existing WTP capacity in order to supply the treated drinking water to the 10 blocks of south 24 Praganas dist., mostly arsenic affected areas .Source of Raw is from Hooghly river.

### Challenges:

#### Time, Cost & Contractual Conditions



The Project duration was 36 months including 6 months trial run and there is no escalation applicable, totally it is a lump sum turnkey project. Within the Project duration 4 months/year is the monsoon period in west Bengal, 13 festivals in 12 months which are all going to affect the project.

We have under great pressure to avoid time overrun & cost overrun, since there is no escalation applicable to us and no extra claim allowed. Despite various odds, the project team committed to complete the project before the completion time and committed to look in to the possible areas to reduce the cost and restrict the area where the cost overrun /time over is possible for that we need to explore alternate ways to complete the task without affecting the quality.

#### Issues with Local Union & Syndicate

Initial 8 months we are struggled with local union & syndicate & unable to start the work without interruption. Union demand was to engage all workmen from the local union only which may lead to poor product quality & less productivity. Syndicate demand was, they only supply all the materials required including cement, steel, etc. for the Project and they cannot meet the requirements (i.e.) quality, time etc. We discuss with them continuously and finally we restricted to supply only aggregates and bricks and also we convinced to engage outside experienced workmen by giving the job of material unloading from trucks to the union workmen. Though there is day to day problem is there but the decision leads to better product quality and uninterrupted supply of materials and we are in ahead of schedule.

#### Development of Staff

The project started with all New Staffs, GETs& DETs. It is a challenge that formation of a team to execute the project with quality, safety & achieving expected progress with all new staffs. Initial duration utilized to train the staffs in the site Infrastructural works to learn the requirements of our company, arranging training programs, also send them for training at cluster and periodical one to one interaction with them for continual improvement, frequent visits of Seniors from cluster/HQ all put together to help to shape a young team to meet the customer expectations. Today we have received appreciations from the client, consultant & our top management for our progress with very good quality, safety & ahead of schedule.

#### Innovations & Value Addition to the Project:

- We have made the water treatment Plant layout as a Compacted Layout by convincing client & consultant logically to save the space of the land and utilized for future expansion or can allotted for some other purposes ,which can also reduce the length of RCC connecting channels from structure to structure & advantage for the close supervision.

- The ground water table of the Project area is at the existing ground level itself since river Hooghly is only 1.5 km away from the project site, river nearby site is under tidal zone, during high tide the Hooghly river water will prone to spread all over the areas nearby including project area. Initially we have made a bund all around the project area to restrict the entry of outside water, also In the Basic engineering itself during the design of hydro flow diagram we have increased the level of the structure maximum possible so that to reduce the depth of excavation in the marshy land, otherwise additional cost to be incurred for shoring and lead to enormous time delay in execution.



- We have conducted the geotechnical survey which gets more SBC value than the client conducted test which was given in the contract. Though the contract calls for lesser value to consider, but we get it approved for the higher values based on the detail reports, calculation & technically proved by us, which help the project to save considerably.
- Foundation of Maximum structures is pile foundation due to poor quality of soil strata. Without completion of piling we cannot start the civil works. In west Bengal monsoon period is 4 months with maximum rainfall when compared to other working states. It's a challenge for us to do the piling concreting in the marshy land. Conveyance of concrete & other materials are main problem without affecting the quality .various methods were tried and finally we engage heavy concrete pump to convey the concrete up to 250m without affecting the required quality 7 cost. We have completed 1883Nos of 600mm dia pile, -29m depth, completed in 282days and all the tests are successful. Our respected client issued an appreciation certificate for this successful completion of piling works.
- Project has Negative cash flow as per the contract billing break up, but we have submitted additional billing break up and convinced the client logically to make it positive cash flow.
- When the execution going to start the price of OPC cement has been increased over the ACE, in order to control the cost we made the design mix in PSC cement & get it approved from the client. This approval leads to cost saving and to save the environment also.
- When there was an acute shortage of steel from main manufacturers in July'14, prices of reinforced steel went up, that time we got approval for secondary producer in order to control the cost & for un interrupted work.



- As per the contract we have to use Fe415 reinforced bars ,in the market Fe415 & Fe500 has not much of variation in price and we are decided to use Fe500 instead Fe415, even in design also we have considered Fe500 which lead to some savings in the cost of overall steel quantity & client also accepted since we giving superior one.
- Though the project physical starting got delayed we are very much concern about the progress of the work which is never to be delayed, for that we have continuous follow up with the design department and ensured that the design & drawings submitted in time, also got approved from the consultant & client before the schedule start date of respective structure. No structure held up because of design & drawings Vis -Vis

Structure are started immediately after receipt of approved drawings.

- We have approached for additional vendor approval other the approved make for the electro mechanical items and got it approved from the consultants/Client. This will help us to save the cost and ensuring timely delivery.
- Though there was an ambiguity in the contract document, we have represented for the Excise duty exemption for the electromechanical as per the Govt. notification for water treatment plants and we are getting the Excise duty exemption certificates, which is considerable saving in the cost anticipated.
- In place of Retention money we are submitting the bank guarantee against the cash retention, hence there is no cash retention for the running bills.

- We got the Interest free Mobilization advance of 10% of the contract value and the same will be deducted in initial eight RA bills in equal instalments. We have submitted the RA bills only when the fund was available with the client, otherwise deduction will be done against the no of submissions .It helped the Project cash flow.

## Achievements of Good Project Management Practices:

### Customer Satisfaction

Customer Satisfaction achieved Excellent rating continuously and also received an appreciation certificate from client against Safety, Quality & Progress.

### Financial

- Gross margin has been enhanced.
- Negative Net & Average working capital maintained since inception of the Project.
- Negative Sales over Invoice maintained for the past 16 months
- Positive cash flow maintained for the past 16months
- Payment collection has been done and no cash outstanding

### Safety:

Construction workers are maximum floating labours, every time before engaging the new labours necessary safety induction has been given and daily safety Pep-talks, mock drills, Encouraging best workmen, daily unsafe act & condition's observation & compliance has been monitored, safety function organized to create the awareness, fortnight safety walk down all leads to the achievement of more than 2.5Million safe man-hours and the Project got the International safety award -Rospa Gold Award. Presently 500 workmen are working at site.

### Quality:

Construction sequence & methodology has been formulated to avoid quality issues. Toolbox meeting to the workmen whenever engaging new workmen/new item of work started. The Project has won the Quality award for the year 2014-15 within the Water Supply & Distribution BU.

### CSR:

The project area located in a politically sensitive area, during any functions they are asking for donations, we explained them we are not giving any donation to the political parties but at the same we can help the poor people located nearby. Through CSR we have distributed mosquito nets, blankets, tree plantation & supported the blood donation camps conducted near-by areas.

### Conclusion:

We have anticipated & faced many a risk, mitigated many of them by exploring new opportunities available and put our team efforts to utilize that. We also supported the maxim - "one rupee saving is equal to one rupee earning to the company ". The dedication and hard work of the Team helped the project to complete in time thereby, providing clean potable water, free of arsenic, to the people of West Bengal.

### Awards:

1. Runner-up, L&T Risk Competition, Category- less than 500 Cr. Projects, 2017
2. WS&D Quality trophy, 2014-'15
3. Rospa Safety Gold Award, 2015

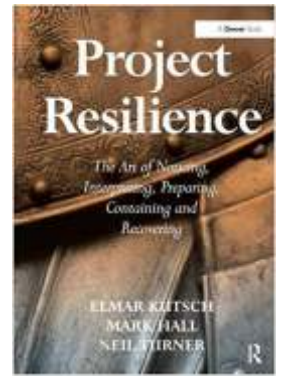
*Contributed by*  
**Mr. V. Dakshinamurthy**  
 Project Manager

**Mr. P. Siva Kumar**  
 Cluster Head, Kolkata  
 WET IC

# Look-out in the Library

## Book Review

**Title** : Project Resilience: The Art of Noticing, Interpreting, Preparing, Containing and Recovering  
**Authors** : ElmarKutsch, Mark Hall, Neil Turner  
**Publisher** : Gower/Routledge 2015/16



While, professionalization of Project Management and its contribution to organizational success is a foregone conclusion and is credited to enabling economic growth worldwide, project success has been hard to predict/realize.

While prescriptive guidelines in Project Management, which entail following a set of rules, procedures and techniques, support achieving Project Success; managing the iron triangle of cost-schedule and scope remains elusive. While the tools are valuable, project performance across a range of industries is still disappointing.

This book while giving due respect to the "science of project management" delves deeper to unravel the "art of project management" which is embodied in the creative skill, experience and imagination in dealing with risk, uncertainty and complexity. Given the advances in cognitive neuroscience and behavioral economics, it has become imperative that we recognize both leadership and fallibilities/ biases in human behavior. The aim is to, therefore, go beyond mere compliance to rules and procedures.

The mechanistic view of projects claim that work can be broken down, executed and controlled as a series of interlocking parts. The authors suggest an alternate view, which is an "organic" construct i.e., living entities existing for a finite period of time, consisting of people, processes and structures. Project Management frameworks have not geared up to dynamically manage "sudden" and "creeping" project crises. The "project organism" is constantly challenged by adversarial circumstances from the environment and success therefore stems from being resilient - which is characterized as mindfulness-based project management- the ability to notice, interpret, prepare for, and consistently to contain and recover from adversity.

### Noticing

Noticing is the awareness of the ambiguous and the subtle with little or no warning. We should foster a state of awareness that recognizes and anticipates emerging adversity, but trouble is visible when it unfolds and demands a response.

The "lure of certainty" does not allow for forecasting trouble-spots - the "lure" stems from expectations of normality, complacency, focusing on the familiar, aiming at the measurable, negative connotation, fixation, myopia etc.

Key enablers of noticing are: acknowledgment of risk and uncertainty, vigilance, freedom to be vigilant, reporting culture, cross-functional teams and intelligent tools. Leadership in the art of noticing is derived by battling complacency, moving the onus of proof, making people imagine, stripping adversity of its negative connotations, focusing on the issue not the person reporting it and encouraging the sharing of adversity. The impact of noticing behavior is seen when reporting beyond boundaries, consistency in relationships and paying for supposedly idle resources.

### Interpreting

The key factor underpinning the complexity of working in projects is the interaction of various elements with its environment and ecosystem. Complexity may be apparent in new technologies or innovative methods and processes, however, it is less apparent given there is a diverse range of stakeholders and constant change in market conditions.

The "lure of simplicity" encourages complacency and adds to the growing ignorance of the complexity. The "lure" is an outcome of optimism bias, normalizing, "no effect on me", oversimplification, subjectivity of assessment of probability of risk, (unchecked) estimates become commitments, anchoring, amnesia, and differing scales of loss/gain perception.

To avoid the "lure", we, find key enablers, by deep-dive into interconnections or inter-dependencies (via causal maps), play devil's advocate, creating organizational memory via communities of practice and value driven risk management.



Leadership in the art of interpreting is achieved by asking inconvenient questions, focusing on opportunities, distinguishing between noise and "real" risk / uncertainty, addressing the 'So What?' question, extending the half-life of risk and uncertainty, being optimistic in the face of the abyss and by allowing people to appreciate different perspectives. The impact of interpreting on relationships are being reluctant to commit to singularity, selling capabilities to deal with the uncertainty, not the illusion of certainty, repeatedly understanding the power of hold diverse perspectives.

## Preparing

Preparation in projects consisting of understanding the project environment consisting of organization(s), people and ways of working. Preparation entails creating a structure for people to fit it, for ways of working to be established and all of which should be aligned to project goals and objectives.

The "lure of the fail-safe" has to be avoided in the planning phase itself and prepare of what we do not know or cannot yet imagine. This "lure" has its foundations in preparing only for the expected, erosion of effectiveness, optimism bias, abstracting reality, favoring rigidity over flexibility, subscribing to a silo mentality and anchoring.

The key enablers to the art of preparing are faith in preparing for adversity, having a repository of wide number of responses, empowerment via simulations, games and rehearsals, being routinely flexible (freedom with fences), a sensible planning horizon and goal flexibility. Organizational flexibility has four dimensions - namely, temporal (timely response), range (of outcomes), intention (proactive) and focus (on internal environment and external ecosystem).

Leadership in the art of preparing is a product of maintaining goal flexibility, empowering project members, breaking down barriers, helping people get 'close' to risk (role plays) and incentivizing beyond compliance. The impact of preparing on relationships by dealing with issues of power and politics via integrating stakeholders in preparations and addressing discomfort. We need to be open to a range of project outcomes and resilience if an outcome of preparing a project for the unexpected.

## Containing

The penultimate step in managing complex projects in a VUCA world is the commitment to contain risk/ uncertainty while preventing complexity cascading into a full-blown crisis. While preparation allows for unexpected risk, containment manages unexpected uncertainty. Despite proactive and timely resolution, behavioral obstacles hinder readiness for containment.

The "lure of control" is a mindset is built by responding habitually, over-use of hierarchical escalation mechanism, problematic accountability, isolated view of situations, non-commitment on risk response and lack of reflection. The realization of the key enablers are due to commitment, abundance of expertise, ability to see the big picture, spontaneity through improvisation and freedom to think. Leadership in managing uncertainty, ambiguity and novelty require reflection and deliberation and not 'blind and unthinking' adherence to past response. Increasing readiness via constant communication, crucial conversations; facilitating improvisation with purposeful consideration; slowing down progress and deferring to expertise while continually dealing with accountability and correcting wrong containment practices. The impact of this process increases due to assessment of contribution, driving commitment of suppliers, addressing accountability and continually engaging in containment.

## Recovering

Given that preceding normality has cascaded into crisis; undue stress, lack of clarity, we must avoid poorly thought-through actions. Objectivity even with stretched emotions is the need of the hour.

The "lure of a great-escape" is created by defensive retreats, broken communication, centralization of power, thinking and acting from past mental maps and tunnel vision. The enablers for recovering are ensuring project continuity, checklists, closeness, "tiger teams" and sustain commitment. Leadership builds from readying stakeholders, being reluctant to press the panic button, being hesitant to centralize, maintaining trust, managing behavior not plans, channeling resources where they are needed first and learning from crisis.

**The ideas in the book will assist you in managing adversities in the project more effectively and probably, in helping to prevent crises from happening.**

## IPM Library: New Arrivals

IPM Library has added total 59 new books in November – December 2018. These books are latest editions and published by reputed publishers like Taylor & Francis, Gower, Wiley, etc. The areas covered are Project Management, Construction & Infrastructure Management, Claims & Contract Management, Real estate and Project Finance and Project risk management.



## Book at a glance



**Title** : Managing Complex Construction Projects: A System Approach  
**Authors** : Briesemeister, John K.  
**Publisher** : CRC Press – A Division of Taylor & Francis Group, New York, 2018

**Abstract:** To many program, project, or construction managers, a complex project seems to be a labyrinth with many hidden dangers. This book is a guide through that labyrinth. It explains best practices and provides insight so they cannot only identify hidden dangers but also effectively manage the construction process to either mitigate or eliminate these risks.

The book presents a systems-based approach to construction project management that can facilitate a greater understanding of the complexity inherent in large construction projects and how that complexity can be effectively managed. The systems approach permits the onsite construction project manager to take a complex construction project, break it down into manageable pieces, and ensure that all systems are in alignment with the original goal of the project.

This approach combines industrial engineering, project management, and finance into a unified approach for effective management of complex construction projects, ranging from a power plant to a highway project. The problem with complex programs and projects is that many managers are only equipped with a knowledge of project management. A system for construction is a collection of many processes effectively working together to produce a specific deliverable, which is usually defined in the program or project's contract. This system has a series of specific inputs and outputs, which are what the customer expects from the company or companies performing the work.

This book develops checklists based on these inputs and outputs, which managers can use when first arriving onsite, and provides a "nuts and bolts" approach for managing a complex construction project onsite. The author shares valuable lessons learned during a career of more than thirty years of working on various construction sites around the world. These lessons learned are filled with valuable information to aid readers become more effective as a program, project, or construction manager of complex construction projects.

# Latest Presentations & Publications

**Dharmendra Trivedi,**

**"Contemporary Trends of Information Seeking Behaviour of Research Scholars of Gujarat University: A Case study"**

Library Philosophy and Practice (e-journal), ISSN-152-0222

Digital Commons @ UNIVERSITY of NEBRASKA-LINCOLN.

**Abstract:** The study inspects the Information needs and seeking behaviour of research scholars of Gujarat University in Social science and Linguistics disciplines. Sample constituted the population of total 80 research scholars from social science and linguistic disciplines. The study conducted through survey methodology with questionnaire developed basis on the core compounds of information seeking behaviour and collected the research data from the registered research scholars of Gujarat University. The results revealed that female little dominated in research work and the major purpose of seeking behaviour is for research work, knowledge enrichment and writing research and conference papers.

Research scholars desired to use Gujarat university central library and their department library to pursue information. Study shows that research scholars have initiated to use various e-resources and internet based services but still they are not aware about remote login and File Transfer Protocol (FTP). Majority of research scholar's consults print resources mainly reference collection, subject books and periodicals followed by digital resources for their on-going research work. Research scholars desired to discuss with subject experts and participates workshops and conferences on their areas for updating with current trends.

Study also explored the difficulty faced by the scholars in information seeking activities. Study found that majority of scholars reported problem to access e-resources of university library and due to the information overload facing difficulty to identify appropriated sources. Study concluded with the recommendations to the university library authority to understand the research scholar's needs and reframe the library management system based on the social scientists requirement and provide better quality library services to this important community.

**Arun Vetrivel, Reghunath K.P.**

**"Agile Project Management for Non-IT Projects"**

12th Annual ISDI Conference,

SPJIMR, Mumbai.

**Abstract:** Today even in Non-IT projects the scope and technology are evolving which has resulted in a paradigm shift in the minds of project managers from preventing scope changes to embracing changes. Due to this new mindset agile project management (APM) which brings in agility to adapt to changes will be the future norm. This paper explores the prerequisites in implementing APM for non-IT projects. Data about relevant APM practices is collected from Project Managers of Non-IT background and after analysis a list of suitable practices for Non-IT projects are identified.



# Reflections on Real Life Project Problems

- **How the problem surfaced. (See it)**

Change in earthquake zone for design of structure from Zone 4 to Zone 5 results in delay of 3-4 months. No Indian supplier was ready to supply 18000 MT in 6 months.

- **How we took immediate action on it (Own it)**

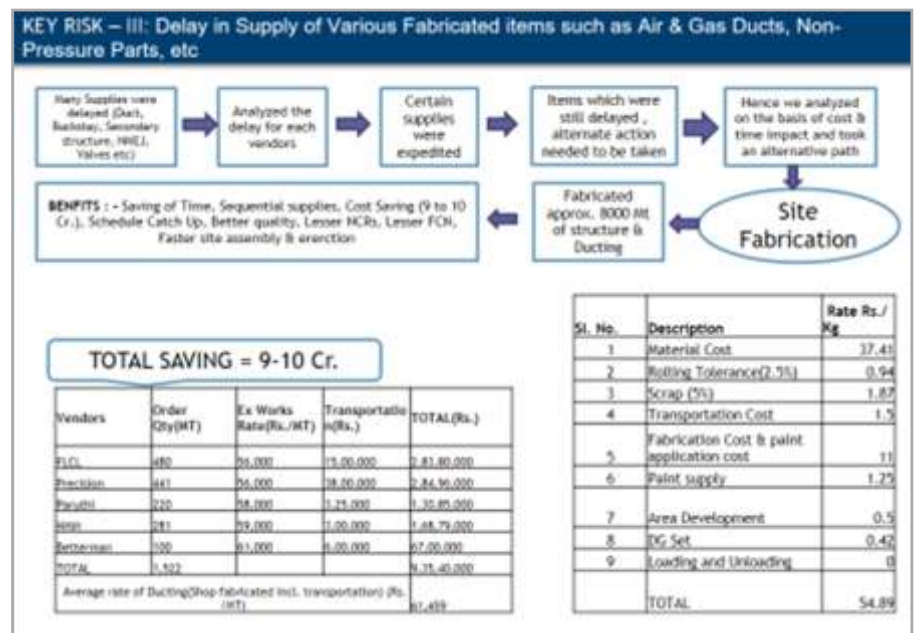
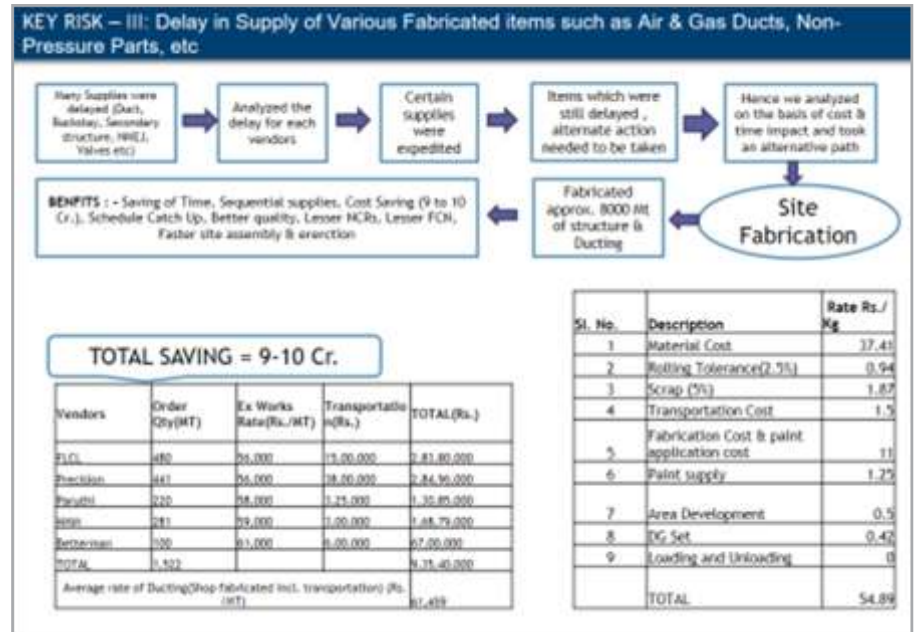
Consulted our collaborator MHPS (Mitsubishi Hitachi Power Systems) who suggested few suppliers from China. Our team visited these suppliers and zeroed on one competent one (Shanghai Boyce - MCC)

- **How the problem was analysed and solution was found (Solve it)**

We worked on micro details of total design, material procurement, manufacturing, inspection, custom clearance, dispatch processes and optimized each one. We even optimized logistics and imported the material at Mundra Port and ensured to deliver the material in 7-10 days to Rajpura Site via Gujarat - Rajasthan - Punjab route.

- **How the problem was actually solved (Do it)**

We placed our own design inspection and expediting managers/engineers turn by turn in their premises and ensured each activity is performed as per the plan. Ultimately 18000 MT was delivered in 6 months spanning shipments.



## Learning experience in a reflective tone

I think it was taxing, but very educative experience. True, part of the problem could be avoided, but what equally matters is what we do when an unexpected problem hits us. For me lesson was myself and my team taking responsibility, displaying ownership and demonstrating accountability without passing the buck or passively waiting the problem to disappear. Good teams deliver better projects.

Thinking out of the box when every supplier had refused to deliver and going out of India to China was an excellent decision. Posting our design/quality/expediting/insurance surveyors was excellent boost to total delivery cycle. Importing material at Mundra Port was a marvelous idea, which avoided long waiting time while passing through Mumbai Port and Mumbai municipal limits and most importantly the Boiler erection could be started on scheduled date despite design delay of 3-4 months.

Contributed by

**Mr. S. K. Gupta**

General Manager & Project Director – Malwa,  
L&T Power



# IPM Programme Panorama

## Role based Programme

### Cost Engineering

**Date** : 22nd October to 27th October 2018

**Venue** : IPM, Vadodara

The programme delivered by Dr. Hiren Maniar, Dr. Hariharan and Mr. RamapriyaValmiki

### Programme Highlights:

- This programme is to understand area of Total Cost Management (TCM) through planning and controlling resources, costs, profitability and risk.
- The principles of effective practices in projects & product development in order to achieve the organizations goals and objective in profits and mark up.
- To explain about the body of knowledge and standards of conduct for the practice of cost engineering.
- 23 participants from B&F, Defence, E&A, LTHE, LTTS, HCI ,PT&D, TI and WET IC attended the programme



## Flying High with Flagship Programmes

### L&TIPM and NICMAR: Batch - 4 (2018-2020)

### Module 1 - Essentials of Infrastructure and Construction Management (EICM)

**Date** : 26th November to 1st December 2018

**Venue** : IPM, Vadodara

The programme delivered by IPM faculty, NICMAR faculty and external faculty.

### Programme Highlights:

- EICM –Module 1 Inauguration ceremony was held on 26th November 2018 at IPM Vadodara campus.
- Prof. VTCS Rao, Dean IPM addresses the participants
- 42 participants from LTHE, B&F, WET,HCI, Power and TI IC attended the Module.
- This programme focuses on developing strategic and crucial skills for managing major construction contracts or construction of major EPC projects.
- Post programme participants will be able to improve upon their interface with various stakeholders. Participants will also gain confidence in use of tools, techniques and tactics and improve deliverables management.



## Module 1 - Quantity Surveying and Services (QSS)

**Date** : 10th December 2018 – 14th December 2018

**Venue** : NICMAR, Pune

The programme delivered by NICMAR faculties.



### Programme Highlights:

- Module 1 Inauguration ceremony was held on 10th December 2018 at NICMAR, Pune campus.
- 25 participants from LTHE, B&F, WET, HCI, Power and TI IC attended the Module.
- This programme focuses on impart knowledge, skills and competencies in the area of Quantity Surveying.
- Participants will be able to confidently deliver in the areas of quantity estimation, planning, cost management, contract and claims management.

## Ikons of IC-Specific Programmes

### PT&D IC- Nurturing Excellence in Planning & Control (Nu EPC)

**Date** : 21st November to 27th November 2018

**Venue** : IPM, Vadodara

The programme delivered by IPM faculties, PT&D and other external faculty.



### Programme Highlights:

- Batch 2- Nu EPC programme has 27 participants from PT&D IC.
- Provided an Understanding & importance of structured Planning approach. Participants appreciated the nuances in planning and estimation. Planning behavior is understood through various group activities.
- Better understanding of Risk behavior, risk analysis, team behaviors and key stakeholders etc. are new dimensions to the learning and implementation.
- The programme helped in getting orientation in terms of latest technological development (Digitalization) to improve traditional construction methodology, speeding up, better monitoring and control like (Pro-cube, Drone/LiDAR for survey, RFID for store management, L&T Mobile apps, BIM for Building 3D modeling, Geospatial Technology (Vehicle Monitoring System).
- Improved understanding of Contractual obligations and defect liabilities and statutory compliances in business.
- Scope management and scope change control, construction monitoring and control, especially from the point of view of reducing rework by increasing check points will help in mitigating rejections and improving client satisfaction

### PT&D IC -Special Program for Excellence in Engineering & Design (SPEED)

**Date** : M1 – 15th November to 17th November 2018  
M2 – 28th November to 30th November 2018

**Venue** : IPM, Chennai

The programme delivered by Prof. V.T.C.S. Rao, Prof. Sunil Kumar, Dr. Chakradhar and various seniors from PT&D IC.

#### Programme Highlights

- PT&D IC and L&T IPM successfully completed first batch of SPEED and trained 20 participants in the field of Engineering and Design Management.
- L&T IPM launched the 1st batch on 15th November 2018 to address issues/pain points/challenges faced by PT&D projects in the area of design coordination, impact to timely completion, change management – strengthening the effectiveness of Project Engineering Managers.
- The programme was inaugurated by Mr. T. Madhav Das in the presence of Mr. Srikant Srinivasan and Prof. VTCS Rao (Dean-IPM).
- Programme was delivered by IPM Faculty members, PT&D Practicing managers and visiting faculty members from reputed institutes.

#### The following BU-heads & seniors participated in various sessions/interactions:

- Mr. Jones, Mr. R.B.S. Natarajan, Mr. S. L. Mahajan; Mr. G. Kesavan, Head, Supply Chain; Mr. Sekhar Balasubramanian, Head, Central Planning cell; Mr. Sikka, Head, Africa; Mr. V. Ramnathan, Head, Risk, (PT&D); Mr. Mohan, Consultant (Retd. L&T-PT&D); Design Heads – Asokan D., K. Jambu Kailas, Manivannan, Kalyansundaram, Geeta Hariharan
- Ms. Deepa Philip, IPM external faculty took a session on Situational Leadership, as a technique for developing team members.
- Orientation to a new online community of practice was given on L&T IPM's Knowledge @ Work – <http://kb.Intipm.org/>. This C.O.P also serves as database of course artefacts.
- The programme sponsor(s) was Mr. Srinivasan Head – Design (PT&D) and Mr. Srikant Srinivasan, Head-HR (PT&D)
- A mixer was organized for the participants to interact with PT&D seniors on 29th November at Feathers Hotel.
- The 21 participants were mostly from Sub-station BU of PT&D.



### LTTS IC- Common Certification in Project Management (CCPM)

**Date** : 13th December to 21st December 2018

**Venue** : IPM, Chennai

The programme delivered by Prof. K P Reghunath, Dr. Hariharan, Arun Vetrivel and Mr. Karthik Ramamurthy.

#### Programme Highlights:

- The program caters to the Products/Plants orientation through detailed intersections of the project life-cycle with the product and service life-cycle(s).
- The programme will reinforce some basis of project management and will deal with application of PM concepts in real life scenario.
- 22 participants from LTTS attended the programme.



### PT&D IC - Claims & Contract Management

**Date** : 28th November to 1st December 2018

**Venue** : IPM, Chennai

#### Programme Highlights:

- This program has been specially designed to get familiar with the systematic approach in managing complexities.
- Navigate through potential pitfalls and minimize profit leaks through well managed Contract and Claims Management approach.
- 17 participants from PT&D attended the programme.





## Geo Structure IC - Planning Engineers Capability Building Program (PEP)

**Date** : 28th November to 1st December 2018

**Venue** : IPM, Chennai



### Programme Highlights:

- This is the first flagship program of L&T Geo Structure.
- The programme has been specially formulated to hone the capabilities of planning engineers to meet their goal “3G3” (Three times growth in three years).
- This programme focus on – Project Planning & Scheduling, Supply Chain, Material Management, Project Finance, Stakeholder Management, Risk & Contract Management and Experiential learning through Simulation.
- The course was taught by Dr. Chakradhar Iyyunni, Prof. K.P. Reghunath and Dr. Hariharan.
- 21 participants from Geo structure IC attended the programme.

## WET IC - Project Risk Management

**Date** : 19th& 20th November 2018

**Venue** : IPM, Chennai

### Programme Highlights:

- This program aims at identifying & measuring risks involved in WET projects & mitigation of the same
- Better understanding of Project Risk Management – Bidding & Planning Phase
- Qualitative & Quantitative Risk Management to the learning and implementation.
- 23 participants from WET IC attended the programme.



## Smart World & Communication - Level 0: Principles of Project Management

**Date** : 29th October–2nd November 2018

**Venue** : IPM, Chennai

The programme delivered by Dr. Chakradhar Iyyunni, Dr. Hiren Maniar, Prof. Sunil Kumar, Dr. Hariharan Subramanyan

### Programme Highlights:

- To develop perspectives to adapt & shift planning strategies, staffing models & goal setting during lifecycle of a project.
- To impart knowledge and skill across various aspects of the theory and practice of project management.
- To understand the basic principles/concepts and terminology of Project Management.
- To enable the participants to prioritize the project activities & workload.
- Understanding the fundamentals of Managing Scope, Schedule, Cost & Resource
- To understand the fundamentals of Project Risk Management.
- To understand the fundamentals of Project Execution Management.
- 18 participants from Smart world attended the programme.





# Snapshots of SCDMs

## (Specific Competency Development Programmes)

### ■ Lean Construction & Project Management

**Date** : 23rd & 24th October 2018

**Venue** : IPM Chennai

The programme delivered by Prof. Sunil Kumar & Mr. Tony Jacob

#### Programme Highlights:

- In construction projects majority of activities gets completed during the fag end of projects, irrespective of the time schedule prepared in the initial phase. This causes quality issues, stress for professionals and profit loss even if the project is handed over on time.
- A simple, structured and systematic way of planning the project using Lean Construction & Project Management best practices by involving every stakeholder at right time will ensure proper making ready of activities, better controlling of works & timely completion of project.
- 11 participants from PTND, LTSB, HCI & HE attended the programme.



### ■ Client Relationship Management

**Date** : 23rd & 24th October 2018

**Venue** : IPM Chennai

The programme delivered by Prof. V T Chandra Sekhar Rao & Mr. Sunil Kumar Gupta (L&T MHPS - Cluster Project Director)

#### Programme Highlights:

- Understand the difference between Client Relationship & Customer Relationship.
- Understand the complexities of Client organisations & have right strategies to build relationship at various levels.
- Understanding Priorities and preferences of Client Key Personnel; Establishing correct and appropriate level of engagement to help the project objectives.
- Project Manager/ Project Director's role in double? hatting as an account manager while delivering a project.
- Business Scenarios in Contract Execution & How to deal with Client
- Dealing with Crisis situations while maintaining the Client Relationship.
- Contract & Negotiation Strategies including a preliminary assessment of your bargaining styles.
- 11 participants from Geo, LTSS, HCI & MMH attended the programme.



### ■ Project Supply Chain & Logistics Management

**Date** : 10th & 11th December 2018

**Venue** : IPM, Chennai

The programme delivered by Mr. N S Sivaraman

#### Programme Highlights:

- This programme focuses on the creation of appropriate approaches and special skills needed for effective Supply Chain Management.
- It also emphasizes the need for integration of various skills with project needs for successful project management.
- 16 participants from LTTS, Shipbuilding, Defence, LTHE, and PT&D attended the programme.



# Tool based SCDMs

## ■ Advanced Primavera

**Date** : 5th - 6th December 2018

**Venue** : IPM, Vadodara

The programme delivered by Prof. K.P.Reghunath

### Programme Highlights:

- This Programme provides detailed exposure to various features and aspects of Primavera that can simplify the job of project managers to handle the complexities of managing single and even multiple projects.
- The programme trains on advance scheduling options, user defined fields, global change, earned value analysis, duration types, importing and exporting project data and percent complete types.
- 18 participants from B&F, E&A, LTHE, LTTS, PT&D, TI and WET IC attended the programme.



## ■ Primavera

**Date** : 10th - 12th Dec 2018

**Venue** : IPM Chennai

The programme delivered by Prof. K. P. Reghunath

### Programme Highlights

- This Programme provides detailed exposure to various features and aspects of Primavera.
- To understand the overview of Project Management Software.
- It provides the knowledge about Structuring the Project, Creating a Project & Work Breakdown Structure.
- 18 participants from Heavy Civil Infra IC & their end customers viz., NPCIL, Kudankulam attended the programme.

## ■ Preparatory program on PMP certification examination

**Date** : 17th December- 21st December 2018

**Venue** : IPM Chennai

The programme delivered by Mr. Tony Jacob

### Programme Highlights

- This programme has lively, engaging delivery style including PM games.
- Practical examples to match PMBOK concepts to project situations.
- Live project examples to demonstrate use of tools in real projects.
- Discussion of sample exam questions after every knowledge area.
- Extensive summary session to highlight key exam concepts.
- Detailed "Exam Roadmap" with a PM approach to prepare for the PMP exam.
- 19 participants from PTND, TI, LTTS, Realty, LTHE, L&T Ship Building, SWC.



# From the “World of Webinars”

<b>31 Oct 2018</b>	<b>Decision Making</b>	<b>Dr. Chakradhar Iyyunni</b>
The objective of the webinar is to provide participants a broad overview to understand challenges, framework, process and tool(s) for effective decision-making		
<b>23 Nov 2018</b>	<b>Project Communication Management</b>	<b>Prof. VTCS Rao</b>
The objective of the webinar is to enhance participant knowledge on more specific detail like, what communication and communication plan mean in a project, the steps required for effective communication, how to overcome obstacles and barriers.		
<b>27 Nov 2018</b>	<b>Risk &amp; Profitability</b>	<b>Prof. Makarand Hastak</b>
Many construction companies are not obtaining the profits they expect from the awarded projects. Therefore, a protocol to analyze profitability has been developed to understand the gaps between actual and estimated profit and the origins of loss of profit on construction projects. The purpose of this webinar is to present a protocol for profitability analysis for the construction companies.		
<b>28 Nov 2018</b>	<b>Project Site, Commissioning and closeout</b>	<b>Prof. Sunil Kumar</b>
The objective of this webinar is to provide an Overall understanding of key principles of site management, site organization, management of equipment and materials, human resource management, commissioning and close out considerations.		
<b>5 Dec 2018</b>	<b>Project Organization Structures</b>	<b>Dr. Chakradhar Iyyunni</b>
The objective of the webinar is to provide an overview about different organizational structures and discuss how matrix organizational structures should be utilized for effective project delivery.		

## IPM – Programme calendar

### Forthcoming Quarterly Programme details

Sr. No	Programme	Location	Duration	Date
1	RICS - AC3A - Advanced Certificate in Contract Claims and Arbitration	Chennai	6 days	28th January - 2nd February 2019
2	External Programme - Project Planning in Construction Management	Vadodara	6 days	18th February - 23rd February 2019

## Watch-out Box

- **WWW series:** Webinars on Workable Solutions to Wicked Problems - Real World Experience Sharing Sessions from May 2019.
- **SEEK** (Share Enlighten Enrich Knowledge) Events that will be launched in March 2019 on working Saturdays - at Vadodara and Chennai
- **I-PECS** (IPM - Project Execution Case Studies) Case-study competition from 2019-2020





Please send your valuable suggestions & comments to  
**Info@Intipm.org**

Conceptualized, Designed & Published by



**IPM - VADODARA**

IPM/PTI BUILDING  
KC RESIDENCY CAMPUS  
B/h L&T KNOWLEDGE CITY  
AJWA-WAGHODIYA CROSS ROAD, NH #8  
VADODARA

**IPM - CHENNAI**

L&T CONSTRUCTION DIVISION  
TRAINING CENTRE, 1ST FLOOR  
OPP TC-II,  
MANAPAKKAM  
CHENNAI