Towards a paradigm shift in stakeholder engagement of PPP projects

Author: Anand Lokhande
Co-Author: Dr. B. S. Patil

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Abstract

The most important and imperative agenda for any developing country is the sustained growth in its economic status. This development is fuelled by advancement in sectors like infrastructure, energy, manufacturing and services. However, this is not possible without the active and incessant participation of the private sector. Governments have relied on public procurement mechanism in the past to engage private sector in delivery of projects and policy programs. Over the years, public procurement has transformed into a more defined and consolidated form of relationship with the private sector, known as, public private partnerships. Public private partnerships, in recent past, have emerged as critical driving force behind large scale infrastructure projects. They epitomise strategic relationships where private sector capital and technology, coupled with favourable government regulatory mechanism and machinery work hand in hand to deliver large and complex projects. PPP projects are vital tools to enable the creation of national assets for the country. Consequently, the role of stakeholders is a key component of the success of such projects. PPP projects are seen in the education and health sector as well, but the focus of this study is on the infrastructure sector. This paper investigates the value of stakeholder engagement in PPP projects based on current literature and recommendations for best practices to project managers to manage stakeholders effectively. There is a need to review the existing engagement models to adapt with the changing politico-economic dynamics and to ensure continuous stakeholder engagement.

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Introduction

"In a broad overview of the progress in the roads and railways sectors, the Prime Minister called for a consolidated approach to existing projects, and working towards their completion within strict timelines." (Press Information Bureau, 26th April 2017. PM Meeting with NITI Aayog, PMO, all infrastructure ministries of the government of India). It is without doubt that the progress of any nation is heavily dependent on the growth of the infrastructure sector. Growth of the manufacturing and services sectors are heavily dependent on the infrastructure sector. There is a large demand for airports, seaports, power, rail and road infrastructure. Along with existing sources of power generation there is also a great demand for renewable sources of energy which are ecologically more viable and sustainable. Urbanization is the main driver for such growth. Population nearly double the size of US will be staying in cities in India by 2030. The country needs nearly INR 31 trillion (USD 460 billion) over the next five years to meet the growing infrastructure needs. Out of this nearly INR 5 trillion is being planned to be invested in road, railway and port connectivity projects. The government's aim is to connect the seven lakh villages through road network. By the end of February 2017, nearly 6000 kilometers out of the 15000 kilometers of target set for the national highways was completed. The government has revamped the urban renewal schemes and pumped in around INR 2900 crores to be utilized in six states. One of the ambitious projects of the government is to build East Coast Economic Corridor which runs across 2500 kilometers and several states. Such large projects require investments which are not easily available with the government.

The government at the Centre and the State are unable to create sourcing of funds for the scale of investment and hence the participation of the private sector is very crucial for the success of the projects in the infrastructure sector. The government's welfare objectives will not be met if the projects are not executed within the stipulated time and budget. The Smart Cities project and many other infrastructure projects related to road and transport sector are characterized by long gestation periods. The overall goals and deliverables from these projects are complex in nature and their execution needs high level of experience and expertise. The funding requirements are also very high, and governments are unable to meet them through the regular fiscal funding mechanisms. Therefore, to meet these welfare goals private sector enterprises have been involved in partnering with the governments to achieve the developmental objectives of the State. Public private partnerships are emerging as key enablers to fuel the economic growth of nations especially in the developing countries.

Public private partnerships (PPPs) are characterized by the term bound agreement between the state and the private corporation to execute actions based on common agreed objectives. The World Bank (1999, p.4) defines PPP as joint initiatives of the public sector in conjunction with the private, for profit and not-for-profit sectors, also referred to as the government, business and civic organizations. These PPPs are differently structured based on the needs of the projects or the ability of the parties to execute the

contract. The most common forms of PPPs executed are BOT (Build-Operate-Transfer), BOOT (Build-Own-Operate-Transfer) and BOO (Build-Own-Operate).

In India, the history of PPPs date backs to the latter half of the 19th century, which saw the British companies investing in the Indian railroad operations. Later during the early 1900s, the electric supply companies in Mumbai (Tata) and Kolkata (Birla) were instrumental in partnering with the then government to take up the electricity generation, transmission and distribution. This also paved the way for similar ventures in the southern part of the country. The economic liberalization reforms from the Union budget presented in 1991 opened the gates for a new generation of PPP consolidation in India. One of the earliest infrastructure sub-sector to be opened up to private participation was the electricity generation sector. This led to the formation of independent power producers or IPPs. Another significant development was the amendment of the National Highways Act, 1956 to allow private players into the highway development and maintenance activities. The telecom sector also saw major shift when competitive bidding process was introduced to allow operators to own up circles in various states. In fact, this policy shift has been the landmark event in telephony sector across the world. The formation of the Infrastructure Development Finance Company in 1997, based on the recommendations of the "Expert Group on Commercialization of Infrastructure Projects" under the chairmanship of Rakesh Mohan, indicated the government's desire and direction to invite private sector partnership in infrastructure development along with capital, expertise and management. The growth in the PPP sector was the highest during these 15 years between 1997 and 2012.

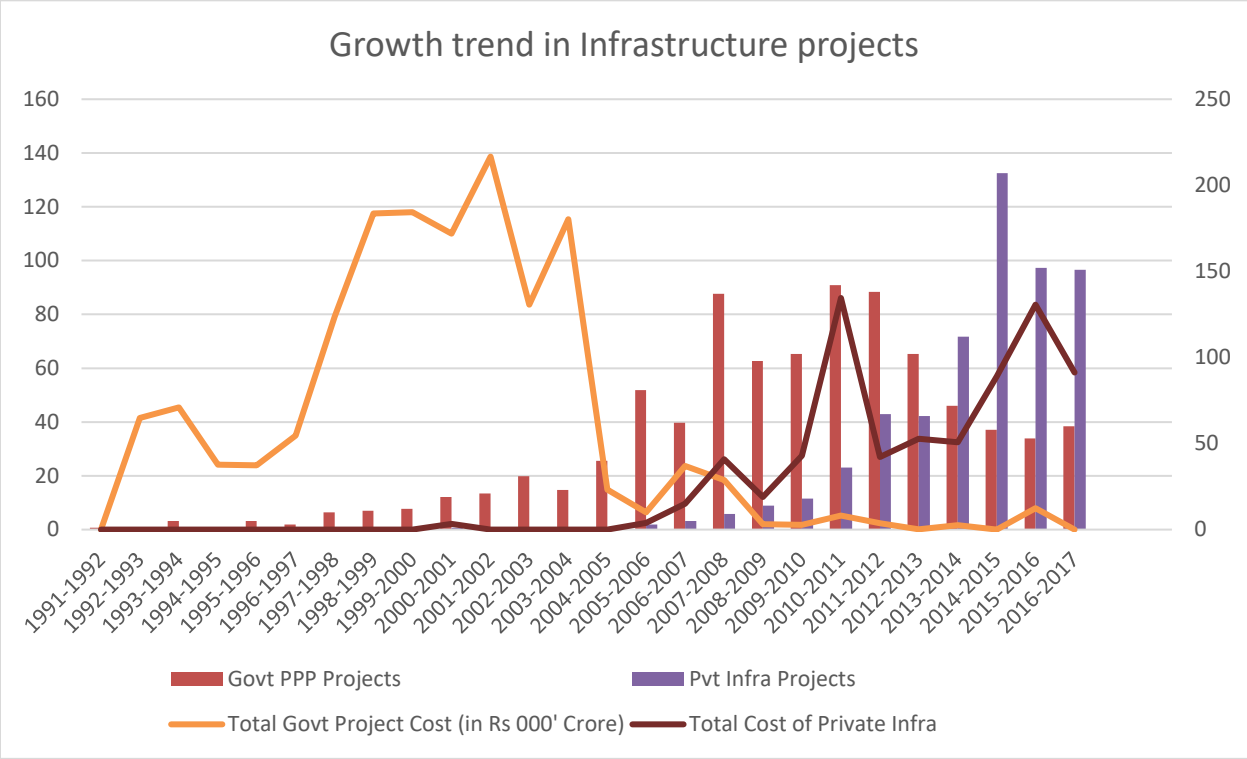
Current Scenario

Based on the data available from the government website on public private partnership, Table 1 indicates the growth of the private participation in infrastructure sector. The data considered for this study is taken from the year 1991 onwards. Data for investments before 1991 is not part of this study. It is observed that the during the period from 1994 to 2004, government investment in infrastructure was the maximum demonstrating the direction of economic focus. Some notable examples being the Golden Quadrilateral Project, Delhi-Mumbai corridor project, upgradation of several important national highways by increasing the lanes and building bypasses to ensure smooth flow of traffic. It is also notable to observe that the initial investments were very high compared to the actual number of projects. Later, from 2007 onwards, private participation in the infrastructure sector increased year on year. Happily for the government this resulted in the increase in the number of projects being taken up in the PPP mode. In the last ten years, private sector infrastructure projects have seen a rise, examples being elevated roads, urban rail systems and other roads being taken up in various finance/delivery models like BOT, BOO and others. Similar growth has been observed in other sectors e.g. communication (specifically – towers related), energy (electricity and solar), transport (airports, ports railway related), water and sanitation related to treatment and disposal, and finally social infrastructure related to SEZs, industrial parks, cold storage etc. We can

also notice a slow decline in the government led PPP projects, reasons could be attributed to the maturity of the private sector in handling large gestation projects, provision of investing ability and thereby the funds with the private sector to take up the challenging projects, opening up of the sector to private players who have at their disposal, experienced personnel, highly qualified and competent to execute such projects.

Year	Government led PPP Infrastructure Projects (A)	Private sector led PPP Infrastructure Projects (B)	Project Cost of (A) (in Rs 000' Crores)	Project Cost of (B) (in Rs 000' Crores)
1991-1992	1	0	0	0
1992-1993	0	0	42	0
1993-1994	5	0	45	0
1994-1995	0	0	24	0
1995-1996	5	0	24	0
1996-1997	3	0	35	0
1997-1998	10	0	79	0
1998-1999	11	0	117	0
1999-2000	12	0	118	0
2000-2001	19	1	110	2
2001-2002	21	0	139	0
2002-2003	31	0	84	0
2003-2004	23	0	115	0
2004-2005	40	0	15	0
2005-2006	81	3	6	3
2006-2007	62	5	24	10
2007-2008	137	9	18	26
2008-2009	98	14	2	12
2009-2010	102	18	2	27
2010-2011	142	36	5	86
2011-2012	138	67	2	27
2012-2013	102	66	0	34
2013-2014	72	112	2	32
2014-2015	58	207	0	57
2015-2016	53	152	8	84
2016-2017	60	151	0	58

Source: www.pppindia.gov.in Table 1



Source: www.pppindia.gov.in Chart 1

It is important to take note of type of the agreements in force for the projects indicated Table 1. Not all the projects are based on the same type of agreement. The type of agreement determines the extent of participation of both the partners. The Build-Operate-Transfer (BOT) is the most popular form of PPP format followed by the Design-Build-Finance-Operate-Transfer (DBFOT).

The Table 2 gives the breakup of the projects in the infrastructure sector based on the type of agreement between the project partners. The data has been sourced from the government website for public private partnership. One noticeable aspect is that the sub-sector of roads and bridges has the largest share of such projects in line with the current thrust of the government to improve the road infrastructure in the country. The previous governments have embarked on a policy direction to increase the length of roadways in India in order to aid the growth of, both the industrial production and the movement of agricultural products from one part of the country to another without causing delays, especially, in case of perishable commodities.

Type of agreement	Airports	Ports (excluding captive)	Roads and bridges	Urban public transport
Build-Operate-Transfer (BOT)		6	33	
Build-Operate-Transfer (BOT) Annuity		1	12	
Build-Operate-Transfer (BOT) Toll			14	
Build-Own-Operate-Share-Transfer (BOOST)		1		
Build-Own-Operate-Transfer (BOOT)	2	4		
Design-Build-Finance-Operate-Transfer (DBFOT)		1	20	2
Design-Build-Finance-Operate-Transfer (DBFOT) Annuity			1	
Design-Build-Finance-Operate-Transfer (DBFOT) Toll			4	
Operate-Maintain-Share-Transfer (OMST)		1		
Operation-Management-and-Development-Agreement (OMDA)	1			

Source: www.pppindia.gov.in Table 2

The control of the project delivery and the overall organization is also dependent on the type of the agreement in force for a project. Table 3 is a good indicator of how the ownership pattern changes as the type of the agreement changes on the spectrum.

Design-build	Design-build-maintain	Design-build-operate	Design-build-operate-maintain	Build-own-operate-transfer	Build-own-operate

	Service contracts	Management contracts	Lease	Concession	Divestiture

Source: Institute of Civil Engineers, Frost and Sullivan Table 3

From the Table 3, some key features of the Indian infrastructure sector are listed – a) there is a growing need of infrastructure for the development of the country b) the government has always been the major driver behind such projects c) the last two decades have seen tremendous jump in the overall investment in this sector d) private sector has emerged as the key partner in building infrastructure e) public private partnerships are being developed to promote and deliver large projects in the areas of airports, railways and road transport, shipping ports and most importantly urban infrastructure f) different forms of PPP models are in operation currently to execute these projects.

Challenges in the PPP sector

Despite the strength of the PPP models, attributed to the fact that they incorporate the best of the government and the private sector, they are still plagued with several problems. The Vijay Kelkar Committee report identified the issues that afflict the PPP in its reported presented in November 2015. The committee was established to study the existing state of public private partnerships in the infrastructure sector and come up with recommendations on improvements. Titled as the report on "Revisiting and Revitalizing Public Private Partnership Model of Infrastructure" the committee identified several challenges faced by the private sector partners and highlighted what the government agencies were facing. These were due to macro-economic factors, sectoral regulatory meso-economic factors and micro-economic factors specific to the private sector.

Case study 1

The Reliance Infrastructure-led concessionaire was fined INR 795 crores for pulling out from the Airport Express Line of Delhi Metro. This project was one of the prestigious projects for the country and was supposed to be provide seamless integrated travel to and from the Delhi Airport to the city and outskirts in conjunction with the existing Delhi Metro. The project was commissioned in February 2011 but was faced issues from day one due to the strict penalty clauses of the DMRC (Delhi Metro Rail Corporation) over delays if any, in construction. Further there were glitches related to commissioning which caused closure of the line for over six months. These were sorted out and Reliance commenced operations as an agency while paying fees to the DMRC. One of the reasons identified was the incorrect projections of footfall which never crossed 20000, while the expectation was its double. Meanwhile

Case study 2

The Vadodara Halol Toll road project was one of the earliest PPP projects in the country with partnership between the government of Gujarat, Roads and Buildings Department and the Infrastructure Leasing and Financial Services (IL&FS) company in 1995. The toll road operations were started in 2000, however the projections of revenue were incorrect and collections dropped from 63% to 34%. There was absence of

support from the public-sector partner to help redeem the situation due to non-existent policy framework. Government incentives proposed were then taken away leading to further loss to the concessionaire as the project was unable to generate the requisite funds from operations. It was clear that the policy and revenue related risks were not clearly anticipated and the beginning, neither were they allocated equitably between the two partners.

Case study 3

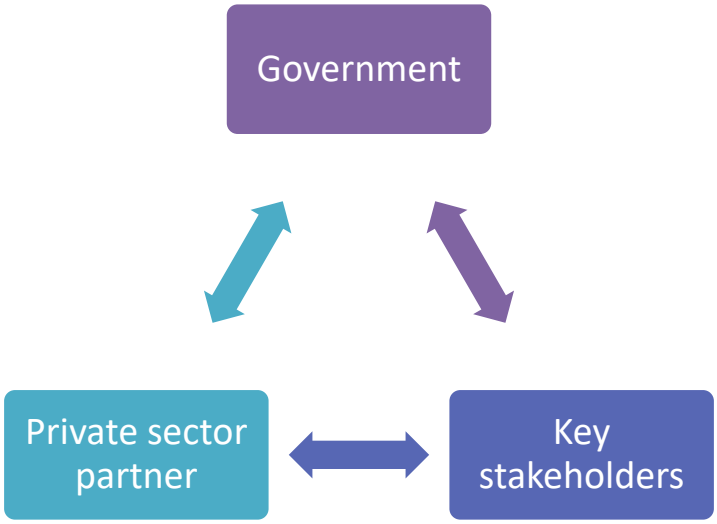
The Delhi Gurgaon expressway was initiated to help reduce the traffic congestion between the two cities. This project was awarded on the BOT basis to Jaypee DSC Ltd in 2002 but the Jaypee group exited the venture in 2004. The project was completed in 2008, but the issues it faced during and after the construction have remained since. The overall length of approximately 28 kilometers with 11 flyovers and was a PPP project conceived between the NHAI (National Highways Authority of India). DS Constructions, and the state governments of Haryana and Delhi. There was no historical documentation for reference on BOT basis in 2002. Risks and constraints were not appropriately documented and allocated between the partners. The projections of the traffic were not estimated correctly and rise in traffic did not materialize in lowering of the toll charges for the end user citizens. Land acquisition had caused major delays in the project completion and claims caused major funds outflow. Along with this flawed designs and lack of environmental clearances were other causes of project failure.

Case study 4

The Karnataka state government initiated a project to provide drinking water supply to the water-scarce regions of Belgaum, Dharwad and Hubli. This was one of the earliest PPP projects in the water sector in the state. The project was budgeted at INR 237 crores to be spent over a period of four years between 2004 and 2008. Appropriate regulatory and legal framework was established by the government to ensure that the service delivery and tariff setup and maintenance. However, the project was faced with severe hurdles. The tariff was set at very high levels in order to recover the project costs. Availability of water depended on the monsoon rains and the flow of water from the Mandovi river in the state of Goa. Water disputes between the two states led to drying up of the Neersagar reservoir from which this water supply was being sourced. Several citizen and civil society groups protested that the government's decision to upscale the project was taking without taking the local population into confidence and the ambiguity related to the tariff and costing of the project. Thus, an ambitious yet genuine people welfare project was dealt a significant blow due to mismanagement of stakeholders. The project has proved to be too costly for the state government and the overall benefits from the project have not yet reached the population for which it was set up.

Current model of stakeholder engagement in PPP projects

The case studies listed earlier, clearly indicate the failure factors faced by the project manager in various areas of project management, especially in stakeholder engagement and stakeholder communication. The current model of stakeholder management in most PPP projects is illustrated in Fig 1 –



Source: http://www.pppindia.gov.in Fig.1

The flow of information is linear between two specific partners at any given point of time. The reasons for this could be attributed to the contractual nature of the relationship, the complexity of the project, the differences in the communication tools used internally, by the partners, relegating the external communication to linearity. This model of stakeholder engagement has not yielded any benefit. Instead it has led to issues and avoidable risks of communication, plaguing the time of the project manager. The Vijay Kelkar Committee also identified some more of them which can be classified under stakeholder engagement –

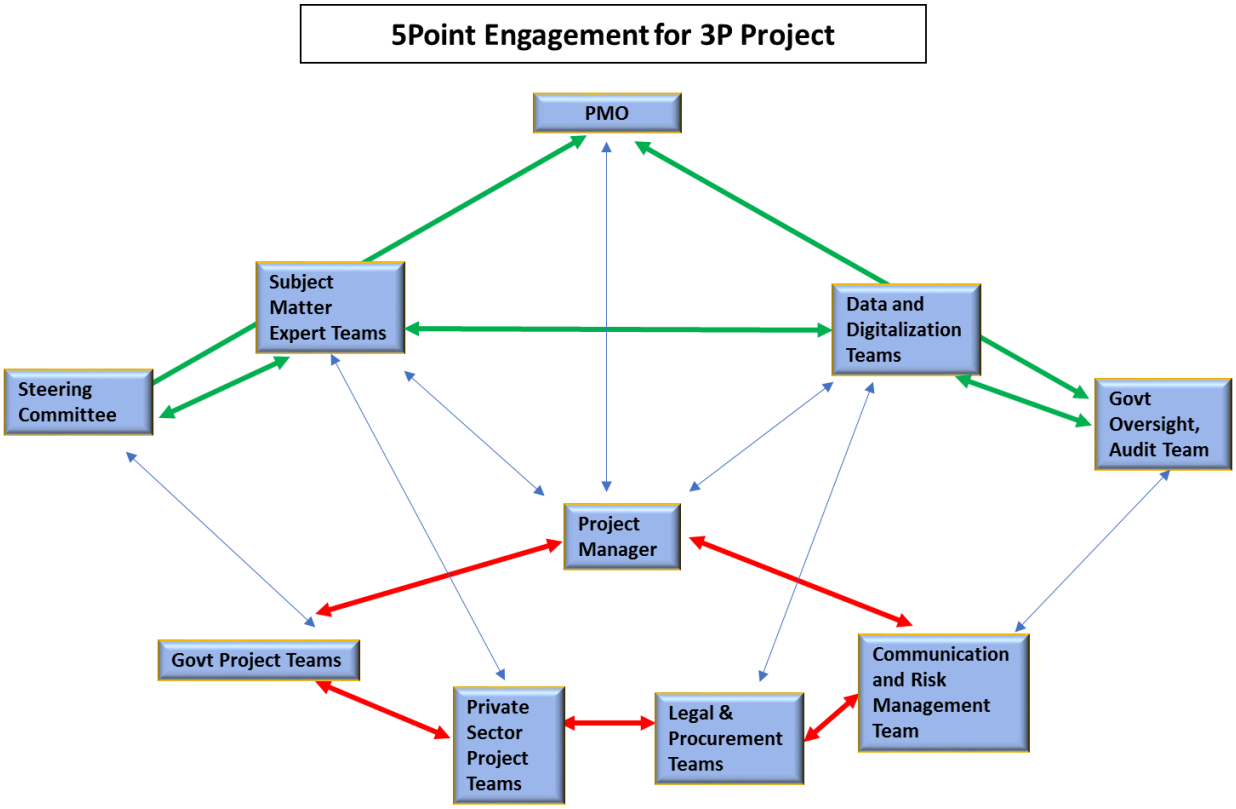
a) Lack of coordination between different government agencies to deliver the overall PPP project
b) Lack of communication and clarity regarding the regulations, procedures and policies between the two partners
c) Lack of capability within the statutory authorities on dealing with PPPs and the contradiction of corporate functioning vis-à-vis the standard government oversight
d) Resort to litigation in case of monetary claims and other risk contingencies, thus derailing the entire partnership, which could otherwise have been avoided through effective expectation setting between the stakeholders

In the words of the committee "*inadequate and inconclusive stakeholder consultations are often observed in PPP project design. It is important to consult and obtain buy-in of stakeholders to ensure the smooth implementation of projects, especially with regard to access, willingness to pay and dispute resolution*".

Recommendation of a new model for effective stakeholder engagement

It is necessary to completely revamp the model of stakeholder engagement in PPP projects. The complexity of the various contractual models (e.g. BOT, DBFOT and others) is only adding to the existing chaos around risk allocation, statutory control of resources, one-upmanship and negative power management. Added to that is the heightened nature of public awareness related to environment protection, pollution control, use of tax revenues for development and outcome-based delivery of projects.

The model in Fig 2 will prove to be an effective tool with the project manager and his team to handle complex stakeholder relationships.



Source: created by the author for his research

Fig.2

The attributes of the model in Fig 2 are collaboration, coordination, continuous communication and consistent information flow across all the major components of the PPP project. I have called out the project teams separate from the teams which handle legal, procurement, risk and communication

management work to emphasize the nature of their work. It is important to segregate and reinforce the teams that work on information dissemination so that they can contribute effectively to the stakeholder communications. Risk management is an essential component of any project big or small. PPP projects are facing risks continuously in the ever-changing business and economic scenarios. Hence it is important to have a separate team completely focused on the risk awareness, response and issue resolution.

The red bold arrows indicate the communication between the teams which are executing the project at the common ground level and without whose technical and functional work the project will not be completed. The green bold arrows indicate the communication between the teams which are providing the oversight, guidance and overall steer to the project.

Currently there is no stakeholder engagement model available in India for addressing the challenges faced by project managers of PPP projects. Complex questions do not always need complex answers. The simplicity of this model will help in addressing the difficulties faced by the project managers of PPP projects. Adoption of this model for project communication in PPP projects will definitely help in early flagging of risks, maintain adequate control on resources, ensure optimum use of material resources, proactive planning for regulatory changes and project risk mitigation.

Limitations of the proposed stakeholder engagement model

The obstacles in successful delivery of PPP projects related to coordination and cooperation can be addressed in totality through this model. However, the model has not been used or adopted in any of the projects. The direct benefits of the adoption of this model are not quantifiable at this point in time. The model is based on the gaps identified in the literature reviewed by the author and subject to change and refinement based on feedback from peers and experts in the project management community.

Conclusion

The large volume of growth needed in the infrastructure sector is only possible by successful delivery of the projects at hand. The partnership of the public sector/government with the private sector is the backbone for the growth engine of this sector. The key to the success of this type of partnership is the effective and engaging collaboration. There is a need for a paradigm shift in the approach to engage with stakeholders at all levels in PPP projects. This shift calls for a totally new vision and action to instill confidence in the minds of all the stakeholders towards the project objectives and thereby achieve their buy-in for a successful delivery of the project. Government's vision for welfare of the citizens can only be achieved through prudent project management and effective stakeholder engagement at all levels.

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