IPM Prism

A Learning Journal from L&T Institute of Project Management

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Connected Excellence in Project Management

Special Edition

Stay Ahead
Stay Relevant
Stay Connected

Leadership Letters

Mr. T. Madhava Das
EVP & Head
Power Transmission &
Distribution IC

Dear Colleagues,

Excellence in Project Management has been a hallmark of L&T story. To stay ahead in that game, L&T IPM can be a major enabler. In recent times, we at Power Transmission & Distribution have worked closely with IPM in developing and delivering a few programmes that have been quite successful and proven effective.

With changing times, we have set out to fortify both frontline planning & execution and back end analytics to support our site teams. As part of these initiatives, our HR team has launched a slew of tailor-made training programmes in which I have personally been part of conceptualizing / designing.

Nurturing Excellence in Planning & Control (NuEPC) is one such example where L&T IPM has got engaged with us. Starting from site visits by IPM faculty for understanding our requirements to evaluation post – training, their involvement has been great. IPM has been instrumental in delivering similar programmes for project managers and design professionals as well.

To ensure the effectiveness of such programmes, we follow certain key success factors. Firstly, the key components of programme are embedded into the work, for instance, in the form of a breakthrough project. Secondly, the immediate superiors of the trainee are involved in the process. Also, the content & delivery is designed in such a way that a lot of learning happens through interaction with peers. For the multigenerational, diverse and remote workforce like ours, digital and experiential means are adopted. Gamification brought in by IPM is a case in point.

With the right mix of inhouse and external faculty, we stay relevant to our requirements while simultaneously staying connected with the happenings outside.

I have also made it clear that soft skills training has to be incorporated at every possible avenue, in tune with changing requirements of the business. It is not the era where just rigorous scientific management & Gantt charts will work. The workplace is dynamic and work nature is nebulous, demanding a lot of collaboration and instant adaptation.

We used to say that L&T also stands for Learning & Teaching. In the same vein, T&D stands not just for Transmission & Distribution but also for Training & Development.

IPM's pedagogy is aligned with our practices. Its ability to cross – pollinate based on pan L&T reach and through institutional collaborations is a plus.

To lead is cool, To learn is ubercool.

Dean's Desk

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

Last quarter has been a very eventful one for the institute. For the first time in the history of IPM, we conducted a Project Management Conclave, with the theme, “Connected Excellence in Project Management (CEPM)”. The focus of this edition of the PRISM is on CEPM, with many of the featured columns containing references to it. The Conclave was a huge success, underpinned by openness and knowledge sharing across IC/BUs of L&T.

Second, we floated our first program with an exclusive focus on Contracts, Claims, and Arbitration in collaboration with RICS India which was supported by our esteemed patron, Heavy Civil Infrastructure IC. This program will enhance competencies among the participants in navigating contracts and claims issues in this challenging and demanding project environment. IPM will endeavour to further improvise the program delivery from module to module to address problems faced by L&T Projects.

Third, we conducted our first World Bank tie-up training program in Feb 2019 on Construction Project Planning and Management (CPPM) for project professionals from Government organizations in World Bank assisted development projects. Participants appreciated the academic rigour, program coverage, and case studies. L&T IPM has also derived benefits through exposure to the World Bank Contracting Models during content development. Sessions were interactive with sharing of challenges faced at a working level by project owners, for which IPM proposed some implementable ideas and brought in perspectives of international best practices.

During the last two years, L&T IPM has taken many new initiatives which have given desired success. I attribute this to continuous encouragement by senior management of L&T, constant mentoring & guidance from Mr. Yogi Sriram and relentless efforts and hard work put in by team IPM. Our patrons–the HR Heads of the IC/BUs and academic associate partners like SDA Bocconi, University of Texas, Cranfield University, RICS and NICMAR have been of great support to IPM.

During last year we also launched several new IC specific programs to name a few like Engineering Management Program for PT&D, PEP-3G3 program for Geo-Structure planning engineers and the International Project Management program for L&T Realty. Every IC's trust in IPM as their project management knowledge partner for the IC specific programs, is a constant source of inspiration as well as aspiration to do more and add value to their respective businesses. With great opportunities, comes greater responsibility; L&T IPM undertakes it with all its humility and gratitude.

IPM will continue its knowledge sharing and knowledge management activities with more rigor and passion through an increased number of Webinars and more intense topics of project management.

Talking about knowledge (Jnanam), the Gita's thirteenth chapter goes on defining knowledge in few stanzas, but in a profound way –

"amanitvam adambhitvam ahimsa kshantir arjavam |
acharyopasanam saucham sthairyam atma-vinigrahah ||
....
etat jnanam iti proktam ajnanam yad ato 'anyatha" ||

The real knowledge is a reflected by "amanitvam—humility; adambhitvam—pridelessness; ahimsa—nonviolence in transactions and conversations; kshantir—tolerance; arjavam—simplicity; acarya-upasanam—approaching master/mentor for guidance; saucham—cleanliness; sthairyam—steadfastness; atma-vinigrahah—self-control".

Is it too difficult to supplement the methods, strategies in project execution (many aspects of which are more often not in our control) with the above characteristics (all aspects of which are very much in our control)? It is an important question to ponder in the knowledge-worker era.

From the Editor's Desk

Project Management Conclave is one of the grandest events crafted by IPM, to promote cross learning by enabling employees across departments, companies and geographical boundaries to share and exchange knowledge. After drenching ourselves in the knowledge tsunami and savouring the richness of the knowledge that got rediscovered, we decided to disseminate the knowledge to all parts of L&T as success stories through our learning journal. In this edition, we cover two project success stories and more success stories shall be published in the subsequent edition of Prism. The conclave also kindled the minds of the participants with contemporary issues by discussing the impact of digitization in construction project and Risk Management as a Strategic imperative for protecting Profitability, the highlights of the panel discussions are captured under the Expert Talk section.

Project planning has its own limitations, and there will always be some unknown- unknowns in the project, the "Reflection on Real life Project Problems " section throws light on those challenges that presented themselves without notice and how the project team reacted and resolved the challenge. In this section, we have experience sharing from Wipro IT SEZ Project team that advocates the agile principle "Customer Collaboration over Contract Negotiation". For those, who are in the lookout for deep dive knowledge, we have two Book reviews. First, a book about "Block chain technology and its relevance for Business" and second on "Leading Complex Projects". The Q1 of FY 2019-20 training calendar with details about programmes/ webinars and SCDMs is a must read to plan your learning quarter ahead.

The editorial team congratulates theme winners of the conclave for the project success stories and heartfelt thanks to Mr. Nandakumar T, Project Director of Wipro IT-SEZ project on the section Reflection on Real life Project Problems.

IPM PRISM is a 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 executing complex Domestic & International projects and adopted 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:

Arun V, Bala Maikandan, Dharmendra Trivedi, Dr. Hiren Maniar, Janaki G, Thivyapriya, Vandana Bhargava

Please send your valuable suggestions & comments to – **info@lntipm.org**

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Expert Talk

Risk Management as a Strategic Imperative for Protecting Profitability

Prof. VTCS Rao, Dean - L&T IPM (Facilitator)
Panel members
Ms. Jayashree Ramasubbu, Head - Corporate Risk Management
Mr. V. Ramanathan, Head - Risk Management, PT&D IC
Mr. Chandran KRR, Head - Contract administration and Risk Management, HCIIC

Discussion Points:

- Different risks impacting contracting company's project performance in the current scenario.
- How to navigate project execution in a profitable and efficient manner in uncertain environment?
- How unfriendly contract drafting and administration can impact project performance while performing the risk management process?
- How to balance opportunity and risk from projects' operational performance and profitability perspective?

Discussion Highlights:

- Prof VTCS Rao started the discussion with a pertinent question that often projects risks not considered during the planning and proposal stage impact project margins and performance during the execution stage. Questions are: what are the reasons behind the same and during the bidding stage how to forecast project risk faced in execution?
- Ms. Jayashree agreed that project risk is obvious right from the pre-bid stage and continuous in a different form till handover stage of the project. As per Ms. Jayashree, a major risks on projects are from counterparties like vendors, suppliers, sub-contractors including government authorities for various regulatory approvals. Contractor Company has no contract with counterparties and therefore the contractor cannot manage risks coming from counterparties and that impact project performance. During bidding stage, the contracting company can identify the risk that falls under the scope but during execution stage, most of the risk comes from counterparties. These execution risk includes labour availability, productivity, approvals/clearance from government authorities etc. Hence there should be a mechanism to address continual risk management throughout Project life cycle without fail.
- Mr.V. Ramanathan mentioned that like the theme of this conclave is "connected excellence in project management", "risk is also connected during each stage or facet of the project". Hence it is of paramount importance to have the right selection of resources and stakeholders to enable the contracting company to achieve committed operational and financial performance during the execution stage of the projects in a difficult environment.
- Mr.V. Ramanathan outlined that in some international projects of PT&D there are external risks is not under contractor's control like geographic risk, country risk and connected risk for project performance. As per his opinion, there should be a mechanism for the identification and mitigation of those uncontrolled risk to safeguard contractors' operational and financial performance. According to him, risk discovery and mitigation is a continuous process starts from the pre-bid stage and continuous till project close-out stage hence there should be a systemic plan for effective risk management during each stage of the project.
- Mr. Chandran stated that in Heavy Civil Infrastructure IC, because of mega scale and longer time duration of projects it is difficult to visualize all the risks during the pre-bid stage and at the time of drafting contracts. One can expect tangible risks like currency fluctuation, commodity price volatility or inflation related project resource risk based on past project experience or available historical database. According to him, the major problem or challenge in Heavy Civil Infrastructure IC is disruptive risk or sudden risk which is an unknown-unknown happening due to macro and microeconomic developments.

Key takeaways :

- Business development managers proposal should get involved right from the due-diligence stage of the projects. The contract drafting and administration should be their responsibility. They all need to know the implications of FIDIC terms / clauses and macro & micro-economic developments to tackle risk at each stage of the projects.
- Identification of project risk during bid-stage of the projects and studying of counterparties' ability to manage and mitigate risk is paramount in today's cut-throat and uncertain environment.
- Major risk happens in EOT (Extension of Time) because of non-availability of land or ROW (Right of Way) in the committed time by customers, leading to intentional or unintentional delays from them. At the same time because of the inability of the contractor to challenge customers through contract clauses and fear of losing repeat order or a new job may jeopardize project performance and impacts profitability.
- We have to increase adoption and use of new technology like BIM, mock-data and Digitalization to ensure a fool-proof monitoring and control of project performance from the contractor and customers' perspective to avoid undue risks at various stages of the project.
- In multilateral agency funded like The World Bank, ADB, JICA projects, sometimes the contractor has an inequitable contract with government bodies like NHAI, DFCC etc., in such cases, the contractor along with other affected counterparties should highlight to customers about applicable risk which can impact the operational and financial performance of their projects
- Understanding the number of notifications in government projects' contracts can help contract companies in getting EOT and managing operational performance and profitability.

Deep Dive into Digitalization

Digital Future of Construction Projects

Prof. VTCS Rao, Dean - L&T IPM (Facilitator)
Panel members
Mr. Anantha Sayana, CDO, L&T
Mr. P.R. Surendra Babu, VP & Head - Digital Engineering, L&T
Mr. Kalyan Vaidyanathan, CEO - Nadhi Technologies Ltd.

Discussion Points:

The challenges of digitalization in the Indian construction industry:

- Taking care of integration of multiple products to provide a complete and comprehensive digital solution.
- New skills required by project managers, construction managers to embrace BIM and Digital Initiatives
- Digital initiatives by our competitors in USA and Europe?
- Impact of Artificial Intelligence?

Discussion Highlights:

Prof. VTCS Rao started panel discussion by setting the context of digitization. Regarding the challenges of technology adoption, Mr. Kalyan said technology has not been a bottleneck for digitization. The discipline to share data is an important factor deciding the pace of technology adoption. Also contractual boundaries come in the way of providing information and technology adoption. Regarding query about who has to integrate technology, Mr. Kalyan replied that based on ongoing research about information sharing in construction, new standards were getting developed. At University of Texas, Austin, there is an industry and academia led group “FIATECH”, which has been developing interoperability standards for various processes in engineering, procurement, SCM, financial, progress etc. There are other groups in Europe called Build-Smart-Alliance doing the same. Once these become

Project Management Conclave Spotlight

L&T has a commendable history of delivering successful projects and there is a need for sharing the learning from those successful projects among project professionals in the company. As an enabler for knowledge-sharing, L&T IPM has embarked on another important initiative to connect project management professionals across the organization and promote partaking of best practices and smart ways to the current and future generations of project leaders in L&T.

L&T IPM organised its 1st Project Management Conclave on 24th & 25th January 2019 at L&T Construction's sprawling campus at Manapakkam, Chennai. The conclave created a platform for sharing project success stories and methods used to achieve it, across IC/ BUs of L&T.

Prof VTCS Rao welcomed the delegates in the august presence of Chief Guest Mr. Yogi Sriram, Senior Vice President, Corporate HR & Member of Ecom; keynote speakers Mr. Raj Kalady, Managing Director, PMI India; Dr. K.N. Satyanarayana, Director, IIT Tirupati; HR Heads of ICs – Mr. M.V. N Rao, Mr. Srikant Srinivasan, Mr. C. Jayakumar, Ms. Meena Priya, Mr. Manabendra Misra, Mr. Barttanu Kumar Das, Mr. Ramakishore, Mr. Bino Mathew Jose, Mr. Kumaralingam and senior business leaders from L&T Construction – Mr. Anantha Sayana, Mr. R. Shankarnarayan, Mr. T. Srinivasan, Mr. K. R. R. Chandran and Mr. V. Ramanathan.

Mr. Yogi Sriram started the conclave proceeding with his inaugural address. He spoke about the essential skills required for Project directors, emerging trends in Project Management, Power cultures and social responsibilities of a project organization. He also underscored the vital need for networking amongst the project professionals across various ICs and the need for communications as the new differentiator for excellence.

Opportunity to listen to thought leaders is an opportunity well leveraged by Individual participants, with good takeaways for the business. The conclave speakers who delivered valuable insights about various themes of CEPM (Connected Excellence in Project Management) were - Mr. Raj Kalady, Managing Director, Project Management Institute, India; Mr. Pawan Maini, Country Manager, Mace Group; Dr. K.N. Satyanarayana, Director, Indian Institute of Technology, Tirupati; Mr. Kaustuv Bagchi, Head, India Operations, L&T Hydrocarbon Engineering; Mr. Gordon Torp-Petersen, AECOM and Prof. Makarand Hastak Ph.D., P.E., CCP, Purdue University, USA.

Conclave organised the “case study presentations” and “poster presentations” under five themes–Digital Excellence, $E=MC^2$ (Engineering = Mending Creativity and Cost-effectiveness), Expert Risk navigation & Profit enhancement, Effective Close-out, Commissioning & Start-up and Operational Excellence. 162 participants from various IC/BUs of L&T along with HR team members attended the conclave.

This conclave highlighted multiple dimensions of a successful project execution, namely: for early completion, improving project margins through incentives, achieving committed project completion to customers, effective positive cash flow management, managing working capital, enhanced supply chain efficiency and record level production rates.

There were 16 posters selected in various categories: Digital excellence (Contributing IC/BUs - IDPL, LTHE, Power, Solar, and Defence); Operational Excellence (Contributing IC/BUs - Realty, B&F, MMH); $E=MC^2$ (Contributing IC/BUs - B&F, Heavy Civil); Effective Close-out, Commissioning & Start up (Contributing IC/BUs - LTHE); Expert Risk Navigation and Profit Enhancement (Contributing IC/BUs – LTHE). The poster presentations allowed for a detailed discussion from the delegates and the presenters.

Conclave also arranged stalls from BIM Academy, TILOS for Scheduling, Taylor & Francis Publishing, Nadhi Consulting, and Candy for Estimation provided a useful venue for explorations into excellence to display innovative solutions in a dynamic project environment for the impressive audience.

Prof V T Chandra Sekhar Rao, Dean - L&T Institute of Project Management during his valedictory speech on way-forward mentioned about IPM’s initiatives in delivering high quality project management programs in fulfilling the ambitious “Lakshya 2021” of L&T. IPM plans to implement the learning inputs in project management programs for inculcating strategic imperatives such as achieving better profitable execution and developing a project management culture that will foster team behaviors and customer intimacy.

Mr. Shailesh Pathak, Chief Executive of L&T IDPL graced the valedictory of the conclave. During his valedictory address he gave a poignant description of project management excellence in everyday life viz, management of elections, opportunities and challenges in an evolving environment. He also felicitated the conclave winners.

The Project Management Conclave winners under:

Case study Presentation Category

Theme	Session Chair	Case study presentation	Winners
Digital Excellence	Mr. Anantha Sayana	Monitoring Concreting is Like Checking Cricbuzz	Heavy Civil Infrastructure IC
Expert Risk Navigation & Profit Enhancement	Ms. Jayashree Ramasubbu	Managing Risk Dynamically	Heavy Civil Infrastructure IC
Operational Excellence	Mr. N.S. Sivaraman	Operational Excellence& and Best Practices in Nagpur Safe & Smart City	Smart World & Communication
Engineering = Mending Creativity & Cost Effectiveness	Mr. T. Srinivasan	Smart–Synergized - Fast track Project Execution	L&T Hydrocarbon Engineering
Effective Closeout, Commissioning & Start up	Mr. R. Shankar Narayanan	Effective Close-Out By Goal Zero PSUA Initiative	L&T Hydrocarbon Engineering

Poster Category

Paper Title	IC	Winner
Commissioning Management Excellence in SNDC2/ KDC2 projects.	LTHE	1st
Information Management of SNDC2/ KDC2 Projects	LTHE	2nd
Operational Excellence in T3 project (Solar BU)	PT&D	3rd

The conclave in its entirety stood true to the L&T IPM mantra "Stay Ahead–Stay Relevant–Stay Connected" in all three contexts of individual excellence, institutional maturity and organizational pre-commence.

Testimonial on the IPM conclave

"This conclave has been an excellent platform to enhance awareness about the innovative work done by successful Project Managers to other counterparts across L&T. This exposure is required to enthuse, motivate and emulate Project Managers to set their goals with better level of understanding to improve productivity and profitability in their respective project sites"

Mr. J. Venkatesh
Senior DGM, WS&D BU, Chennai

"L&T IPM has significantly enhanced the integration with L&T construction in last two year. This conclave in Chennai is a great example of such close involvement with L&T's business"

Dr. C. Jaya Kumar
VP, Human Resources, Divisional Corporate, L&T

Snippets from Thought Leaders, Keynote Speakers

The future trend is on modelling, simulation, visualisation of projects, automation of project management processes

Mr. Yogi Sriram
SVP-Corporate HR &
Member of ECom

In his inauguration address Mr. Yogi Sriram said that Virtualization of Project management, Gender diversity in projects, Project management as a core competency, and Extensive adoption of project management as a profession are the emerging trends. He stressed the importance of appropriate power culture in project organisation and emphasized the relevance of the article "Gods of Management" by Charles Handy which talks about 4 different power cultures, Club, Role, Task and Existential culture and urged the audience to ponder upon the right culture for their projects.

Mr. Shailesh Pathak
Chief Executive Officer,
L&T IDPL

At L&T information exchange happens because of individual networks which need to evolve into a system that enables employees to interact with each other without knowing them personally

In his valedictory address Mr. Pathak asserted that India will become the 3rd largest economy by 2030 and how important is 2019 towards that grand journey. He emphasized the importance of timely delivery of projects and the impact of delay on the return on investments. He encouraged participants to visualise the huge growth opportunity for construction industry as the world's Top 10 growing cities are in India. He gave a poignant description of project management excellence in everyday life viz, management of elections, opportunities and challenges in an evolving environment.

The future of value delivery is a spectrum of approaches—predictive, iterative, incremental, agile, hybrid

Mr. Raj Kalady
Managing Director,
PMI, India

The project management as profession has been evolving over the last 50 years, in the past successful project management depended purely on technical skills like critical path method, PERT etc. but today technical skills are considered as basic hygiene and the requirement of strategic as well as leadership skills have become vital. Considering this requirement PMI created a talent triangle to emphasize it. Mr.Raj Kalady also shared his real life example of meeting with an accident during his scuba diving and related how interdependent we are and how to act in crisis situations.

The primary source of Occupational stress among Indian constructional Professionals is that their Job demands coordination with multiple stakeholders with conflicting demands

Dr. K.N. Satyanarayana
Director
IIT, Tirupati

The human resource issues in construction industry elaborating on the construction professional's issues and construction workers issue. As per the research on this issue, the factors causing turnover of workers are payment delays, improper basic Facilities, Better Wages elsewhere, labour subcontractor loss, improper arrangement and shifting of materials, Poor performance of Crews, inadequate work front, excessive rework, work available near their home town, Excess travel from labour shed to site, sharing of resources, Festival and harvest season & Relationship with other crews are some of the noted observations.

Mr. Pawan Maini
Country Manager,
Mace Group

Internet of Things (IoT) will make buildings interactive and alter their performance based on human input and machine learning

Mr. Pawan Maini has used a video case study construction of Heathrow air traffic control tower to illustrate how technology can be leveraged to build complex structures without impacting the daily operations of busy area like airports. The second case study the rising factory example showed how they were able to complete 18 storeys in 18 weeks, with 40% reduced lorry movements and 75 % less waste. He also talked about Digital innovation, modern methods of construction and moving to a production model.

Manager of high performance team need to juggle between the roles of a Coach, Barrier buster, Business Analyser, Facilitator, Result Catalyst & Living example

Mr. Gordon Torp-Petersen
AECOM India Pvt. Ltd.

During Mr. Gordon mentioned that achieving Operational Excellence requires the successful implementation of an integrated Business Execution System that effectively and seamlessly integrates the four building blocks: Strategy Deployment, Performance Management, Process Excellence, and High Performance Work Teams. According to him Well designed, efficient, and effective Management, Value Chain, and Support Processes are necessary to deliver world-class results.

Mr. Kaustuv Bagchi
Head,
India Operations,
L&T Hydrocarbon Engineering

Project Success can be achieved by eliminating double layering, Implementing RACI

Mr. Bagchi emphasized on "In quest of Execution par Excellence" and shared the lessons learnt from the PMI Award winning Bassein project. He elaborated how they have adopted an agile approach to project management and how they could seamlessly collaborate with Engineering, Procurement, Construction, Installation and Commissioning teams. He also showcased how did they achieve zero Punch Points, adopted the smart sourcing for smart execution, redefined the benchmarks and capitalized on new opportunities.

Snippets from Session Chairs

Using machinery can increase the speed of the projects and we use a lot of machinery in construction projects and digital technologies. The Internet of Things enables remote monitoring in real time of every one of the construction machinery, across 100 of our sites. On a single day, we have around 8200 machines on the field across 400-500 sites, where they are all connected and streaming data to us in real-time every minute to tell us what these machines are doing, what is the level of productivity, what is the diesel they are consuming and how do they assist in project progress.

Mr. Anantha Sayana
Chief Digital Officer,
L&T

Ms. Jayashree Ramasubbu
Head - Corporate Risk Management, L&T

There is no business without risk. It is not wrong to say the profit you make is the reward you get for the risk you are taking. So there is no wishing away risk. When we say we are managing risk, it means, what is the best way to optimize our processes, optimize our approaches to do business, such that we have predictable outcomes.

Mr. N S Sivaraman
Vice President (retd.) Special Projects

I would like to Quote from Henning Hock Larsen videos that "Machinery must be there, Buildings must be there but our most important asset will be People" and also refer to the recent BMW ad campaign which said "the Best way to predict the future is to create it" and I think L&T will create the future rather than predicting it.

Mr. T Srinivasan
Head Operations,
L&T GeoStructure

We will achieve the cost effectiveness through value engineering. The opportunity for value engineering starts right from the concept phase even before releasing the drawings to the project which includes aligning the resources from the tender stage including the project manager and key resources, faster mobilisation, focusing on the methodologies at the pre tender stage to improve the productivity.

Mr. R Shankara Narayan
Head - Strategy & Planning, Buildings & Factories

What organisation wants from a closeout is a huge learning transfer to happen from the team that executed the project to the future project managers. The challenge is how to capture the knowledge and how to transfer it. In the past, we have built many projects in the 80s and 90s, and today if we want to get into the nitty-gritty of how the projects are getting implemented and what were the day-to-day performance and what were the real issues, a lot of information has been lost. But with this digitization drive, I believe things are changing, the data will be a real asset. Every project manager must think, over and above the gross margin or the profit they are generating, one more additional important thing they are contributing to the organisation is the data they are going to transfer at the end of the project during the project closeout for the future generations.

Conclave Highlights – Stalls

Klitech

Tilos based planning and progress tracking outputs for linear projects was the main attraction of KL iTech Solution stall.Time/Distance diagrams, distance Gantt charts and powerful project performance dashboards was on full display.

KL iTech Solution also showcased ISETIA – project collaboration platform & its integration with TILOS software. Most attendees of the conclave visited KL iTech Solution stall and witnessed the capabilities of TILOS & SETIA platforms. The stall gave the project team members an opportunity to know more about TILOS software and how it could benefit in their day-to-day project management in delivering a project in a better way. One of the senior project managers who visited the stall quipped "the location /distance dimension based planning" is a big advantage provided by TILOS.

Nadhi Information Technologies

The Stall showcased the capabilities of their flagship product n-Pulse. Nadhi Information Technologies Pvt Ltd., a company incubated from the IIT Madras Research Park, is a Chennai based construction technology company developing analytics based, mobile enabled, collaborative decision support solutions for capital projects. Their flagship nPulse has been deployed by owners and EPC contractors in a wide range of projects ranging from Roads, Rail, Bridges, Power, Power Transmission & Distribution, Oil & Gas, Commercial, Residential, and Industrial Real Estate projects. Today, the nPulse solution is deployed in over 250 projects across 14 countries pan India, Middle East, Africa, and South East Asia. Nadhi also has wide experience implementing lean construction practices at various projects including power plants, factories, residential and commercial real estate facilities. Nadhi is part of the digital initiatives at PT&D (Align) and HCE (ITM) divisions at L&T. Nadhi is co-founded by Mr. Kalyan Vaidyanathan and Mr. Ravi Mundoli, from IIT Madras.

Candy

Construction Computer Software, better known as CCS, has been developed by contractors, to provide specialist software solutions to the construction industry – The Estimating, Project Control, Cost and Enterprise Management software of CCS helps increase and improve Control, Compliance, Efficiency,& Profit. The Booth demonstrated the following to the visitors

1. A computerized construction management solution that allows construction organizations to evaluate, monitor and control spend in real time – effectively integrating their cost management and reporting with their books of account.
2. The information gathered is used to compare with budgeting information prepared during the bid phase of the project.
3. Integrate traditional accounting and financial data with engineering data to get real time and reliable CVR reporting, a critical prerequisite for decision making, pre-emptive corrective actions and accurate cost to complete and at completion computations.

BIM Academy

With a vision of becoming a global leader in digital engineering, L&T launched its very own BIM Academy to empower and upskill staff in the latest BIM technologies, processes and standards. The BIM Academy collaborates with global universities and technology experts; currently with over 38 faculty members sharing knowledge and experiences from across the world with our staff, contributing towards digital transformation in the business. The academy is equipped with state of the art hardware, such as high-end BIM laptops, iPads, VR facilities and soft wares from global leaders like Autodesk, Bentley and Trimble.

The BIM Academy provides end to end training in 3D BIM, 4D BIM, 5D BIM, virtual reality, common data environment, management and processes, and computational designs. With senior executives and management striking conversations of integrating BIM technologies to better business outcomes and performance, for improving the bottom line, collaboration, efficiency and cost; the BIM academy is striving to create awareness and knowledge pool for design optimization, alternative construction methodology and increasing operational efficiency within L&T.

The IPM Conclave was a great platform to continue creating that awareness and enthusiasm. The curiosity among L&T-ites for the same was evident at the conclave, which was extremely motivating. The overarching ideas, vision and wisdom of thinking big, staying relevant and achieving digital and operational excellence, shared during the course of the IPM Conclave were some significant elements that made us feel that we as an organisation are moving forward in the right direction.

Glimpses of CEPM

L&T Project Management Conclav
Connected Excellence in Project Manager

Project Management Conclave 2019

Project Management Conclave 2019
STAY AHEAD | STAY RELEVANT | STAY CONNECTED

Pages from Project Success Stories

Success story 1

Risk Management and Digital Adoption at Work

Project Background:

Medigadda Barrage is the starting point of the proposed Kaleshwaram Project which envisages construction of three Barrages between Yellampally & Medigadda. This Mega Project is under construction and is in the verge of completion, which aims to utilize Godavari River water for the purpose of drinking and irrigation.

Project Technical Details:

- Scope : Construction of Medigadda Barrage having 1.6Km with 85 Gates across River Godavari with scope of Concreting-18.0 Lakh cum, Reinforcement-1.0 Lakh MT; Structural Steel-26,000 MT; Excavation-1.0 Cr cum
- Client : I&CAD; Telangana Government
- Project Duration : 25 Months (Completion by April 2019)
- Project Value : INR 3,000 Crore

Risks Identification by Brainstorming

- Heavy Flooding of River Godavari - Access to site as a major Constraint
- Interstate project – Delay in land acquisitions and approvals, Local agitations
- Stringent Timelines – Challenge to complete the Multi fold Scope variation with no additional Time
- Extremists zone - Remote location and workmen retention

Introducing the Risk strategy of "PIER-C" to tackle the Gigantic Piers with dimensions of 110m*26m*4m/6m,

While PIER-C stands for P - Plan Risk Management, I - Identify Risks, E- Evaluate Qualitative & Quantitative Risks, R-Record Risk Responses and C-Control Risks

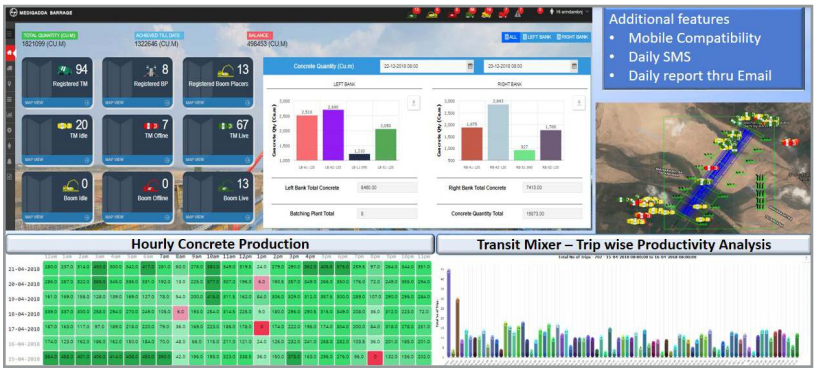
Risk Management Strategy adopted in Project

REF	RISK	STRATEGIC APPROACH	RISK AS OPPORTUNITY
R-1	Sourcing Construction Materials	L&T Owned Quarry & Material from River Banks	Sellers Market to Buyers Market
R-2	Extremists Zone	CRPF Deployment	Risk free Working Zones
R-3	Heavy Flooding of River Godavari	In House Coffer Dam Design	Coffer Dam withstood 9.6 Lac Cusec - 10yr. Peak flood

Digital Adoption:

- The entire concreting cycle starting from production, transportation and placement is very cumbersome to monitor through manual tracking. Batching plants have to run 20 hrs. minimum daily; Transit mixers have to make about 1,000 trips daily; Boom placers have to operate 20 Hr. minimum daily at different locations. This situation demands perfect coordination between production points, pouring points, and in-transit.
- The need of the hour is nothing other than to digitalize the Concrete process cycle. Concrete management system is the first of its kind technology developed and launched in this project to capture the data related to production, transportation and placement of concrete in a single Dashboard Live & Exclusive to the users on their mobile apps and through web-based URL.

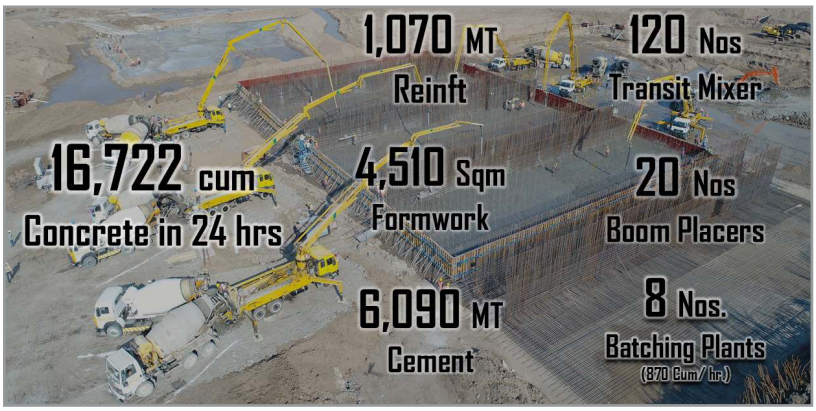
- The Portal with the simple user interface displays the status and productive levels of Transit mixers, Boom placers, and Batching plants. Further interactive Graphs and Bar charts provide an insight of Utilisation factors and rate of production/ trips/ placement.



- Batching plants, Transit Millers and Boom Placers are equipped with the Internet of Things (IoT) sensors to capture the production data which gets auto-transmitted to the dashboard through cloud.
- Alerts/Pop-up will be received by the Project Manager & Project Monitoring team instantly up on breakdown or underutilisation of Batching plants/ Transit Mixers/Boom placers.

Lesson Learned:

- Medigadda Barrage Project despite of several odds has converted various Risks into opportunities by close evaluation of Risks through PIER-C concept thereby approaching and resolving the root cause threats with defined team strategies.
- Project adopted various Digitalization initiatives to ensure maximum utilisation of assets and uninterrupted production of Concrete to meet the stringent Time lines. The process of Digitalization has thus showcased excellence in achieving Project operational efficiency, Profitability and in setting-up new Benchmarks.
- Unique strategized In-house Coffer Dam design by Delphi Technique (Panel of Experts) has helped the Project team to create hindrance free work fronts during Heavy floods of River Godavari that has rewritten the history of past 10 years.
- The Project has set various Benchmarks in Indian Construction Industry by pouring Concrete of 16,722 cubic meter in 24 Hours and 21,580 cubic meter in 35 Hours followed by other execution excellences including but not limited to 7,000 MT of Rebar in a Single Month and executing staggering record height of 10m. Formwork for the first time which showcases the level of acumen by the Project team with their well versed Risk and Digitalized strategies.



Core Team:

Mr. M V Ramakrishna Raju, Project Manager; Mr. Rajnish P Chauhan, Planning & Construction Manager; Mr. Rupesh Mishra, Construction Manager; Mr. Siva Prakasam, Construction Manager; Mr. R.D. Joshi, Formwork Manager; Mr. Ashish Goel, P&M Manager; Mr. N. Ramesh Kumar, Safety Manager; Mr. R Venkata Ratnam, Construction Manager, L&T Heavy Civil Infra IC.

Team Enablers:

Mr. Deepak Routray, Procurement Manager; Ms. Tulsi Lakshmi Devi K P, Engineering Manager; Mr. Indu Praveen Kandula, Contracts Manager, Mr. Mohanbabu S, Digital Officer, Mr. Arindam Banerjee, Digital Champion, Mr. Naga Raju D, Asst. Manager-Systems; Mr. Gautam Solanki, Sr. Engineer – Digital, L&T Heavy Civil Infra IC.

Medigadda Barrage project bagged the theme(s) Winner Award under themes, Digital Excellence and Expert Risk Navigation and Profit Enhancement in CEPM 2019.

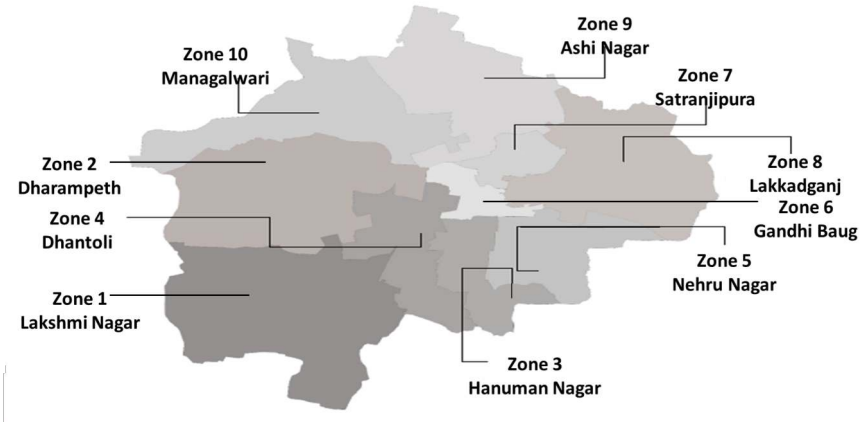
Navigating to make Nagpur City Smart

Project Background:

L&T Construction, the country's foremost builder of next-gen cities, is proud to partner Nagpur Municipal Corporation (NMC) to transform the city of Nagpur into India's first integrated smart city. The citizens of the Orange City should have a safer, smarter and more connected city to live in, equipped with a whole gamut of smart solutions.

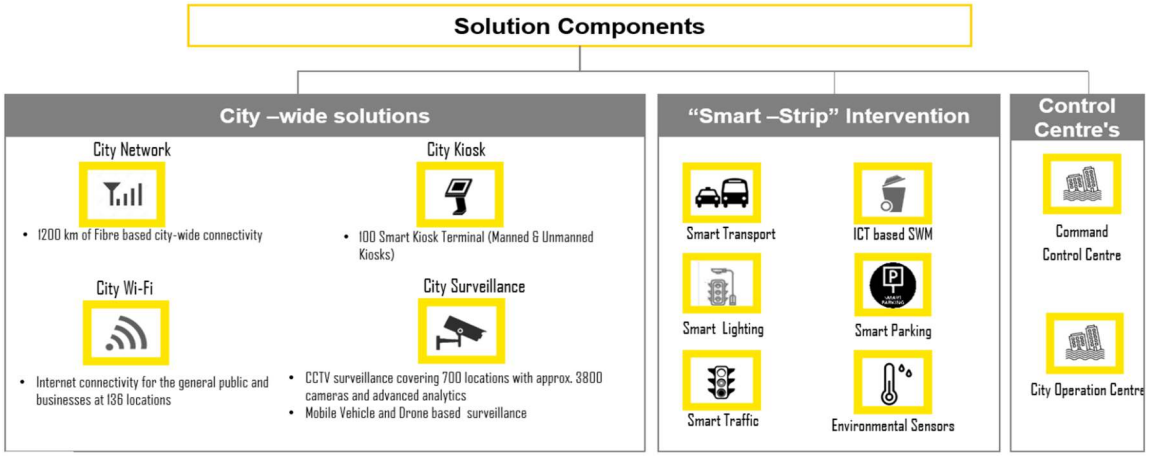
Project Technical Details:

- Fiber Network Backbone: 1200 Km
- City Surveillance:
  – 700 Junctions with 3861 Surveillance Cameras
- Public Announcement System: 56 Sets
- Variable Massaging System: 53 Units
- City Wi-Fi System:
  – 136 Hot-Spots
  – 1360 Wi-Fi Access Points
- Smart Strip Solutions :
  – Smart Environment : 10 Strategic Locations
  – Smart Lighting : 400 Smart Lights
  – Adaptive Traffic Control System : 10 Junctions
  – Smart Transport : 400 Buses and 160 Bus Stops
  – Smart Parking : 1 Location near DikshaBhoomi
  – ICT Based Solid Waste Management : 10 Locations, 20 Smart Bins



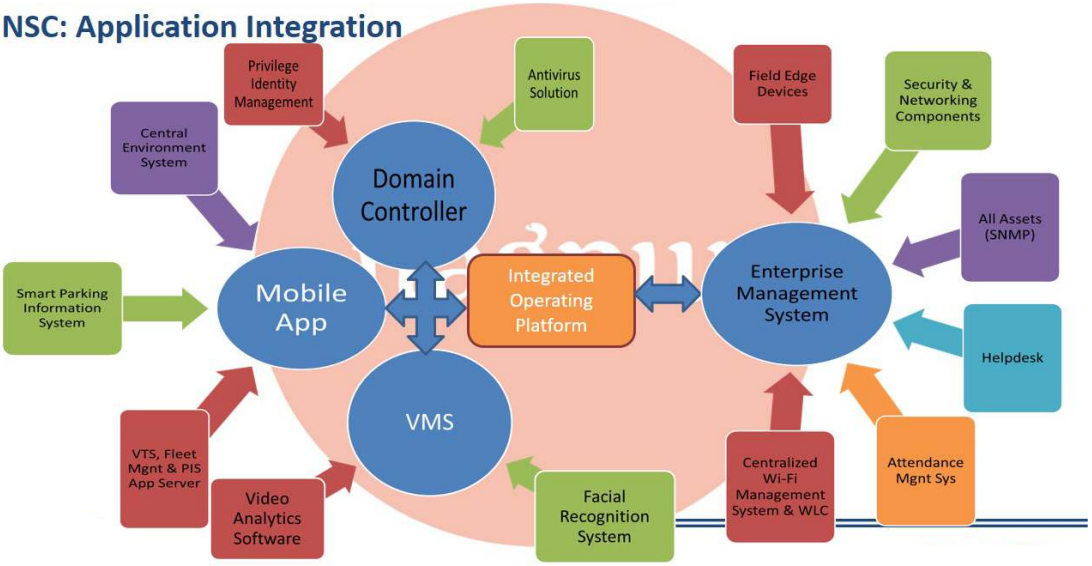
Execution Challenges:

- Brown Field Project, project has to be executed in the public place without hindering the daily routine of a live City using a very small site space.
- Apart from the smart city project, other projects like Nagpur Metro, Nagpur road concretization, waterworks, and Electricity department projects were also ongoing in parallel in the city, making planning and coordination much more difficult.
- 700 Junctions to be identified and 1360 hotspots to be installed, the location has to be defined along with the PMC and other stakeholders like purchaser and the user. This requires a joint study, which requires enormous time and effort.
- Dot Plan Approval from User Dept.
- RI/ROW approvals and clearances from relevant agencies: PWD, NH, NHAI, NIT, VNIT, OCW, Utility Companies.
- Safety of the public, workers, and devices were highly critical. Existing Assets should not be damaged, if in case damaged, it should be replaced without the impacting the normal livelihood of people.
- 29 software to be installed and integrated to common platform: Interoperability, Seamless User Experience, Prompt Response.
- Integration and Validation of IT and Non-IT along with PMC and User Dept.
- Squeezed & Limited Time Frame project.



Execution Methodology:

- The representatives from PMC i.e. M/s. E&Y and User Dept. i.e. NMC and Nagpur Police were part of pre-feasibility survey along with the team of M/s. L&T Construction and necessary approvals were obtained from concerned authorities before commencement of the work.
- Approval of Dot Plan of the Surveillance Cameras and Junction Components from the Client for smooth installation of the solutions.
- Other relevant agencies like PWD, NH, NHAI, NIT, VNIT, OCW, Utility Companies, etc. are kept in consultation as and when required and filed challenges/site constraints have been amicably resolved in best possible manner to cause minimum inconvenience to the citizens during execution of the work.
- In this given constraints of prevailing site conditions, underground utilities and assets, retrofitting of the components and nature of the project, NSSDCL had insisted M/s L&T to take precautionary measures to ensure safety of the works & citizens. Result of the same is reflected in terms of no major incidence observed so far during the course of the project execution.
- Inspection and Validation of Field Components, IT and Non-IT Hardware's along with PMC and Client for Smooth handover process.



Key takeaways:

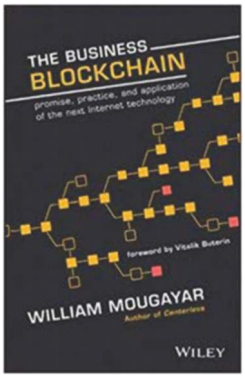
- LIDAR Survey: Surveyed 700+ junctions in 2 months.
- Identification of Key Stakeholders early in the project and engaging them in the planning activities and keeping them updated.
- Joint pre-feasibility survey: PMC Nagpur Municipal Corporation, Nagpur Police & SPV.
- Use of technology via Digital Apps to monitor EHS.
- Effective project management by involving the purchaser and the end users in location decision of the Junctions and hotspots
- Designing a simpler workflow with the end user (Police constable in the control room) in the mind to ensure easy adoption of the new system.
- Drone accommodated in Mobile Surveillance Vehicle: Improving Effectiveness, Usability & Geographical Coverage.

Core Team:

Mr. C. Chockalingam, Project Director; Mr. Jigar Prakash Modh, Project Manager; Mr. Debajyoti Bhattacharyya, Planning Manager, L&T SWC.

"Navigating to make Nagpur City smart" bagged Winner Award under Operational Excellence theme and also grabbed overall **Championship Award** in CEPM 2019

Look-out in the Library



Book Review

Title : **The Business Blockchain:** Promise, Practice, and application of the next Internet Technology
Author : William Mougayar
Publisher : John Wiley & Sons

Review insights:

Blockchain has created a radical change in our lives. Blockchain is helping reshape industries in domains as varied as finance, healthcare, government and manufacturing. The technology will continue to evolve and put to use in more innovative ways. With bitcoin, the blockchain has proven its worth and practical value for cryptocurrency trades. At its core, a blockchain injects trust into the network, cutting off intermediaries from serving that function and disrupting how they operate. We can view Blockchains as ultimate non-stop computers. Once launched, they never go down, and offer an incredible amount of resiliency, making them dependable and attractive for running a new generation of decentralized services and software applications.

With this book author William Mougayar features interesting case for the future of blockchain to business leaders new to block chain technology.

In this book, the author seeks to expand the minds of business leaders, enterprises, and entrepreneurs flickering them to action with an understanding of blockchain as a platform for advancement.

The author begins the book by articulating a three-dimensional view on what the blockchain is.

These three dimensions are:

- Technical perspective, which discovers blockchain functionality as a backend database with distributed ledger qualities.
- Business perspective in terms of its value as an exchange network for business transactions.
- Legal perspective, which states that blockchain can serve as a trusted validator of transactions without the need of a third-party intermediary.

The book looks at 'smart property' which can link digital assets to the blockchain in a way that prevents them from being double owned or double spent. Imagine being able as the creator or owner of a digital asset like art or music to codify one's ownership rights in a manner which prevents the asset from being undone unless one elect to transfer or sell them. Book has also highlighted on "smart contracts". These are not smart and are not contracts; they are the applications that run on top of blockchains. Author states, smart contracts will be no less revolutionary than introduction of the HTML mark-up language which made publishing and linking information on the web simpler.

The focus of the book is on a comprehensive and insightful evaluation of the crucial question of digital identity. According to the book, blockchain identity-based applications will offer a new means of personal sovereignty and control of one's identity. Along with this front, new self-directed identity options like the NYC-based Ethereum studio ConsenSys' uPort system are gaining attention as part of an emerging "Internet of People" movement.

In this book, the author makes two strategic statements:

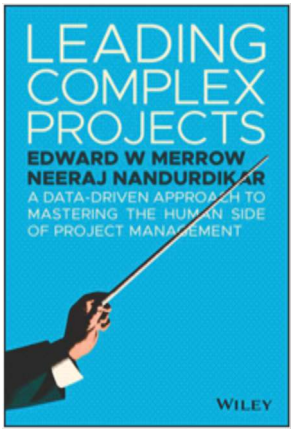
- First, the blockchain has polymorphic characteristics; its application will cause a variety of effects;
- Second, we shouldn't ask ourselves what problems the blockchaincan solve but imagine new opportunities with blockchain and tackle even more ambitious problems.

This book inspires us to understand and, perhaps, join in refining the business blockchain. The key-takeaway is that the business blockchain is an opportunity for technologists to better understand the business potential of the blockchain, and for business minded people to grasp the many facets of blockchain technology.

Application of Blockchain is relevant in almost any business area needing a distributed database with multiple parties transacting with each other (or transferring assets) and recording the relationship between the parties and the transactions with authenticity for traceability. Hence, the scope for implementing blockchain for Project business and associated risk mitigation is huge.

Contributor
Dr. Hiren Maniar
Faculty, L&T IPM

Book at a glance:



Title : Leading Complex Projects:

A Data-driven Approach to Mastering the Human side of Project Management

Author : Merrow, Edward W. & Nandurdikar, Neeraj

Publisher : John Wiley & Sons, New Jersey, 2018

Abstract

Leading Complex Projects takes a unique approach to post-mortem analysis to provide project managers with invaluable insight. For the first time, they link individual PM characteristics to project outcomes through a major study investigating the role of project leadership in the success and failure of complex industrial projects; it analyzes hard data on the backgrounds, education, and personality against the backdrop of project performance to provide insight into controllable determinants of outcomes.

By placing these analyses alongside their own data, PMs will gain greater insight into areas of weakness and strength, locate recurring obstacles, and identify project components in need of greater planning, oversight, or control.Complex industrial projects from around the world provide a solid basis for quantitative analysis of outcomes—and the PMs who drive them. Although most of the data is from projects in the petroleum industry, the insights gleaned from the analysis apply across industry lines for PMs who lead complex projects of any stripe. Leading Complex Projects provides clear, data-backed improvement guidance for anyone in a project management role.

IPM Library: New Arrivals

IPM Library has added a total of 23 new books in January-February 2019. These books are the 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, Project Procurement, and Project Risk Management.

Reflections on Real Life Project Problems

Wipro IT-SEZ Project, Kodathi

Project Background

Construction of Six Blocks in WIPRO - SEZ Kodathi, Bangalore. Overall L&T scope is as a General Contractor (G.C.) which includes overall completion of civil works in coordination with NSC (Nominated Sub Contractors) works, Co-ordination and monitoring of all the Nominated subcontractors to complete their scope of work as per the technical specification and in time as per the schedule.

As a GC we have overall coordination and L&T is the single point contact among all the stakeholders:-

- Client - M/s. Wipro
- PMC - Consultant
- Design Consultant - VA and others
- NSC - Total 21 Subcontractors

Challenges

HVAC package had a major change in condenser line. As per initial design, the condenser line is of HDPE, but after completion of almost 100% of the physical works (only T&C was pending), the client has instructed to convert the total HDPE lengths into M. S pipe as the HDPE was having difficulties in fusion welding for the pipe joints (approx. 1500 rmts). The material procurement became the critical path as we had only 120-150 days left for completion of the project.

After 7 months of work in the fire protection system, which comprise FPS pipe routing of 3,500 meters on all the floors from Typical -01 to Typical -10 including Dining 1 & 2 level and testing, the client requested for the re-routing in all the floors, citing changes in the interior design intent. This change posed a challenge, as there was 90-120 days to complete the project.

As per initial design intent and scope, there were “8 dry type Transformer” for Wipro campus. The testing and commissioning of 3 transformers for block-04 was carried out reports were submitted for CEIG approval. While reviewing the application, CEIG committee has requested implementation of the star rating of a transformer which was the major challenge.

Solutions

- Used WBS to estimate the impact of the change and identify the critical path.
- A detailed plan for rework considering execution timelines and cost impact.
- Additional resources mobilized to work into multiple shifts.
- Analysed cost impact on the commercial with all stakeholders and arrive at consensus considering rework cost, labour cost.
- Identified long lead items and expedited their procurement through vendor visits.
- Meetings with regulators to arrive at an amicable solution.
- Checking Contract Documents to ensure that the change request is not part of the original scope.

Summary

Even after meticulous planning, there can be changes in specifications triggered by the customer during the project execution phase. These changes may impact schedule, cost, and quality of the project deliverables. In this situation, the strategy is to adopt customer collaboration over contract negotiation, which the project team has showcased in all 3 scenarios and won customer satisfaction.

Contributor
Mr. Nandakumar T
Project Director, Wipro IT-SEZ

Programme Panorama

Snapshots of SCDMs (Specific Competency Development Programmes)

Preparatory Programme for PMP Certification

Programme Highlights:

Practical examples to match PMBOK concepts to project situations. Exam question-answering strategy with specific tips and tricks. Detailed "Exam Roadmap" with a Project Management approach to preparing for the exam. Coverage of both Data Flow Diagrams + Tools & Techniques for all 49 processes. The programme delivered by PMP Certified Practicing Project Professional Mr. Karthik Ramamurthy. Participants from LTHE, L&T Realty, E&A, TI, and B&F attended the programme.

Preparatory Programme for PMP Certification
held on 7th–11th January 2019, at IPM Vadodara

First Level Leadership Program (FLLP)

Date : 4th–8th February, 2019

Venue : LDA Lonavala

Programme Highlights:

The program is for young professionals to learn the fundamental principles & practices of leadership. The aim of the program is to provide comprehensive exposure to business management along with concepts to enhance self-effectiveness. Dr. Makarand Hastak from Purdue University, USA delivered the session on Project Execution & Project Risk Management. Mr. Yogen Chawla delivered an Experiential learning session.55 participants from HCI, B&F, TI, WET, PT&D, SWC, MMH, GEO, IEL & DC attended the programme.

Ikons of IC - Specific Programmes

WETIC–Tool Based SCDM–PRIMAVERA

Programme Highlights:

Primavera is a popular and powerful tool for project planning and monitoring. This course provides 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 advanced scheduling options, user-defined fields, global change, earned value analysis, duration types, importing and exporting project data and percent complete types.

PRIMAVERA Programme
held on 3rd–5th January 2019, at IPM Chennai

WET IC – Orientation Programme on Project Management

Programme Highlights:

The main aim of the programme is to emphasize the need of the fundamentals of project management to budding engineers. The session covers the Project life cycle, Scheduling & network techniques, Safety & Quality management, Risk Management, and Project resource management.

Programme on Project Management
held on 20th – 21st February 2019 at New Delhi

PT&D – Nurturing Excellence in Planning & Control (NuEPC)

Programme Highlights

3rd batch of NuEPC programme (tailor made) for Power Transmission & Distribution IC. The curriculum includes both theoretical & practical aspects on project planning and control of construction projects. IPM faculty and PT&D experts delivered the sessions. Mr. R Anand covered an interesting session on GST Implementation & Indirect Tax related expectation from Planning Engineers. Mrs. Geetha Hariharan, Mr. M. Ramaswamy Manivannan and Mr. M. Madhavan have delivered sessions on "Better coordination between EDRC & Site/Cluster" on their respective sectors. Mr. Seshadri covered session Contract Management in PT&D Projects - emerging requirements. Mr. Kavin conveyed a session on Behaviour Based Safety. Mr. Hegde emphasized a session on Quality Leadership. Mr. Yogen Chawla has covered an informative session on Quality Leadership & participants learned simulation PM Game AlbaSim. Prof. Ravi conveyed a detailed session on Primavera.

NuEPC Programme held on 17th - 24th January, 2019 at IPM Chennai

WET IC – Orientation Programme on Project Management & MPCS

Programme Highlights:

To create awareness about Project Management Fundamentals and mapping them to L&Ts MPCS process of S0–S10 schedules. This Programme imparts participants with the basic understanding of project constraints viz. scope, schedule, and cost. The programme also covered resource management, quality management, safety & risk management and their influence on project outcomes.

Programme on Project Management & MPCS
held on 12th -14th February 2019, at Jaipur

L&T REALTY capability building: International Project Management an LTR2.0 initiative

Programme Highlights:

The programme facilitated by Dean –L&T IPM & senior business leaders from L&T Realty. Main aim of the programme was to provide the best practice approach as followed in the real estate industry and encourage participants to share their current challenges and identify scope for improvement. This programme focussed to build the capability of tower managers and planning managers to strengthen their delivery.

International Project Management an LTR2.0 initiative
held on 2nd -16th February 2019 at Mumbai

Words of Wisdom

Planning	Communication	Collaboration
"Let our advance worrying become advance thinking and planning." ***- Winston Churchill***	"To effectively communicate, we must realize that we are all different in the way we perceive the world and use this understanding as a guide to our communication with others" ***- Tony Robbins***	"As you navigate through the rest of your life, be open to collaboration. Other people and other people's ideas are often better than your own. Find a group of people who challenge and inspire you, spend a lot of time with them, and it will change your life." ***- Amy Poehler***
"Plans are only good intentions unless they immediately degenerate into hard work." ***- Peter Drucker***	"Communication is a skill that you can learn. It's like riding a bicycle or typing. If you're willing to work at it, you can rapidly improve the quality of every part of your life." ***- Brian Tracy***	

Flying High with Flagship Programmes

L&T IPM & University of Texas
Batch1 - Level 3 - International Project and Programme Management (IPPM)

Programme Highlights:

Batch started in June 2018 and completed in January 2019 with 17 participants from various IC/BUs of L&T–B&F, HCI, TI, L&T Defence, E&A, LTHE and WET. Programme comprised of 3 modules, spread over 8 months, covering advanced project management topics relevant to Mega-project execution. Lectures covered best practices from the Construction Industry Institute (CII), FIATECH, and other leading organizations. Case Study based teaching, Process Improvement (PI) Projects, Project Leadership webinars are major highlights of this programme.

International Project and Programme Management (IPPM)
held on 7th - 12th January 2019 at IPM Vadodara

Advanced Certification in Contracts Claims & Arbitration (AC3A)

Date : 28th January – 2nd February, 2019

Venue : IPM Chennai

Programme Highlights:

This programme has been started in collaboration with RICS India. Main objective of this program is to impart in-depth knowledge on Contracts & Claims Management along with highlighting Dispute Resolutions Management. Program has 12 participants from HCI, B&F, and PT&D. The sessions of the first module were covered by L&T IPM faculty members Prof. VTCS Rao & Prof. Sunil Kumar and RICS faculty members Prof. Vinod Nakra, Prof. Pawan Saini and Prof. Bhasker.

Engaging with Ecosystem Partners

Construction Project Planning and Management (CPPM)

Programme Highlights:

L&T IPM in partnership with the World Bank organized Programme on Construction Project Planning and Management (CPPM) to strengthen existing capacities through imparting required knowledge and skills for the World Bank assisted projects of government bodies' project professionals. Dr. Hiren Maniar, and Prof. Sunil Kumar from L&T IPM delivered sessions. The World Bank officers, Ms. Geeta Shivdasani, and Ms. Neha Vyas in their sessions' coverage highlighted important aspects pertaining to DEA requirements and ESHS, which has given valuable insight about executing the World Bank-funded projects for government bodies to the programme participants. Prof. Venkatesh Krishnamurthy covered an interesting session on Pre-Construction Project Preparation. Prof. Makarand Hastak has covered a very informative webinar on "Global Best Practices for Pre-contract Risk Mitigation in Government Contracts". Prof. Ajit Patwardhan who has vast experience of the domestic and international project, and Contract Management Experience, covered an interactive and valuable session on Contracts and Claims in Different Contracts and contract risks benchmarking contracts executed in international markets. L&T IPM Dean Prof. VTCS Rao delivered sessions on Contract Preparation and Pre-bid Strategies and Enabling Strategies and Techniques.

Construction Project Planning and Management (CPPM)
held on 18th - 23rd February 2019 at IPM Vadodara

Role based Programme

Cost Engineering

Programme Highlights:

Cost Engineering Programme
held on 11th - 17th February 2019 at IPM Vadodara

L&T IPM has completed 4 batches of Cost Engineering Programme and trained 87 participants in cost engineering. The 4th batch completed in Feb 2019. Cost Engineering programme addresses issues/pain points/challenges faced by L&T projects in cost estimation, planning, budgeting, monitoring and control pertaining to a set of complex and inter-related project activities leading to the attainment of a defined goal, subject to specified conditions of cost, schedule, quality, and performance. Main aim of the Programme is to apprise participants about the body of knowledge and standards of conduct for the practice of cost engineering, enhancing project management skills & knowledge and prepare participants for the CCP (Certified Cost Professional) exam conducted by AACEi by covering knowledge areas & cost engineering competencies and working through various programme assessment techniques. The Participants of Programme developed technical papers of 2,500 minimum words detailing the relevant technical and mandatory skills required, in-line with AACEi's requirements for the Certified Cost Professional (CCP) examination. The 4th batch on Cost Engineering has trained 17 participants from 9 different IC/BUs of LTHE, B&F, HCI, E&A, WET, MMH, PT&D, and L&T Defence.

From the "World of Webinars"

IPM has been conducting its 3P WEBINAR series since October 2017 wherein "Problems, Principles and Practices" (3P) on various specialized topics in Project Management have been deliberated

Webinars delivered between January - March, 2019

11th Jan 2019	**Project Management Fundamentals**	**Prof. Reghunath K P**
The aim of the webinar is to make participants understand the role of the project manager in project planning, the major factors effecting successful project execution, the overall company project life cycle and the major phases of projects		
16th Jan 2019	**Cost Reduction through Lean Supply Chain Management**	**Mr. N S Sivaraman**
The webinar summarizes supply chain management covering Supply chain evolution, Supply chain requirements for Business Excellence,5V to SCM, Lean warehouse, Lean tools for Implementation and Trends in SCM		
24th Jan 2019	**The concept of Intelligent Planning Units**	**Dr. Markand Hastak**
This webinar introduces the concept of Intelligent Planning Units (IPU), elaborates the three phase implementation process of IPU and concludes with the IPU challenges and Opportunities		
4th Feb 2019	**Strategies for Effective Sub Contract Management**	**Prof. Sunil Kumar**
Sub Contract management and Contract administration comprise planning, performance monitoring, quality assurance, and other key phrases. It poses challenges such as How do you handle a contract modification? What kind of oversight does a subcontractor require? Participants will examine the duties performed by contracting personnel during the administration phase of the acquisition process and improve their knowledge and skills in overseeing contractor performance.		
7th Feb 2019	**Making it Work: Leadership Action in Projects**	**Prof. VTCS Rao**
The purpose of this webinar to enhance participants' understanding of project leadership principles, adopting leadership styles for various situations depending on the people being supervised. The webinar will discuss how does project leadership translate to concrete actions by a leader and his team to meet the project objectives		
19th Feb 2019	**Global Best Practices for Pre-contract Risk Mitigation in Government Contracts**	**Dr. Makarand Hastak** **Prof. Venkatesh Krishnamurthy**
This webinar brings introduces the tools to identify uncertainty, the list of expected pre-contract risks, prompts to identify these risks, the estimation process, creating a project work plan and pre-planning process.		
21st Feb 2019	**Lean Enabled Integrated Project Controls**	**Mr. Kalyan Vaidyanathan**
This webinar discusses the current state of fragmentation prevalent in the construction industry regarding information flow because of several Stakeholders, systems and their processes. The webinar explains how to create a single source of information from concept to commissioning, connect silos of information, create a platform for collaboration, coordination, and control, generate Lead Indicators based KPI.		

IPM – Programme Calendar

Forthcoming Quarterly Programme Details

Multi Modules Programmes

Sr. No	Programme details	Date	Location
1	Level-1, Batch-2: Advanced Certification in Project Management (ACPM)	06th – 10th May 2019	Chennai
2	Level-2, Batch-2: Advanced Programme in Excellence in Project Execution (APEPE)	03rd – 07th June 2019	Vadodara

Specific Competency Development Module (SCDM)

Sr. No	Programme details	Date	Location
1	PMP Preparatory Course	08th – 12th April 2019	Chennai
2	Managing Financial Performance of EPC Projects	30th April – 1st May 2019	Vadodara
3	Cost Management Concepts in EPC Projects	27th – 28th May 2019	Vadodara
4	Primavera	20th – 22nd May 2019	Chennai
5	PMP Preparatory Course	03rd – 07th June 2019	Vadodara
6	Subcontract Management	04th – 05th June 2019	Chennai
7	Cashflow and Liquidity Management in EPC Projects	10th – 11th June 2019	Vadodara
8	Best Practices in Project Schedule	20th – 21st June 2019	Chennai
9	Statistical Quality Control in EPC projects	20th – 21st June 2019	Vadodara

Webinars

Sr. No	Webinars	Lead Faculty	Date
1	Cost Estimation and Baseline Preparation in EPC Projects	Dr. Hiren Maniar	17th April 2019
2	Critical Chain Project Management	Prof. K P Reghunath	08th May 2019
3	Managing Working Capital in EPC Projects	Dr. Hiren Maniar	15th May 2019
4	Construction Productivity Management	Prof. Sunil Kumar	29th May 2019
5	Scheduling, Monitoring and Controlling Linear Projects	Prof. K P Reghunath	05th June 2019
6	Scheduling Techniques for Predictable Project Performance	Prof. K P Reghunath	12th June 2019
7	Financial Performance Improvements in EPC Projects	Dr. Hiren Maniar	19th June 2019
8	Sub Contract Management	Prof. Sunil Kumar	26th June 2019

Watch-out Box

- **A WWW** webinar series called the "Webinars on Workable solutions to Wicked Problems", which is a real world experience sharing session by project directors or business managers.

Project Management Conclave Accolades

Theme: Effective Closeout, Commissioning & Start up

Winner : Mr. Aniruddha Hingane, Mr. Aravind P &
Mr. Dhruvang Soni from L&T Hydrocarbon Engineering

Runner-up : Mr. K V S R Murthy, Mr. P V Muralidhar &
Mr. M Jayakumar from L&T IDPL

Runner-up : Mr. M Rajkumar, Mr. Kugan Ku &
Mr. Syed Najaf Hussain,
from Water & Effluent Treatment

Theme: Digital Excellence

Winner : Mr. M.V. Ramakrishna Raju, Mr. Ashish Goel
& Mr. Mohanbabu S from Heavy Civil Infrastructure

Runner-up : Mr. S. Kumar, Mr. P. Prabeesh, Mr. Ajay Kumar Saini
& Mr. Bhargav Shah from L&T Rubber Processing Machinery

Runner-up : Mr. Viral Shah from L&T Power

Theme: Engineering = Mending Creativity & Cost Effectiveness

Winner : Mr. Prince Walter, Mr. BrijeshTrivedi &
Mr. Dharmesh Raval from L&T Hydrocarbon Engineering

Runner-up : Mr. Ashok Kumar, Mr. Pradeep Kumar Chaturvedi
& Mr. Kalidas Chakraborty from Buildings & Factories

Runner-up : Mr. Murugesan Kannan, Mr. Jaspreet Singh Gill
& Mr. Samuel K Mathew from Heavy Civil Infrastructure

Theme: Operational Excellence

Winner : Mr. C Chockalingam, Mr. Jigar Prakash Modh &
Mr. Debajyoti Bhattacharyya from Smart World & Communication

Runner-up : Ms. Laya Mariam Pannikottu, & Mr. Ravikumar R
from L&T GeoStructure

Runner-up : Mr. S M Roy Merline, Mr. G Sridhar
& Mr. Prakash Sapkal from L&T Defence & Aerospace

Theme: Expert Risk Navigation & Profit Enhancement

Winner : Mr. M.V. Ramakrishna Raju, Mr. Deepak Routray,
Ms. Tulsi Lakshmi Devi K P & Mr. Indu Praveen
from Heavy Civil Infrastructure

Runner-up : Mr. K. Sivaramakrishnan
from Water & Effluent Treatment

Runner-up : Mr. Francis Xavier, Mr. Abhishek Shrivastava &
Ms. Akshya S from L&T Power Transmission & Distribution

Poster Category

Winner : Mr. Abhishek Kumar Sinha, Mr. Ankit Agarwal
& Mr. Rachit Parikh from L&T Hydrocarbon Engineering

Runner-up : Mr. Nikunj Surti & Mr. Hemant Panchal
from L&T Hydrocarbon Engineering

Runner-up : Mr. Francis Xavier, Mr. Abhishek Shrivastava
& Mr. Akshya S from L&T Power Transmission & Distribution

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