

PROJECT MANAGEMENT CONCLAVE, 2018

Ranchi, June 2-3

Structured Project Management – the key to Project Success

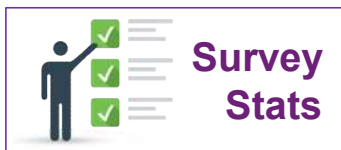
Title: *An imperative for the Project Executors / Contractors*

Presenter details: **T Kumaresan, BU Head, M&M BU, L&T Construction**



An Insight: Project Management – A Global Perspective

Key findings from KPMG's Global Construction Survey



100

Companies around world

0.25-5
Bn USD

Annual Revenue

25

From Public Sector

WHAT GLOBAL COMPANIES ARE **DOING WELL** & WHAT ARE THE **CHALLENGES**

74%

Formal project delivery and contract strategy analysis prior to approval

84%

Financial & risk analysis to screen projects

74%

Investment in controls & Governance has reduced costs

73%

Comfortable with accuracy & timeliness of project level reports

69%

Poor contractor performance is the most important reason for project failures

32%

High level trust in contractors

25%

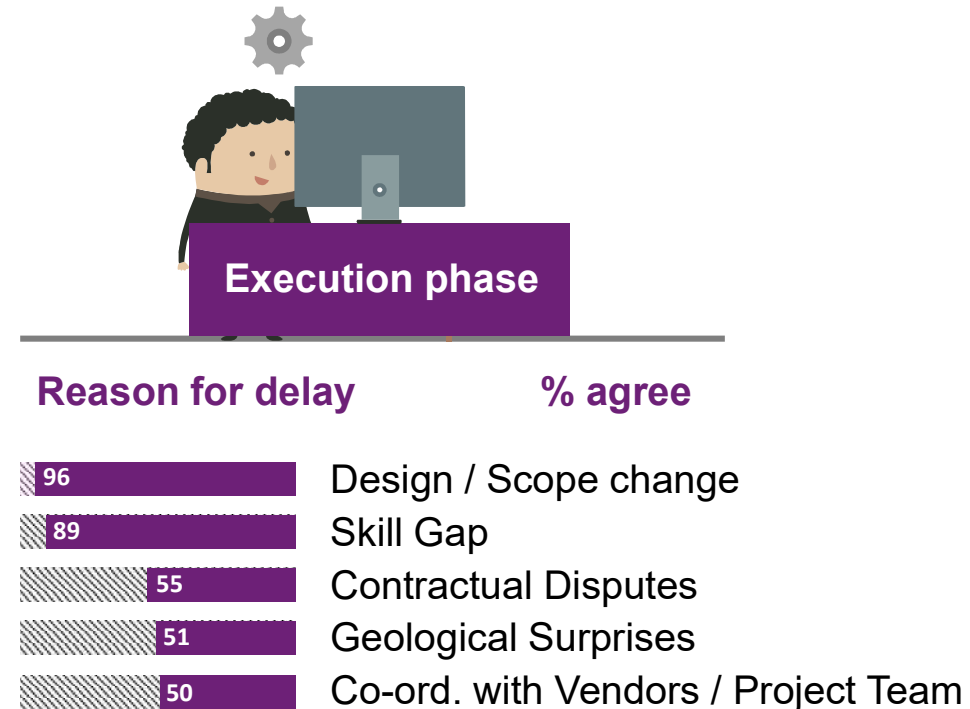
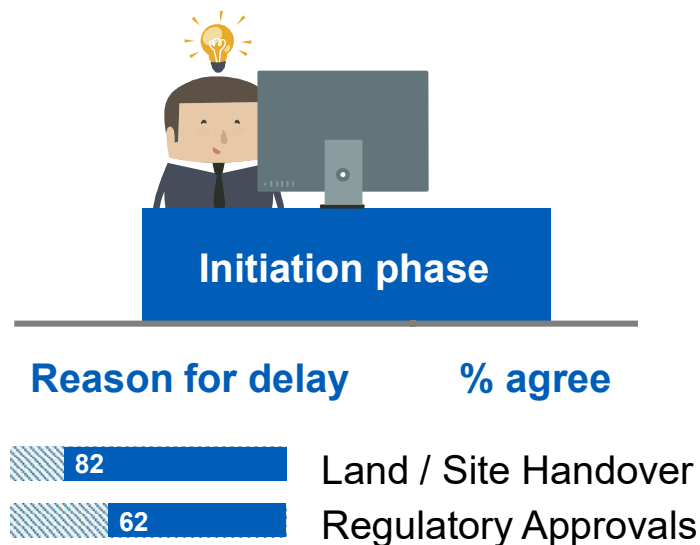
Projects completed with-in 10% time over-run

...In spite of having strategies and analysis in space, **THREE** out of **FOUR** projects globally face inordinate delay.....**IMPLEMENTATION** is the **KEY**

Another findings for reasons of Delay: Indian Environment

More than **82% of projects** are suffered by time overruns

The delays have been analyzed under two phases of the project: **a. Initiation phase** **b. Execution phase**

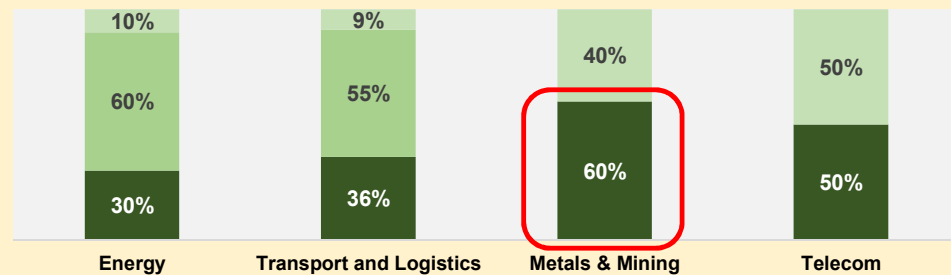


Key findings from KPMG's KPMG PMI Survey

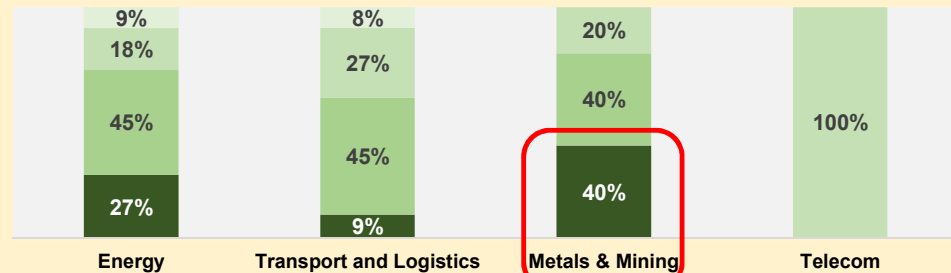
Another findings for reasons of Delay: Dip Dive – Sector wise Impact

Initiation Phase

Land Acquisition

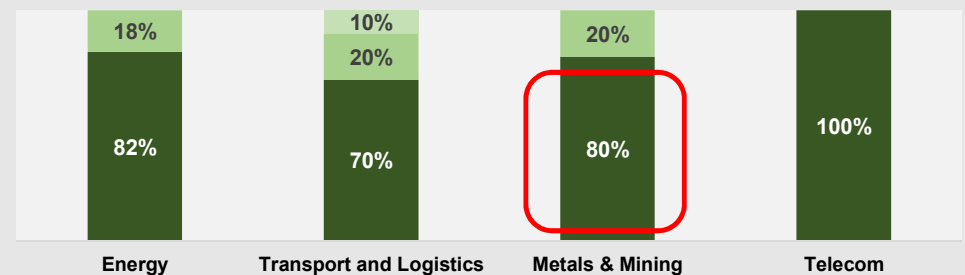


Regulatory Approval

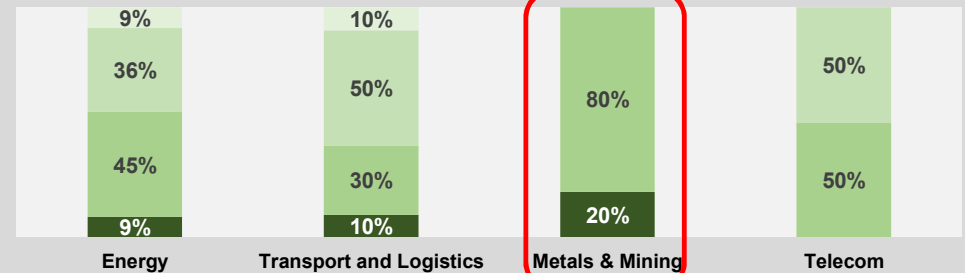


Execution Phase

Criticality of Design / Scope Change



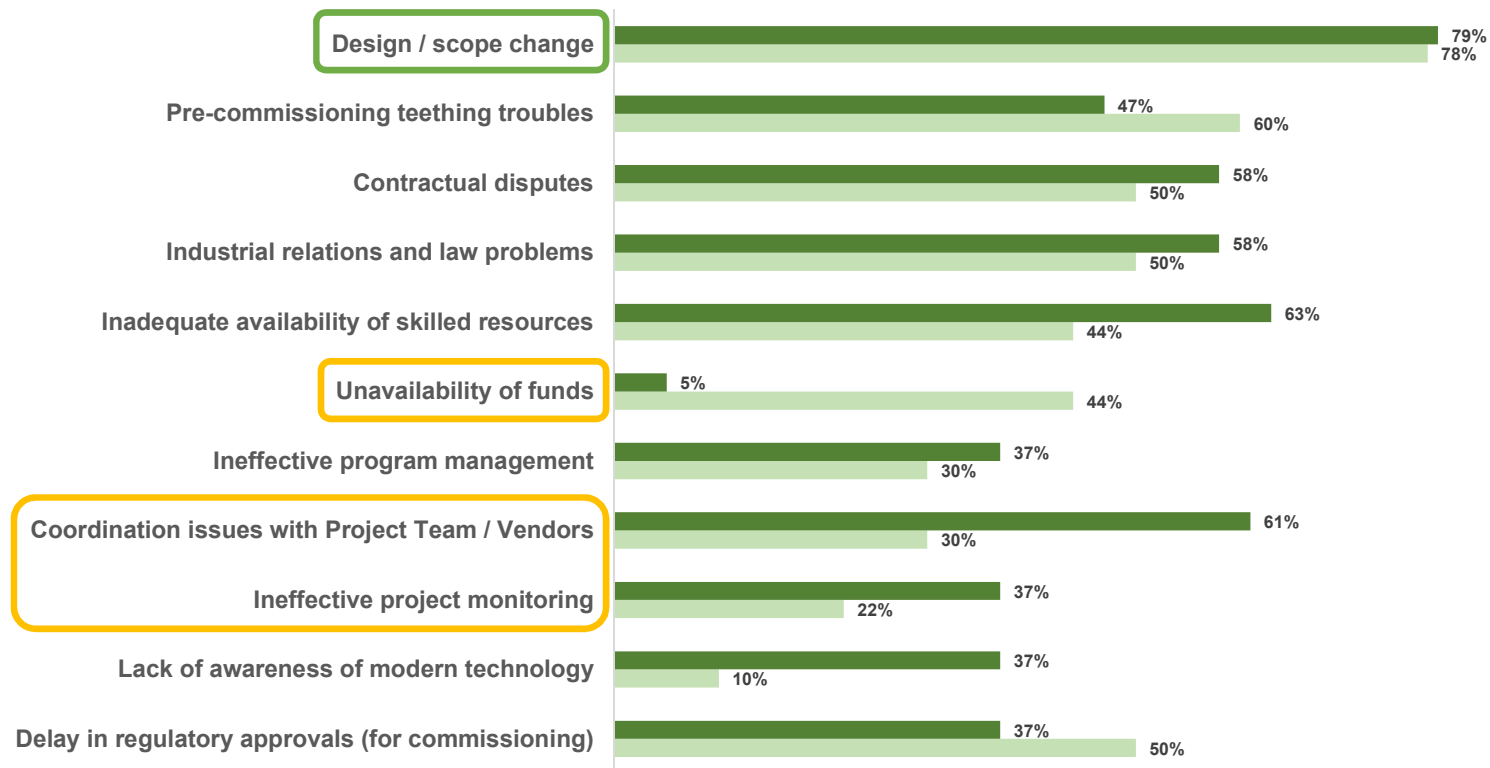
Lack of Skill Availability



Key findings from KPMG's KPMG PMI Survey

Strongly agree Agree Disagree Strongly Disagree

Factors impacting PSUs and Non PSUs Project Schedule



Key findings from KPMG's KPMG PMI Survey


PSUs Non-PSUs

Key Challenges in Developers and Contractors Space

DEVELOPERS SPACE

- 
- ✓ Acquisition of land
 - ✓ Delay in regulatory approval
 - ✓ Scope creep & inadequate detailed project report
 - ✓ Stringent environment & other compliance norms
 - ✓ Maturity in risk, control & governance
 - ✓ Consistent Project Management Information system
 - ✓ Contingency planning
 - ✓ Poor owner / contractor collaboration
 - ✓ Delay in completion, impact of escalation & IDC
 - ✓ Financial Stress - unavailability of funds

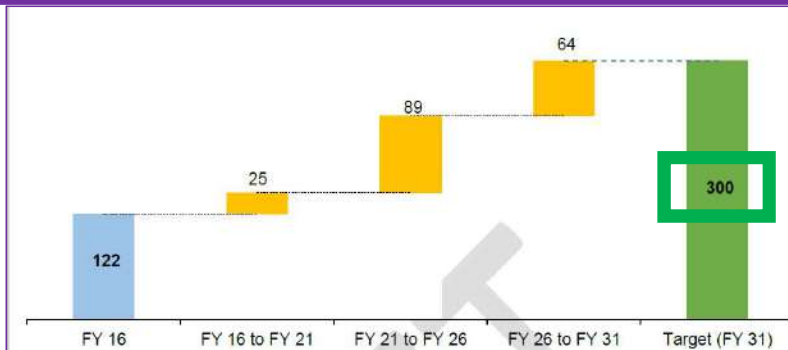
CONTRACTORS SPACE

- 
- ✓ Design & scope change
 - ✓ **Ineffective Project Management** - ineffective PMO
 - ✓ Inadequacy of skilled resources
 - ✓ **Weak contract admin. & Risk Management**
 - ✓ Escalation of labor cost and ineffective utilization
 - ✓ **Weak Procurement planning**
 - ✓ **Poor estimation & contingency planning**
 - ✓ **Delay in completion and impact of cost & LD**
 - ✓ Non-availability of funds
 - ✓ Increased competition leads to affect profitability

...Challenges can be addressed **ONLY 'together'**, though, it apparently looks from different worlds
Specially when MARKET IS CONDUSIVE TO GROW

Constructor's perspective on Steel Market

Some key pointers from National Steel Policy 17



Source: JPC (for present), MECON (for projection)

Note: Capacity additions are considered based on the announcement made by steel manufacturers.

Objectives:

- Crude steel capacity of **300 MT**..... by 2030-31
- Per capita consumption to **160 Kgs**..... by 2030-31
- Domestically meet entire demand**..... by 2030-31
- To be **net exporter** of steel..... by 2025-26

- ✓ In FY17, crude steel production in India was **97.4 MT**, with total crude steel production growing at CAGR of **5.5%** over last 6 yrs.
- ✓ The steel sector: over **2% to the GDP** of the nation
- ✓ Provides **20 lakh jobs** in the country.

Major Players to move forward are...



and others

... creates enough space in
contractor's business framework

LEADS TO

Look for critical success factors
by introducing a
structured project management mechanism

Along with introduction of Key Enablers like
Technology usage across lifecycle of
Project Management

Critical Success Factors



The likelihood of Project success increases with a **robust project delivery framework** that ensures:

- Main **project risks** are **consistently identified** & mitigated
- Project delivery and **cash flow** are **tracked and optimised** though integrated planning and monitoring
- **Project progress measurement systems** allow schedule and cost overruns to be prevented and detected consistently. MIS reports **enable effective decision making**
- **Decision making authority is controlled** thru' delegation policy to optimise execution & maintain accountability
- **Project controls & governance** are efficient; systems are adequate to assure Trust on Project Governance

MMH System of Structured Project Management (Snap 1)

- Our State-of-art, homegrown **project management system** establishes **L&T Way** in Ferrous & Non-Ferrous Sectors in India and strives to attain world class quality parameters

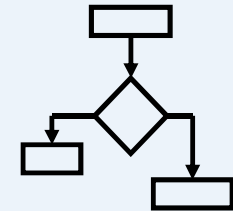
Leads to become
Certified ISO 9001:2015
on 6th Feb, 2018

Our project management system



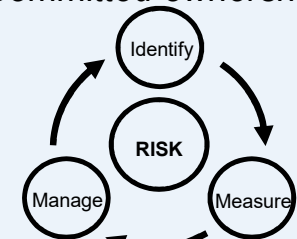
Process driven approach

- Change management



Risk based approach

- Committed ownership



Continual improvement

- Sustainability

MMH System of Structured Project Management (Snap 2)

Emphasis on: QMS

QMS



- * 4 levels of documentation
- * Internal / External audits & mgmt. reviews
- * Risk & Opportunities management

Assurance



- * Dedicated QA team for inspection
- * QA Plans & approved ITP for all key items / activities
- * Inspection as per QAP/ITP

Control

- * Systematic process to check quality as per NIT spec. & drawings
- * Check as per approved ITP & relevant Codes

Emphasis on: Sustainability

The amount spent on CSI activities (₹ Lakhs)

2015-16	11988.81
2016-17	10077.00

People impacted across thrust areas

Thrust Areas	People Impacted	
	2015-16	2016-17
Education	111472	108013
Health	262460	459878
Skill-building	33489	25704
Water and Sanitation	245930**	47003
Sub-total:	653351	640598
L&T Public Charitable Trust (LTPCT)	613743	827242
Total	1267094	1467840

* Rs. 60 crores was donated towards the Prime Minister's Swachha Bharat Abhiyan

Emphasis on: Engineering



Engineering

Few snaps



Enabler: Technology usage across Project Life Cycle (Globally)

Planning

Design

Construction

Operations



Drone monitoring and Simulation

Equipment/ Materials connectivity and tracking

Robotics and automated technology

Mobile technology, platforms and reporting

Project information encryption

Integrated real-time data and analytics

Building information modeling

3D printing

...Dramatic disruption thru' Digitalization will re-define the Project Management formula soon

L&T's Journey: Foray into Digital World



SLIM / Pro-Cube / Asset in Sight / Vehicle Tracking solution / Workmen Connect



S/c Tools Tracking / Workmen Biometric Attendance / RFID Solution / Work Permit / 4D Modelling & BIM

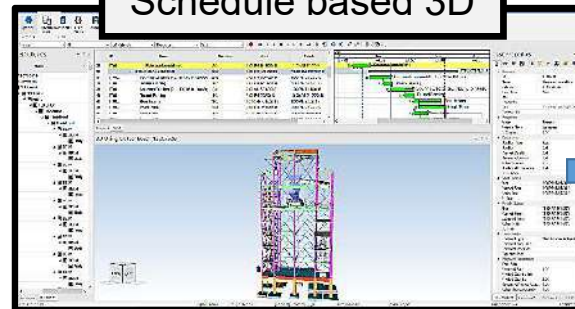
L&T's Journey: A Step towards BIM

- 3-D BIM: A model that includes 3-D shape information, specification, quantity
- 4-D BIM: 3-D Model added with construction modules, assemblies, schedule and time constraint data

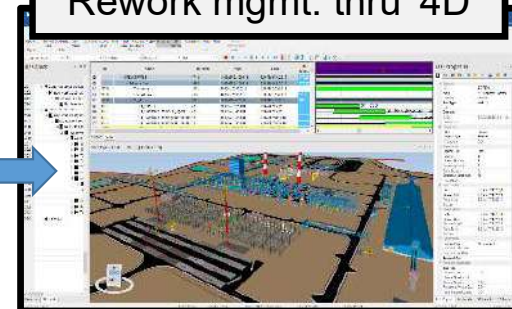
Offers from BIM



Schedule based 3D



Rework mgmt. thru' 4D



Advantages / Key Features



- ✓ Optimization of Schedule with Visual Interface
- ✓ Coordination & Collaboration with stakeholders
- ✓ Conflict Detection & Risk Mitigation – Reduction of rework
- ✓ Higher Level of Customization, Flexibility & Accuracy
- ✓ Improve different phased of Construction Planning



Thank you

