



**PUNJ LLOYD INSTITUTE OF INFRASTRUCTURE
MANAGEMENT
ANNUAL REPORT FOR 2018-19**

Professor Chandan Chowdhury, Executive Director, PLIIM



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PUNJ LLOYD INSTITUTE OF INFRASTRUCTURE MANAGEMENT

Punj Lloyd Institute of Infrastructure Management (PLIIM) is established within the Indian School of Business as a specialist Institute to support the infrastructure industry. The Institute has the MIT Sloan School of Management as its associate partner. The vision and mission of the institute is:

Vision

- To create high quality leadership and management capacity for the infrastructure sector and create an understanding of the sustainability dimensions impacting the sector, by delivering quality education, contextual research and continuous outreach

Mission

- Create top-quality educational and training programs
- Facilitate learning through online programs
- Undertake research that is contextual to the Indian and developing country context
- Develop tools and decision support systems to support the infrastructure practice
- Undertake continuous outreach to support the sector
- Serve as a "Go to" place for the infrastructure sector in India and abroad

The Punj Lloyd Institute undertakes various initiatives to guide the infrastructure sector towards efficient and sustainable development. This shall involve research initiatives, knowledge sharing events, training of public officials and industry professionals. It has already developed a smart cities index and digitalization index. To meet its vision, the institute works closely with corporates in all three verticals, Education, Outreach and Research. A brief on various activities of the institutes is given below.

EDUCATION

Advanced Management Program in Infrastructure

As part of its vision, the Institute offers an “Advanced Management Programme for Infrastructure Management” (AMPI). The AMPI is a specialized programme blending online and on-campus learning spread over a year and seeks to develop top level leadership in the infrastructure sector. The first batch of the program started in 2016, and currently, the third batch is in progress.

The participants attending the third offering of the program are from reputed public and private organizations like National Highway Authorities of India, KPMG Lower Gulf Ltd, CRISIL, Thermal Powertech Corporation (I) Ltd, Lanco InfraTech Ltd among others.



Students of AMPI Co2019

Action Learning Projects

The Co2019 worked on five Action Learning Projects (ALP) and submitted them in March 2019. There is a plan to convert one or two of them into a case.

ALP for Advanced Management Program in Infrastructure			
Details of Students		Title of ALP	Brief Description
Santosh Kumar Bajpai	National Highway Authority of India	Eastern Peripheral Expressway	The Eastern Peripheral Expressway was a model project of NHA that showcased competence in project management, enabling completion in a record time of 500 days. The Action Learning Project (ALP) team utilised hitherto unpublished data to bring out the best practices behind the success of the project. Learnings from this ALP can be leveraged as a benchmark to evaluate and drive similar infrastructure projects in India.
Varun Gupta	Public Works Department (Building and Roads)		
Sanjay Yadav	National Highway Authority of India		
Mukesh Kumar Meena	National Highway Authority of India		
Vedant Gupta	FLUOR DANIEL INDIA PVT LTD		
Ravindra Rao Madasu	National Highway Authority of India		
Details of Students		Title of ALP	Brief Description
Chandra Murthy	SembCorp	Incentivising the Pradhan Mantri Awas Yojana - URBAN	Affordable housing is one of the primary developmental shortfalls in India. Through PMAY (Pradhan Mantri Awas Yojana), the government has made a strategic shift and moved from being a provider to a facilitator in the affordable housing, with increasing participation being sought from the private sector. Several schemes had been rolled out in the past with minimal success. It is essential to find out what the pitfalls and shortcomings are within these schemes to help address the concerns of the
Harshad Prakash	S&T Group		
Hrydhal Damani	CRISIL		
Mohiddin Bhasha	Dr Reddy's		
Ripul Shrivastava	GMR Energy		
Varun Krishnamoorthy	KPMG		

		private sectors. This study focuses on incentivising the current national housing scheme – the PMAY.	
Details of Students		Title of ALP	Brief Description
Ajay Mann	Essar	Public-Private partnerships in Waste Management-Ramky	Urban India generates 1.6 lakh tons of municipal waste (MSW) every day resulting in 58 million tons per annum. So far around 17% of MSW is scientifically managed. The Ramky waste management project is the largest PPP (Public Private Partnership) MSW Management Project in India. Through this Action Learning Project (ALP), critical issues and challenges faced by different stakeholders in a PPP model for MSW project are studied.
Penmetsa Tejasree	Sree Buddha Homes		
Rajani Mall	Homelane		
Srikant	Lanco Infratech Ltd		
Details of Students		Title of ALP	Brief Description
Alok Kumar	National Highway Authority of India	Challenges & Opportunities in the implementation of SMART CITY PROJECTS in India	Smart Cities Mission is an urban renewal and retrofitting program by the Government of India with the mission to develop 100 cities across the country, making them citizen friendly and sustainable. The Action Learning Project (ALP) team has interviewed several key stakeholders and have attempted to establish the status of smart city development in India. The aim was to study past experiences of implementation of smart cities projects in India since the launch of mission 4 years back and understand 'Challenges and Opportunities' while implementation of such urban infrastructure projects for development of urban economy.
Rushikesh J	Larsen & Toubro Limited		
Lalit Kach	Qualcomm India Private Limited		
Arun Mahajan	ASCENDAS SINGBRIDGE INDIA		

			As a part of this project, primary and secondary data was collected along with interactions with Industry and Academic experts which gave in-sights of prudent concepts with insightful examples on Smart City mission in India vis-a-vis Global context in terms of existing framework and challenges, funding issues in smart cities, practical concerns to improve Happiness Index through smart cities and deployment of new technologies and innovations in smart cities.
Details of Students		Title of ALP	Brief Description
Sanjeev K Sharma	National Highway Authority of India	Tolling, Operation, Maintenance & Transfer model in National Highways	<p>The Bharatmala project is a flagship initiative of the current government.</p> <p>TOT or Toll-Operate-Transfer is a model adopted by NHAI where the authority puts its operational assets (Highway stretches) on auction. The bidder, who submits the highest bid, must deposit the money (bid amount) upfront with NHAI.</p> <p>The ALP team has obtained exclusive data and have done an in-depth SWOT analysis of Bharatmala Project Phase 1. They brought out the opportunities and weaknesses in the TOT model being applied in the award of such projects.</p>
P Nageswara Rao	National Highway Authority of India		
Sanjay Verma	National Highway Authority of India		
C M Sinha	National Highway Authority of India		
M S Chaithanya	National Highway Authority of India		
Rahul Vaidya	Nirmitee construction and project management consultants		

Graduation for the second batch of the Advanced Management Programme in Infrastructure Management (AMPI).

The graduation of the second batch of the Advanced Management Programme in Infrastructure Management was held on the 2nd of June 2018. In all 23 mid - career professionals graduated this year. The Chief Guest for the event was Mr Amitabh Kant, CEO, Niti Ayog.



Students receiving certificates from Mr. Amitabh Kant, Chairman Niti Aayog. Also present are Dean Rajendra Srivastava and Mr. Sunil Kant Munjal, Chairman, Mohali Campus Advisory Board

RESEARCH

A Study on Domestic Penetration and Export Potential of Premium Cars from India

In the global context, India is the largest tractor manufacturer, second largest two-wheeler manufacturer, the second largest bus manufacturer and the fourth largest car manufacturer with 5.16% of the global car sales. India has also exported 7,01,757 passenger vehicles in 2018. However, the bulk of the exports are in compact cars which constitute only 30% of the global sales volume of cars. The export of large/premium cars (cars other than class A and B with subcompacts, microcars, and superminis) is negligible, which constitute 70% of the global sales turnover. To achieve higher throughput and sales, India needs to scale up the manufacturing of the large and premium car segment having a cylinder capacity of 1500 cc and higher.

ISB had approached BMW to give a research grant for studying how India can become an international hub for manufacturing of high-end cars in India. A Memorandum of Understanding (MoU) was signed between ISB and BMW Group India. This research project studied domestic penetration and export potential of premium cars from India.

As part of the study, the following activities were completed:

- Survey prepared and administered for studying consumer behavior to 161 prospective customers (ISB Alumni).
- Survey prepared and administered for studying consumer behavior to 35 distributors of premium cars in 6 cities of India – Delhi, Mumbai, Chennai, Bangalore, Chandigarh and Ludhiana.
- Secondary Research on International Experiences by comparing the policies and taxation for domestic sales, manufacturing and exports of luxury cars in India with countries including Brazil, China, Mexico and Thailand.
- The policies adopted by the foreign markets of China and Mexico towards promoting the sales of premium cars have been studied
- Price Elasticity Model prepared
- International benchmarking of auto manufacturing and best practices in promoting passenger car sales and exports
- Analysed policies and taxations issues related to passenger cars across India, Thailand, Mexico, Brazil and China
- Quantitative and Qualitative analysis of production, domestic sales, premium car sales and export data among India, China, Thailand, Brazil and Mexico identifying key takeaways
- Analysis of primary consumer and distributor surveys
- Policy analysis and analysis of market dynamics have been completed

The draft report has been submitted to the client.

Case study of DND flyway project and comparison with other road contract forms

- The study investigates the reasons and factors that led to annulment of the concession agreement between the Delhi Government, Greater Noida Development Authority and IL&FS for the Delhi-Noida-Direct (DND) Toll way project
- The specific features (procurement terms, toll mechanism, insurance, etc.) of the DND contract were compared to other similar projects which were executed in public private partnership mode in India and abroad

We are now working on a plan to refine this case study for an external release and publication.

OUTREACH

International seminar on 'Innovation & Entrepreneurship in the Smart Cities of India'

An international seminar on 'Innovation & Entrepreneurship in the Smart Cities of India' was jointly organised by the Indian School of Business (ISB), Ureka Education Group, UK and Urban Value Creation Institute, UAE & France. This seminar scheduled at ISB's Hyderabad campus on 30th November 2018, had more than 500 attendees and was termed as a huge success by all. During this seminar, issues were discussed from three perspectives:

- Head of Academic Institutions
- Senior Government Officials / Public and Private Sector Industry Leaders
- Students and Entrepreneurs

Key questions were addressed for three set of stake holders, these are as below:

For Senior Government Officials / Public and Private Sector Industry Leaders

1. How do smart cities create opportunities for entrepreneurs- a Government perspective?
2. Which types of innovations do we need in smart cities in India?
3. What are some of the international best practices in the field of smart cities?
4. What are some of the potential areas of collaboration between Indian and international smart cities?

For Head of Academic Institutions

1. In terms of employment, what are the current needs and challenges?
2. How the universities could support the smart city development?
3. How do the universities contribute?
4. What are the current and future opportunities for the students?

For Students and Entrepreneurs

1. How smart cities can create opportunities for entrepreneurs?
2. How and where the students could develop their entrepreneurial ventures?
3. From where could the entrepreneurial ventures be funded?
4. How the city is supporting entrepreneurial ventures?

The Chief Guest of the seminar was Mr. C. Srinu Raju, Chairman, Sri City and the Guest of Honour was Mr. Arvind Kumar, Principal Secretary, Municipal Administration & Urban Development, Government of Telangana. Speakers and panelist were from industry, academia and government.



Welcome address at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018 by Professor Sanjay Kallapur, Deputy Dean, Faculty Review and FPM



Mr. Arvind Kumar, Principal Secretary, Municipal Administration & Urban Development, Government of Telangana, delivering a keynote address at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018



Srini Raju, Chairman, Sri City and Executive Board Member, ISB delivered the key note and participated in a panel discussion at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018



Professor Chandan Chowdhury delivered a key note on 'Global Challenges for Indian Smart Cities' at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018



Heads of academic institutions having a panel discussion on how universities can support smart city development and employment opportunities for students at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018



Professor Anand Nandkumar, Academic Director, Centre for Innovation and Entrepreneurship, ISB and Pradeep Mittal, Past President, TiE Hyderabad & CEO, GreatFour Systems Inc. in a discussion on 'Innovation & Entrepreneurship in Smart Cities'



Professor Bhagwan Chowdhry, Pradeep Mittal, Past President, TiE Hyderabad & CEO, GreatFour Systems Inc. and Sarfraz Hasan, Group CEO, Ureka Education Group at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018



Participants at the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018



Students from ISB's Infrastructure Club made significant contribution during the International Conference on Innovation and Entrepreneurship in the Smart Cities of India 2018 held at Hyderabad campus

This event was a part of an international seminar series on 'Innovation & Entrepreneurship in the Smart Cities of India', held in three cities Hyderabad, Mumbai and Delhi. The first in the series was held at our Hyderabad campus on 30th November 2018. Professor Chandan Chowdhury was the co-host for this event at our Hyderabad campus. He had also delivered a key note on 'Smart Cities in India: Future of Education' on 11th December 2018 at the 'Innovation & Entrepreneurship in the Smart Cities of India' organised at IIT, Delhi.

Eminent Speaker Series for the AMPMO & AMPI

The eminent speaker series organized for the Advanced Management Program for Infrastructure (AMPI) and Advanced Management Program for Manufacturing & Operations (AMPMO) was very compelling. Following speakers addressed the students:

Name & Designation	Company	Topic
Anil Chaudhry,	Schneider Electric	Changing paradigms of digital age customers purchasing behaviors

Country President & Managing Director		and observations for Manufacturing organizations
Anjani Agrawal, Global Steel Leader, Partner Advisory Services, National Leader, Mining & Metals	Ernst & Young, India	Strategic Risk Management and Governance
Gaurav Agarwal, MD	Symantec	Cyber-security for the Cloud Generation
Manish Kumar, MD & CEO	National Skill Development Corporation	Skilling challenges in India and on India's technical and knowledge sharing initiatives
Rahul Shandilya, Chief Information Officer, Customer Experience & Product Development	Mahindra & Mahindra	Changing Paradigms of Digital age Customers purchasing behaviour and observations for Manufacturing Organisations
Ravi Kirpalani, Managing Director	Thyssenkrupp	Growth Opportunities in India
Sanjay Sharma, Executive Vice President & Head, Global Manufacturing Operations	Dr Reddy's Laboratories	Designing and Operating for scale in Manufacturing
Venkatesh Natarajan, Chief Information Office	Ashok Leyland	Digital trends in manufacturing
Vijay Sethi, Chief Information Officer and Head Corporate Social Responsibility	Hero MotoCorp	Digital Transformation in Manufacturing Industry
Sir Simon McDonald, KCMG, KCVO Permanent Undersecretary and Head of the Diplomatic Service	Foreign and Commonwealth Office, UK	The Future of India-UK relations

Ajay Arora,

AVP Strategic Planning and
Projects

Hero Enterprise

Running Marathons and Achieving
Corporate goals

Talk by Mr. Gaurav Agarwal: A session was organized on 'Cyber-security for the Cloud Generation' by Mr. Gaurav Agarwal, Managing Director, Symantec. He addressed the students of AMPMO and AMPI on April 21, 2018, covering issues like:

- Sharing global findings on Internet Security Threat Report 2018
- Risks of use of Mobile and Public Networks and how to secure the same
- Offering Enterprise Security when access is not through office networks



Professor Chandan Chowdhury presenting a memento to Mr. Gaurav Agarwal, Managing Director, Symantec

Talk by Mr. Ravi Kirplani: A talk was organised on '**Growth Opportunities in India**', by Mr. Ravi Kirplani, Managing Director & CEO, Thyssenkrupp. He addressed the students of Advanced Management Programme for Manufacturing and Operations & Advanced Management Programme for Infrastructure on 23rd April 2018 at Mohali campus. He talked about key growth opportunities in India and had provided some learnings and takeaways on leadership.



A talk on 'Growth Opportunities in India' , by Mr. Ravi Kirplani, Managing Director & CEO, Thyssenkrupp

Talk by Sir Simon McDonald: Sir Simon McDonald KCMG KCVO, Permanent Undersecretary and Head of the Diplomatic Service, Foreign and Commonwealth Office, UK spoke to our AMPMO & AMPI students on **'The Future of India-UK relations'** on April 23rd at the Mohali Campus. He discussed the impact of Brexit on Britain and on the India-UK cooperation. He also conveyed his thoughts on the impact of Brexit on manufacturing and logistics.



Sir Simon McDonald spoke to AMPMO & AMPI students on 'The Future of India-UK relations'

Talk by Mr. Anjani Agrawal: Mr. Anjani Agrawal, Global Industry Leader - Metals | Mining | Strategy & Operations | Corporate Responsibility & Governance | EY | SDGs was the guest speaker at AMPMO & AMPI during Residency-1 on April 25th, 2018. He shared his views on

‘Strategic Risk Management and Governance’: As Nation states are having re-birth as economic entities, business rules are being rewritten by regulators. How should business deal with these multiple movements and how should they assess its strategic risks and opportunities?



Col. Rajiv Bhargava presenting a memento to Mr. Anjani Agrawal, Global Industry Leader - Metals | Mining | Strategy & Operations | Corporate Responsibility & Governance | EY | SDGs

Talk by Mr. Vijay Sethi: Mr. Vijay Sethi, Chief Information Officer, Head Human Resources and Head Corporate Social Responsibility, Hero MotoCorp Ltd on April 28, 2018 delivered a talk on ‘Digital Transformation in Manufacturing Industry’.

The Government of India is focusing on manufacturing industry as part of various programs including Make in India. Globally also, there is a thrust on using digital technologies and concepts like Industry 4.0. This session covered what is Industry 4.0, what are the technologies that can make cyber-physical systems work, what issues manufacturing companies can face in their journey to Digital Transformation, what are the key learnings from some successful transformation initiatives.



Mr Vijay Sethi delivering a talk on ‘Digital Transformation in Manufacturing Industry’



Professor Chandan Chowdhury presenting a memento to Dr. Manish Kumar, MD & CEO, NSDC

Mr JM Balamurugan, Secretary to Governor Punjab had delivered a talk on Infrastructure Sector and interacted with the participants at the Mohali campus. Mr Balamurugan had shared his vast experience in the Infrastructure space on 18th July 2018.



Students of Advanced Management Program for Infrastructure (AMPI) with Mr JM Balamurugan

Quarterly Newsletter

INFRA NOW, a Quarterly Newsletter by Punj Lloyd Institute of Infrastructure Management, ISB:

The sixth edition of “Infra Now” provides an update on third batch of the Institute`s flagship program “Advanced Management Program for Infrastructure” and formation on the Special Interest Group (SIG) of Infrastructure. It also provides an update on two new research projects undertaken by the institute. In addition to that, Vignesh, analyst at the Institute, writes on the legal aspects of DND flyway case. This article is second part of the study on DND flyway. Part 1 of the article was published in the previous issue of the newsletter.