

**EXTERNAL STAKEHOLDER MANAGEMENT
STRATEGIES IN INFRASTRUCTURE MEGAPROJECTS
– AN ORGANIZATIONAL POWER PERSPECTIVE**

A THESIS

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ABSTRACT

Keywords: Infrastructure Megaprojects, External stakeholder management, Strategic action, Organizational Power.

Infrastructure megaprojects, due to their colossal nature, can cause inconvenience to multiple external stakeholders such as stakeholders in lands, existing services and project communities. These stakeholders are difficult to manage as they interact with the project across permeable boundaries, are not accountable to the requirements of a Detailed Project Report (DPR) and cannot be governed with contractual instruments or conformance to standards as in the case of internal stakeholders. In this context, this research aims to understand *how* an infrastructure megaproject during its construction and operation phase can manage these external stakeholders through strategic action from an organizational power perspective.

Anchored in the dimensions of power, persuading strategies, framing strategies and hegemonizing strategies are observed from two exploratory case studies. Multiple organizational power theories which relate to these strategies such as influence tactics framework, bases of power framework, framing theory, governmentality theory and circuits of power theory are considered in this study. The literature review of these organizational power theories and the megaproject literature pertaining to each of these strategies helped identify gaps in the literature, for addressing which eight research questions are proposed. To address these research questions, I selected a metro rail megaproject in India. Multiple data sources from this project such as semi-structured interviews, news media articles, and social media posts were used to investigate the strategies employed by the megaproject to manage external stakeholders. Subsequent to developing twenty-one propositions through a grounded theory approach, a conceptual framework that can help explain external stakeholder management in megaprojects is proposed.

The research makes multiple contributions to theory, methodology and practice. The role of strategy in making power dynamic by creating power, using power and maintaining power is established. The definition of project community is broadened to involve all stakeholders of the project (both internal and external) as the strategies used to manage the project community percolated and trickled down to other stakeholders as they are also part of the project community.

A structured approach to study naturalistic data such as news articles and social media is proposed and their ability to contribute to megaproject research is highlighted. To practice, I contribute a framework to explain external stakeholder management in megaprojects. The study also emphasizes the role of the covert strategies such as framing and hegemonizing in dictating the visible stakeholder management strategies such as persuading strategies, and vice versa.

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ABBREVIATIONS

ANT	Actor Network Theory
AR	Augmented Reality
BIM	Building Information Model
CSR	Corporate Social Responsibility
DMIC	Delhi Mumbai Industrial Corridor
DPR	Detailed Project Report
FRP	Fibre Reinforced Plastic
GDP	Gross Domestic Product
GIFT	Gujarat International Finance Tec-City
HVAC	Heating ventilation and Air conditioning
ICT	Information Communications Technology
INR	Indian National Rupee
IT	Information Technology
MEP	Mechanical Electrical Plumbing
MOU	Memorandum of Understanding
MRTS	Mass Rapid Transit System
NGO	Non-Governmental Organization
OHL	Overhead lines
OPP	Obligatory Passage Points
PSD	Platform Screen Doors
RQ	Research Question
SNA	Social Network Analysis
TVA	Tennessee Valley Authority
UITP	International Association of Public Transport
USD	United States Dollar
VR	Virtual Reality

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Infrastructure is essential for the socio-economic development of a country. Empirical studies show a strong correlation between the availability of infrastructure and economic growth (Queiroz & Gautam, 1992). Public infrastructure projects in the form of transportation, energy, water supply and telecom also result in an increase in global economic activities (Söderlund et al., 2017). So, infrastructure is considered as a by-product as well as a necessary condition for economic growth and market development (Démurger, 2011). Other than economic growth, infrastructure developments also provide the material links which allow a spatially disjointed area to function as a whole (Bertolini, 2005). They also touch upon essential areas of the society such as transportation, water and sanitation, electricity, etc., hence they are critical for the well-being of the community. These infrastructure services shape the surroundings in significant ways, sometimes as intermediaries for bringing together multiple organizations to innovate and create value to the society (Bliemel et al., 2018).

Globally, such infrastructure investments of over 90 trillion USD, which is around 3.55% of global Gross Domestic Product (GDP), are planned in the next 20 years (Global Infrastructure Hub, 2017) as many countries look for massive investments in infrastructure to achieve increases in economic activities. Another study (Garemo et al., 2015) estimates that the world needs to spend about 57 trillion USD by 2030 on infrastructure to keep up with the planned GDP growth of different countries. These investments in infrastructure can be in the form of small project, but often as ambitious huge projects aimed to achieve the growth quickly resulting in the rise in the number of megaprojects. Supporting this, Flyvbjerg (2014) claims that the size of infrastructure projects has grown by 1.5 to 2.5 percent annually which is equivalent to a doubling in project size two to three times per century.

1.1.1 Megaprojects

One definition defines Megaprojects as projects that cost more than USD 1 billion (Flyvbjerg, 2014). The Federal Highway Administration (FHWA) of the United States defines megaprojects

as infrastructure projects which cost more than USD 1 Billion, or projects of a significant cost that attract a high level of public attention, or political interest because of substantial direct and indirect impacts on the community, environment and state budgets (Capka, 2004). A similar point is made in the work of Clegg et al. (2017) wherein they highlight that, it is less the money involved and more the features of a large-scale project that are significant here.

‘Mega’ also refers to the high skill level and attention required in managing these projects (Capka, 2004) along with the large number of stakeholders upon whom it has an impact. These projects are important not just because of their scale and costs but also because they indirectly use colossal resources, budgets and management time (Sturup, 2009). The characteristics of megaproject are bigger size, complexity, complex procurement systems, high controversy, time, scope creep, urban setting, human and environmental impacts, risks and uncertainty (Capka, 2004). These projects also have long construction schedules, huge lifespans, extreme complexity and significant social impacts (Sun & Zhang, 2011). Pitsis et al. (2018) suggest the distinguishing features of megaprojects as its reach, duration, risks and uncertainties, widely disparate actors, arenas of controversy, and legal and regulatory issues. All these characteristics can be summarized through 6 C’s – Colossal, Captivating, Costly, Controversial, Complex and laden with Control issues (Frick, 2008). A reason for these characteristics in megaprojects is because they aim not only at practical objectives such as the delivery of the infrastructure asset and services but also involve lofty ideas, high ambitions and economic development targets (Miller et al., 2017).

Explaining the multiple objectives and an increase in the number of megaprojects worldwide, Flyvbjerg (2014) presents four sublims – technology sublime, political sublime, economic sublime and aesthetic sublime. Technology sublime is the interest that engineers and designers have in creating and designing a megaproject, to get their name associated with such a project. It is the rapture these professionals get in building these large projects, often pushing the boundaries of what technology can do in the form of the tallest building, longest bridge, or the first of anything (Frick, 2008). Political sublime is the interest that politicians have in sanctioning and creating a megaproject, to cut ribbons and get political mileage, such as getting re-elected through the project. They see megaprojects as ‘media magnets’ which appeal to politicians as they enjoy the visibility gained from starting the project (Flyvbjerg, 2014). The economic sublime is the interest that construction companies, industry and even the country has in generating jobs and economic

activity from the creation and operation of a megaproject. Megaprojects come with enormous budgets which provide ample opportunities for all these players. Aesthetic sublime is the interest that the community has in taking pride in the project, to say that an iconic megaproject belongs to their city. Flyvbjerg (2014) claims that there is a surge in the number of megaprojects because of these four sublimates that characterize megaprojects in contrast to smaller projects.

Even as the number and size of these projects increase worldwide, these projects are shrouded in inefficiencies and failures. Flyvbjerg et al. (2003) studied 258 megaprojects in 20 countries to conclude that 90% of them fail to deliver on their planned objectives, time, cost, or promises to stakeholders. Other indicators of failure in these projects are negative environmental effects such as noise, pollution, landscape erosion, etc. (Priemus et al., 2008). These projects have social impacts as well, as large numbers of people are inconvenienced and sometimes displaced to enable the construction of the megaproject. Due to the large-scale nature of these projects, any failure in managing them can affect the economy, a variety of stakeholders and not bring about the socio-economic development envisioned. The billion-dollar cost overrun of the 2004 Athens Olympics, is a case in point, which almost single-handedly contributed to economic crisis in Greece (Flyvbjerg, 2007). Thus, megaprojects are a high-risk venture with both higher probability of failure and higher impact on failure. Hence, megaprojects are a mega-challenge for management.

Despite their growth in number and opportunities to learn from their peers globally, the failure of megaprojects to satisfy expectations signifies a ‘megaproject paradox’ (Flyvbjerg et al., 2003). Due to their increase in number and poor performance, many projects enter into a ‘debt trap’ (Flyvbjerg, 2014) where it is impossible for the income generated from a project to cover costs, thereby making the project non-viable, which can result from a combination of delays, escalating costs and increasing interest payments.

On the one hand, these projects are inevitable for the progress of the region or country as their large size and scope allows the internalization of costs and benefits that could not have been possible otherwise (Miller et al., 2017). The deliverables of these megaprojects are also expected to provide value for the society for decades or more. However, on the other hand, they also have a high failure rate and hence the research on how to manage these megaprojects is of prime

importance. Investing these huge sums of money in infrastructure should be coupled with efficient management to complete these projects and achieve planned socio-economic goals.

1.1.2 Reasons for poor performance

Many explanations are offered for the failure of these megaprojects in the literature, such as optimism biases (Flyvbjerg, 2008), strategic misrepresentation (Wachs, 1989), gold plating (Kelkar, 2015), lack of upfront planning (Morris 1994), use of rigid contracts in conditions of uncertainty (Stinchcombe & Heimer 1985) and pluralism (Gil, 2015).

Optimism bias, which relies on the ‘planning fallacy’ coined by Kahneman & Tversky (1979) was used to explain failures in megaprojects in the work of Flyvbjerg (2008). He uses the psychological explanation of optimism bias as a cognitive disposition in the planners and decision makers to judge future events in a more positive light than is warranted by actual experience. Due to this, the planners underestimate the costs, completion times and risks of planned action, whereas they overestimate the benefits of the same actions. The viability of a project along with the socio-economic and environmental appraisals are based on the accuracy of the demand and cost forecasts. Hence, the decision taken on whether to invest in a project or not is highly inaccurate and biased making the project very risky.

Another explanation for the failure is strategic misrepresentation (Flyvbjerg, 2008; Wachs, 1989). Here, planners and political sponsors launching the project, during the forecasting of the project benefits, strategically overestimate these benefits and underestimate costs to increase the chances of the project being selected, compared to the competition. Flyvbjerg (2003) says that these projects are a unique example of the ‘survival of un-fittest’ theory. Politicians, engineers, business people and voters in a region want the megaproject in their locality, for their various reasons of interest, hence they strategically misrepresent the time, cost and benefit from the project. So, only those projects which ‘lie’ more – and are consequently more likely to fail - are selected and hence the ‘survival of un-fittest’. Wachs (1989) emphasizes that planning is not just analytical as planners work in roles that are associated with clearly articulated interests, often as staff of politicians, consultants to government bodies, real estate developers, etc. He says that planners are

trapped between two worlds, one of ‘scientists’ as they analyse data and interpret its meaning and another as ‘advocates’, where they analyse data and prove what their organizations want.

Gold plating is another strategy in practice in these infrastructure megaprojects. These are common in large airport projects (Kelkar, 2015) where the designer tends to over-engineer to deliver the best solution and worry about the costs later. This would lead these projects to cost and time overruns. Lack of upfront planning due to constrained project timelines and political pressures, as well as contracting in the face of highly contingent uncertainty necessitates considerable reliance on project management controls.

The above reasons for poor performance are debated as a megaproject is not in the hands of a few stakeholders. Scholars argue that megaproject ownership is shared between a large group of people from diverse areas and hence the chances of strategic misrepresentation, gold plating, lack of upfront planning, etc., are less due to multiple member checks and due diligence. Adding on to this, the project core group is rarely static, as assumed in strategic misrepresentation and keeps changing with exits and new entrants. Rather than merely flawed project management, pluralism has been seen as another explanation for problems in megaproject delivery (Gil, 2015). In pluralistic settings there is diffused power among the many actors with conflicting goals (Denis et al., 2001). Such settings make standard project management routines for decision-making processes more difficult to implement (Denis et al., 2001). Infrastructure megaprojects have recently been conceptualized as pluralistic settings due to their particular characteristic of diffused power with conflicting goals (Lundrigan et al., 2015; Denis et al., 2011).

1.1.3 Pluralism

Megaprojects often involve various stakeholders of diverse occupational and cultural backgrounds who have different levels and types of interest in the project (Mok et al., 2015). Miller et al. (2017), in their study of more than 60 projects over a period of 20 years, highlight that megaprojects are rarely built with in-house resources and bring in multiple stakeholders in the form of sponsors, experts, contractors, government agencies, opposing stakeholders and other institutions of external players.

To define stakeholders related to a project or a project organization, I adopt Mitchell et al.'s (1997) broad definition which includes virtually anyone that can have an impact on an organization's actions or who experiences an impact as a result of them. Stakeholders are in a position to influence the wellbeing of an organization, defined in terms of its capacity to achieve goals (Freeman, 1984); thus, they are significant in the project context (Achterkamp & Vos, 2008). Stakeholder management in project management scholarship involves bringing stakeholder concerns to the surface and developing robust stakeholder relationships in complex project environments (Bourne & Walker, 2005). In their review of stakeholder literature in projects, Littau et al. (2010) note that stakeholders can be classified in three ways, (1) those who have an interest in the project; (2) those who can affect the project and (3) those that both have an interest in and can affect the project. Megaprojects have a greater number of these stakeholders due to their larger scale in comparison to smaller projects.

Rather than the mere number of different organizational entities in the megaproject, it is the institutional differences such as divergent perceptions regarding the legitimate means and ends of the project which are a source of project complexity (Orr and Scott, 2008). In their study of infrastructure projects, Li et al. (2015) underlines that the interest of each stakeholder is different. For example, the interests for road alignment for the project team would be based on minimizing cost of construction, whereas road users and local vendors near the project would have different interests. The interest in the road alignment would also be different for the different agencies that influence the project such as the utility agencies such as water and electricity, based on their assets in the area. Li et al. (2012) investigated the different priorities of stakeholders in an infrastructure project in Hong Kong. They found out that while government drafts the potential economic benefits for the project, the community is focused on sustainable land use, the project affected groups are focused on tangible compensation and the pressure groups are concerned with ecological concerns of the project. Thus, the construction industry in general confronts many more conflicts than most other industries, in part due to the structurally conflicting interests of various project parties over matters as fundamental as cost, quality and schedule (Black et al., 2000) and the lack of a common rationale and culture binding all project participants and stakeholders (Vrijhoef & Koskela, 2000).

Decision making with these many stakeholders with diverse interests is complex and fuzzy. A study conducted by Bekdik & Thuesen (2016) on the decisions of 27 hospital infrastructure projects in Denmark revealed that the patient room, which has certain guidelines, are differently designed in each case. Their analysis of the stakeholders showed that each hospital had a different set of active stakeholders and hence the priorities and decisions changed in the case of each hospital. The research concluded that because of the different stakeholders acting in each hospital, the patient room was designed differently in each case. Thus, the results of a project are dependent on the interests of the stakeholders active in that project context.

These sources of difference, potential and actual conflict are exacerbated in megaprojects (Flyvbjerg, 2014) because of increased scale, duration, complexity and a wider range of external stakeholders – stakeholders in the periphery of the project. Miller et al. (2017) note that in megaprojects, when decisions are to be made on the specifics of the services, technical solution and financials, projects are subject to conflicting pressures and risks and turbulence emerge. Conventional project control systems, well suited to more routine and standardized projects, cannot guarantee success in conditions of chronic uncertainty, complexity and contingency, as authors such as Flyvbjerg et al. (2003) have noted. Megaprojects combine multiple competing partners with different interests, values and rationality (Van-Marrewijk, 2015). This creates pluralistic sites in which power is diffused among distributed actors and conflicting institutional logics are evident (Biesenthal et al., 2018).

The evidence of conflicting institutional logics is seen in a study on infrastructure megaprojects delivered through Public Private Partnership (PPP) carried out by Mahalingam & Delhi (2012). They highlight that when alignment between logics are not present, there would be contestations and the outcome of these contestations are dependent on factors such as the distribution of resources with the field, the actors' skill, the influence of proximate fields and the degree of normative and cognitive dissonance between the incumbent and challenger logics. Therefore, in the event of conflicting goals in multiple issues, where a single negotiated solution may not be possible, stakeholders push for their interests and power dynamics often decide the outcome. Thus, megaprojects present ample opportunities for capturing and demonstrating individualized forms of public benefit rather than ones that are collective (Lehrer & Laidley, 2008).

Hence, a likely reason for failure of megaprojects is pluralism. As seen above there are multiple players with competing interests and diffused power in a megaproject. To survive, such projects must comply with the divergent and often conflicting demands of multiple institutional logics causing institutional complexity (Matinheikki et al., 2018). Such survival would result in time overruns, cost overruns and not delivering on the planned objectives, which are frequently cited as failures in these megaprojects.

Not only do various sponsors and experts provide diverse engineering and design solutions but external stakeholders will have conflicting diagnoses of problems and prescriptions that may be opposed to the project's goals (Miller et al., 2017; Mok et al., 2015). In comparison to internal stakeholders who can be managed through systems integration through innovative contracts (Davies et al., 2009; Gil, 2009), decomposing the project into manageable entities (Davies & Mackenzie, 2014), improving communication across these organizations (Roehrich & Lewis, 2014) and collective decision-making processes (Gil & Pinto, 2018), external stakeholders cannot be governed by these. External stakeholders include stakeholder's peripheral to the project and include stakeholders, such as existing land-owners, utilities and the community surrounding the project site, and will now be discussed in greater detail.

1.2 EXTERNAL STAKEHOLDERS

Megaprojects cross multiple external stakeholder boundaries. Viitanen et al. (2010) defines three broad categories of external stakeholders who are impacted by a megaproject and are peripheral to it. The first category involves the owners of the land from whom the land is acquired and compensation is to be paid. Due to the large amount of land acquisitions in megaprojects that are required for rapidly transforming landscapes in very visible ways, these projects are considered as 'displacements' (Gellert & Lynch, 2003). The second category involves land owners nearby the project from whom no part of the land is taken, but they are inconvenienced by the project as they live near the project and are troubled by the construction noises, vibrations, diversions and other hassles pertaining to the megaproject scale and megaproject type. Sturup (2009) notes that megaprojects create environmental, social and political disruptions in its local environment. She notes that these projects have substantial impact on the cities in which they are built with a potential to change land use and settlement patterns, which concerns external stakeholders. The third

category are people from the community who stand to benefit from the project improving the services or providing certain benefits. They are the stakeholders who are active in the area surrounding the project. Since these projects are socio-centric, their impacts on the project community is highly significant (Doloi et al., 2016). Söderlund et al. (2017) notes that infrastructure megaprojects are ultimately for the benefit of the society through providing a service and just by looking at their megaprojects, one gets to know the society's ambitions, problems, and future outlooks. Adding on to these three categories, there are Non-Governmental Organizations (NGOs), both national and international, who can be treated as the fourth category as they do not fall into any of the above categories but act as the voice of the affected people. Flinders (2004) claim that NGOs have been influencing and been influenced by public policies and are increasingly involved in public governance. These interfaces with external stakeholders are large in megaprojects thereby requiring many members of the community to be managed (Chinyio & Akintoye, 2008).

Leshinsky (2008) records evidences of projects failing to meet the project community's expectations while meeting the project proponent's economic expectations. She claims that design utopia and social vision is no longer in the mind of busy architects and planners. On the importance of considering these external stakeholders in the project, Miller et al. (2017) compare the cases of the Nanko power project in Osaka and the Orlyval project in Paris in their work on value creation during the shaping stages of megaprojects. In the Nanko power plant, the sponsors worked hard to integrate the interests of the local stakeholders. In the process, the sponsors addressed concerns of these stakeholders and made the project benign and aesthetically pleasing. Such an external stakeholder involvement increased the complexity of the project but on the other hand created value. The authors note that, the Orlyval project, in comparison, excluded a set of external stakeholders from the shaping phase of the project. This reduced the complexity and enabled faster execution of the project. However, the authors note that the project didn't create value to the stakeholders they excluded and turned out to be a 'white elephant'. Considering the project community as the end user of the project and recognizing that their money funds the project either through toll payments or tax payments, they have a significant stake in the project.

However, the interfaces with external stakeholders are large in megaprojects compared to small-scale projects thereby requiring many members of the community to be managed (Chinyio

& Akintoye, 2008). Cicmil and Marshall (2005) stress that the large number of external stakeholder management in megaprojects result in larger number of stakeholder related uncertainties and risks which makes these projects more complex. This is supported in the work of Ward and Chapman (2008) as they claim that stakeholder entities, their claims and interrelationships are a major source of uncertainty in large construction projects. Lundrigan & Gil (2015) says that megaprojects have cost overrun and time overrun due to unplanned activities which are necessary for managing the demands of the external stakeholders to get work done.

1.3 SIGNIFICANCE OF STUDY

External stakeholders – stakeholders outside the project organization – present more complexities than internal stakeholders because they hold significant stake in the project and are more in number. These external stakeholders, spread across different organizations, will have different interpretations of the specifics of the megaproject and may well stand in an adversarial relation to the project strategies, goals and practices. These diverse external stakeholders may articulate conflicting representations and impose multiple demands that arise from the multiple institutional logics they represent (Matinheikki et al., 2018). They conflict on many of the specifics of the planned megaproject (Szyliowicz & Goetz, 1995; Olander & Landin, 2008), such as its basic design, function and alignment, the users for whom it caters, its impact on communities, the effect of project operations on land use, amenity and values, the utilities that the project will disrupt, the construction methods adopted, etc.

Even when Vuorinen & Martinsuo (2018) highlight the importance of considering the interests and demands of the external stakeholders, they note that normally only the voices of the larger and more powerful stakeholders are heard. The project team cannot consider and plan for all these stakeholder concerns as many of them may not be legitimate but just noisy. These stakeholders try to get their vested interests through the project, by changing parts of the project, as seen with the Aalborg project in Denmark. In the study of the Aalborg city re-building project, Flyvberg (1998) notes how the external stakeholders impacted the project. The project was planned to alter the city layout of Aalborg in Denmark to reduce traffic, accidents, noise and air pollution by integrating cycle paths and reducing the movement of vehicles in the central business area. During the course of the project multiple aspects of the project were altered to meet the demands of the external

stakeholders. Flyvbjerg notes how the nexus of the Business Chamber, police and media campaigned to allow vehicles into the central business area, so as not to affect the retailers. The retailers believed that their affluent regular customers would no longer be interested in shopping in the city centre if private vehicle movement became restricted. Thus, the project ended up with an increase in traffic of 8%, an increase in accidents of 40% and an increase in noise and air pollution levels. The integrated cycle paths were no longer continuous and were unconnected as there were multiple breaks to enable access to the shops. Thus, these small battles with the external stakeholders changed the outcome of the project.

In order to satisfy their vested interests, these stakeholders adopt strategies to garner the attention of the project team. Eight such strategies are mentioned in the work of Aaltonen et al. (2008) such as resource building, credibility building, direction action, coalition building, communication, conflict escalation, direct withholding and indirect withholding. These strategies may be enacted through a range of measures that include lobbying, political action, petitioning, negotiating and influencing, as well as direct action (Flyvbjerg, 1998; Aaltonen et al. 2008). In the study of three transportation infrastructure projects, Vuorinen & Martinsuo (2018) highlight that stakeholders influence the project through communications, complaints and disputes, decision-making authority and rules and supervision. These actors are also referred to as ‘stakeholders of the shadows’ (Winch, 2017) as they seek to shape major megaproject decisions including budget and scope in accord with specific vested interests, sometimes subtly, other times less so. Aaltonen & Kujala (2010) note that these strategies occur during all stages in the project lifecycle. They also highlight that these strategies are dynamic as the stakeholders take different roles and actions to cope with the changing project environments.

Troubled stakeholders sprout during the course of a project much as mushrooms after a deluge. The characteristics of external stakeholders can make them quite demanding and sometimes unanticipated participants in projects (Szyliowicz & Goetz, 1995), often pursuing compensation in return for cooperation (Giezen, 2012). Multiple studies have demonstrated that complying with the demands of external stakeholders can lead to scope creep (Shapiro & Lorenz, 2000), escalation of commitments (Ross & Staw, 1986) and goal displacement (Ansar, 2018) on the part of the project team – a prime reason for the underperformance of infrastructure megaprojects (Gil, 2015; Mok et al., 2015). These scope changes drive the project budget and schedule (Dvir and Lechler,

2004) thus leading to cost overrun, time overrun or a change in the planned objectives of the project.

While complying with the demands of these stakeholders create scope creep, escalation of commitment and goal displacement as discussed above, ignoring them creates bigger problems. Ignoring of the needs and expectations of the external stakeholders in the form of general public or local community can generate social unrest or community resistance through collective action against the project (Liu et al., 2018; van den Ende and Van-Marrewijk, 2019). Risks to the project arising from the project community include community protests and politically motivated public resistance (Iyer & Sagheer, 2009). Similar to this, Mok et al. (2015) note that conflicts or resistance from the public can adversely affect or even kill the project despite the public being an external stakeholder who lacks a formal project authority. Negative emotions towards the project can cause these stakeholders to oppose the construction of the project, boycott the services during the operations phase and even cause a democratic government to withdraw support for the project considering their vote bank. Negative emotions and political risks are critical issues in megaproject as stressed by Sturup (2009) who claim that megaprojects suffer from a lack of strategic positioning of projects along with a dilemma of how to gain community approval and acceptance for these projects. Adding on to this, managing these external stakeholders are important as the future of any organization depends on how it is viewed by the project community in which the organization operates (Cornelissen, 2004).

There is a need for megaprojects to show resilience to these external forces. Resilience can be defined as the ability of a system to cope with, recover, or adapt to external environmental disturbances along with social and political disturbances (Cinner et al., 2009) as is the case with megaprojects. However, managing these external stakeholders is more complex than managing internal stakeholders. Emphasizing this, Elias (2017) notes from his study on transportation infrastructure projects that complex problems involving multiple stakeholders, such as the project community, cannot be solved with simple solutions. External stakeholders are more difficult to govern than those that are internal because they are not bound by contractual instruments and their relations with the project team extend across permeable boundaries (Mok et al., 2015). Adding on to this, while the project team's interest is in completing the project as per the contracted scope, budget and timelines prescribed in the Detailed Project Report (DPR), external stakeholders have

representational interests that involve no obligations or responsibilities to such parameters. Moreover, where the project team depends on external stakeholders to complete the project, especially in situations in which there is no reciprocal dependency from the stakeholders, the latter may well have power without responsibility. Thus, external stakeholders in infrastructure megaprojects straddle porous boundaries, are frequently ungovernable, have no reciprocal dependency and cannot be held accountable to the project's scope, budget and timelines. Since governance instruments such as contracts and conformance to standards are unavailable to govern these stakeholders, project teams muddle through with short-term tactics that, temporally, cohere into strategies.

Emphasizing the necessity of strategies to manage these stakeholders, Henisz (2016) highlights that there is a need for megaprojects to craft an 'organizational fit' in their dynamic and demanding social and political environment. Doloï et al. (2016) suggest that projects should prioritize the responses of these stakeholders and thereby ensure social inclusivity of the project. They also call for efficient and responsive strategies for managing the expectations of the project community thereby articulating the need for strategic action for external stakeholder management in megaprojects.

Thus, the study of external stakeholders is significant because they present more risks than internal stakeholders in the form of community risks and political risks. They are also more difficult to govern because of the lack of governance mechanisms such as contractual instruments, conformance to standards, rules and regulation, etc. Hence, megaprojects have to rely solely on reactive strategic actions enacted in response to situations and definitions that arise as well as proactive preparation for strategic contingencies that might arise. These strategies can be either directly observable or hidden. Hence, the motivation for this research is as follows,

Research Motivation

- External stakeholders represent significant risks to infrastructure megaprojects. As a result, understanding strategies used to manage them are essential to ensure project success.

However, a comprehensive understanding of strategies used to manage external stakeholders is missing in the megaproject context.

1.4 STRATEGIC ACTION

Megaprojects use various strategies to manage their external environment. To understand the full set of strategies to manage external stakeholders, I choose to study the literature on strategic action in organizations. These strategies are then compared with those enacted on megaprojects to understand the depth of strategies covered in the external stakeholder management of megaprojects.

1.4.1 Strategic Action in Organizations

Literature on organizations confirms the role of strategic action in getting a preferred outcome. In the case of organizations in nascent fields, entrepreneurs claim, demarcate and control new markets by using power tactics such as creating illusions, using strategic timing and exploiting the tendencies of others (Santos & Eisenhardt, 2009). Strategic action in corporate governance are in the form of power plays such as poison pills and golden parachutes to circumvent stakeholders (Rehbein, 2006). These strategies are visible and often known by subjects. However, there exist invisible strategies too.

Drazin et al. (1999) studied the technical and management teams in an organization and mentioned that a crisis results in a shift in power balance to the team who can manage the crisis better. Upon resolution of the crisis, the power relations move back to the prior power balance. They go on to confirm that repeated crisis is used strategically to shift the negotiated order permanently. Thus, the invisible strategy of creating repeated crisis was able to permanently change the negotiated order of an organization.

Strategies can be subtler, however, bringing about strategic convergence of objectives so as to get a preferred action. Pluralistic settings are situations of diffused power and this creates extreme decentralization, and decision making often suffers in these scenarios as a single objective has to be selected from the multiple conflicting objectives. Research on a healthcare organization for instance, which is pluralistic with conflicting objectives and diffused powers, indicated that leaders

use different strategies to achieve strategic convergence among the many conflicting objectives among the different stakeholders (Denis et al., 2007). This newly built cognition brings about a strategic convergence of objectives in the pluralistic scenario.

In the case of megaprojects, the objectives of the external stakeholders are different from that of the project team. While the project management and execution teams look to complete the project as per plan, the external stakeholders look to satisfy their own vested interest through the project. Extreme decentralization situations, such as in the case of megaprojects, have so diluted powers that action is only possible through the use of strategies (Eisenhardt & Bourgeois, 1988). Therefore, there is a need to understand the strategies that can achieve convergence between external stakeholders and the megaproject. These kind of subtle strategies in a diffused pluralistic environment with multiple objectives, can bring about a single prominent solution among the many conflicting objectives. Such strategies enable the project team to handle difference and conflicts peacefully.

1.4.2 Strategic Action in Projects

Project strategy is defined by Artto et al. (2008) as ‘a direction in a project that contributes to success of the project in its environment’. Through this definition the authors emphasize that project strategy is dependent on the environment in which the project operates. They record the direction that the project takes as the goals, plans, means, methods, tools, or other controlling devices to achieve success.

Various strategies are used to manage the external stakeholders such as the fair process approach (Kim & Mauborgne, 2003) and re-framing (Mastos et al., 2015). Other strategies include the use of negotiations, trade-offs, incentives and concessions (Chinyio & Akintoye, 2008). Gil & Pinto (2016) look at how leaders resolve strategic disputes in these pluralistic settings by acting as umpires or referees. These leaders use strategies such as strategic ambiguity where the goals of the project are maintained as vaguely and ambiguously as possible so as to bring all stakeholders together. Difficult decisions which can create divisions between the stakeholders are postponed, enabling the stakeholders to continue together. The leaders deliberately maintain equivocal language to please all the stakeholders while also maintaining an option to reverse decisions made. The authors also mention reification practices where the project leaders make it hard for the

stakeholders to withdraw from the project. This tactic is achieved by exaggerated claims whereby the stakeholders are motivated to stay in the project.

There are also subtle strategies in play in megaprojects for managing external stakeholders. Hennisz (2016) calls for strategies to enhance legitimacy of the megaproject with external stakeholders such as demonstrating material benefits arising from the project and respecting local cultural norms. He also calls for strategies to build trust, such as acting fairly for achieving socio-political trust, demonstrating an enduring regard for stakeholder interests for achieving institutionalized trust, and listening, reciprocating and keeping promises for achieving interactional trust. He calls these strategic actions of the project to shape the community as ‘corporate diplomacy’ (Hennisz, 2016; 2017). These are a broad range of strategies which aim to win the heart and minds of external stakeholders in support of an organization’s mission. He calls the project team who are part of managing the external stakeholders ‘corporate diplomats’ who play an important role both in sensing risks and opportunities in external environment and shaping short-term and long-term strategies across all functions of the project (Hennisz, 2016). These corporate diplomats should develop a combination of strategies that reinforce and extend the rent generating potential of the organization.

All the project strategies that are in use to manage external stakeholders are devised in the planning stages. The review of external stakeholder management research in megaprojects from 1997 to 2014 conducted by Mok et al. (2015) highlights that the existing stakeholder management approaches are mainly designed for the planning phase of the project. External stakeholder management approaches are recommended as this stage since the project has maximum flexibility to adapt to the external stakeholders and address their concerns. However, the depth of external stakeholder management during the planning stage is constrained due to the very diffused nature of these stakeholders. As noted in the work of Yang et al. (2011) the project team face challenges in the process of identifying the stakeholders and their needs in megaprojects. Mok et al. (2015) highlight that the challenge in identifying external stakeholders is because of the limited cognition of the project team, who are unable to comprehend the incomplete boundaries of these stakeholders. They claim that the accuracy of assessment and judgement of the project team often decreases as the project grows in size and complexity. Stakeholders of the most unexpected kinds can materialize during construction and operation phases of a project from unlikely places, such

as the natural environment (Clegg & Kornberger, 2015). Also, the positive community perception from the initial stages of the project needs to be maintained during the lifecycle of the project. So, there is a need for understanding how stakeholders can be managed during the construction and operation phases of a megaproject. However, there is no theorization around what these strategies in the construction and operation phases are, what they depend on, how these strategies are practiced and how multiple strategies act together. The need for a complete, systematic and formal external stakeholder management model for application in megaprojects is highlighted in the work of Yang et al. (2011) and Mok et al. (2015). This research purports to develop such a model anchored in empirical data and organizational theories. Both the literature on strategies-as-practice and the practice-based view of organizations emphasize the role of power and politics in framing strategic actions that are enacted and the ways in which order is produced in social settings (Nicolini, 2012). Consequently, I intend to use theories of power to study these strategies in practice.

1.5 ORGANIZATION THEORIES

The research involving construction projects has been criticized for being largely rooted within the positivist tradition thereby limiting the researchers' ability to grasp the meaning of the social action from the perspective of the actors involved (Dainty, 2008). This has led to an inability of construction projects to see the wider picture and thus not being able to contribute to theory on a more general level, and as a result not being recognized as a scholarly field of inquiry (Geraldi & Söderlund, 2018).

By including organizational theories, this research tries to bring in post-positivist views into discussions on external stakeholder management strategies. It also answers to the call of Bresnen et al. (2005) to include a more thorough application of social science theories in the form of organizational theories in construction industry research. Adding on to this, researchers in sociology and business are viewing projects in the construction industry as legitimate fields to study organizational theories (Chinowsky, 2015). The use of multiple organizational theories can create multiple perspectives that can hopefully infuse a more insightful and penetrating research agenda (Söderlund, 2011). Such theoretical diffusion is well applicable for these kinds of projects

given the impact, magnitude, frequency and diversity of these projects (Geraldi & Söderlund, 2018).

Theories available in organizational power can explain the individual's or organization's action to bring about change and can be used to understand external stakeholder management strategies in megaprojects. It is said that, in situations of conflict of interests, where actors try to preserve their vested interests, power is used (Schwenk, 1989; Daft, 2012). Research in infrastructure megaprojects are often criticized for excluding topics such as power, politics and conflicting interests, even when they are crucial (Clegg & Kreiner 2013). The actions of the champions of change and the social fabric are both considered in the dimensions of power framework. With the understanding of the 'dimensions of power' framework (Lukes, 2005), I hope to understand the strategies used in practice by the project team for managing the external stakeholders.

1.6 ORGANIZATIONAL POWER

A recently published special issue on megaprojects in the Project Management Journal (PMJ) stresses that megaproject success is often driven by power related factors (Söderlund et al., 2017). The complexity and interrelatedness of major projects opens them to equally complex and interrelated social relations of power, political process and conflict (Pinto, 1996; Marshall, 2006). Megaprojects are delivered by organizational entities socially constructed by relations of power both inter- and intra-organizationally (Clegg & Kreiner, 2013). A large part of project managements' political work seeks to marshal, coordinate, orchestrate and control internal and external entities' resistance. Where actors seek to advance their vested interests, they will use power relations to do so, enacting and creating conflicts of interest (Schwenk, 1989).

In the construction industry, Clegg (1975) notes in his study on contracts that the interpretation of the powerful player wins. He says that the very structuring of projects, the language and language games used, are all saturated with power relations some of which are positive, and some are negative. Using the example of 'clay' observed from his study using data of what people said in each situation, he says that while the meaning of 'clay' may appear simple, its interpretation and meaning is, precisely, a matter of power.

Power is often neglected in the governance literature (Arts and Tatenhove, 2004). One of the earliest sociological definitions of power was that of Max Weber who defines power as ‘the probability that one actor within a social relationship would be in a position to carry out his own will despite resistance’ (Weber, 1947). Based on this definition, this research seeks to explore the strategies employed in carrying out the will of the project team in contrast to the demands of external stakeholders. However, understanding power is difficult as it occurs in multiple dimensions with myriad concepts, different interpretations and diverse theories, making it one of the most ‘essentially contested’ (Lukes, 2005) subjects in political science. Haugaard (2010) argues that power constitutes a ‘family resemblance’ concept wherein there is no single best definition of power and the definition changes depending upon the context of usage. Thus, the concept of power encompasses a broad set of definitions and delineating dimensions of power can help in understanding and categorizing power. Power has been understood as a phenomenon either structurally lodged in multiple dimensions (Lukes, 2005; Fleming and Spicer, 2014) or as flowing through multiple circuits (Clegg 1989; Clegg et al., 2006).

There have been several attempts in the past to map the different forms of power (Lukes, 2005; Clegg, 1989; Clegg et al., 2006; Fleming and Spicer, 2014). The most common structural distinction is between the overt dimensions of power and those that are more covert. Overt power involves the direct exercise of power easily observable when some agency seeks compliance with its directives on the part of some other agency such as an individual, a team, an organization, or even a material artefact. Covert power, however, cannot be as easily observed as this power tends to be congealed into more enduring institutional structures, practices and taken-for-granted ideas through which the flows of overt power relations ebb and swell as per the circuits of power theory (Clegg, 1989). Thus, power theory encompasses both overt power and covert power (Clegg, 1989).

The first dimension of power – overt power – involves the direct mobilization of will, which builds upon Dahl’s (1957) concept of power as providing ‘one with the ability to make another do something they would not otherwise do.’ The execution of this overt form of power relies on the actor’s ability to mobilize resources to realize certain goals (Avelino, 2011). It is an instrumental perspective that views power as an actor-specific resource used in pursuit of self-interest (Avelino and Rotmans, 2009).

The second dimension of power is a mix of overt and covert power and thus involves direct and indirect mobilization of power. Commonly known as the power of non-decision making, this construct was developed by Bachrach and Baratz (1962) as they highlighted the role of agenda-setting by elites and their ability to keep topics off the agenda by framing agendas on an exclusionary basis. Scholars argue that in agenda-setting there is no direct exercise of resource-based power; instead, there is an implicit shaping of issues considered important or relevant in relation to their inclusion or exclusion from agendas (Fleming and Spicer, 2007). Being able to set the agenda is referred to as ‘real power’ by Lukes (2005) because it enables issues to be framed as legitimate and enacted or not and thus limits not only those issues addressed but also the range of possible solutions that a broader set of issues might engender.

The third dimension of power is covert, the radical view of power proposed by Lukes (2005), which works by shaping subjects’ preferences, attitudes and political outlook. Scholars regard that this is a supreme exercise of power as it shapes preferences such that the subject accepts a situation as an existing order of things to which an alternative is unimaginable (Lukes, 2005). Such a state of order can be cultivated through specific corporate cultures as well as field-wide or societal-wide assumptions (Fleming and Spicer, 2014). It is said that power can be most effective when it is least observable (Lukes, 2005)

The dimensions of power framework can help make sense of different strategic action (Hardy, 1996) and hence afford a holistic understanding of different strategies in use for managing external stakeholders in the megaproject context. The three dimensions of power, adapted from Lukes, (2005) are depicted in Figure 1.1.

The circuits of power framework offer an explicit mechanism for tracing the exercise of power as flowing through multiple circuits (Lapsley & Giordano, 2010). Here, overt power depends on the existing rules and practices, which are part of the covert circuit. These existing practices are sometimes referred to as ‘hidden structures of power’ or ‘deep structures’ (Clegg, 1975; Allen & Kern, 2001) as people tacitly accept and reproduce them. The circuits of power framework thus describe the social fabric in which power relations operate.

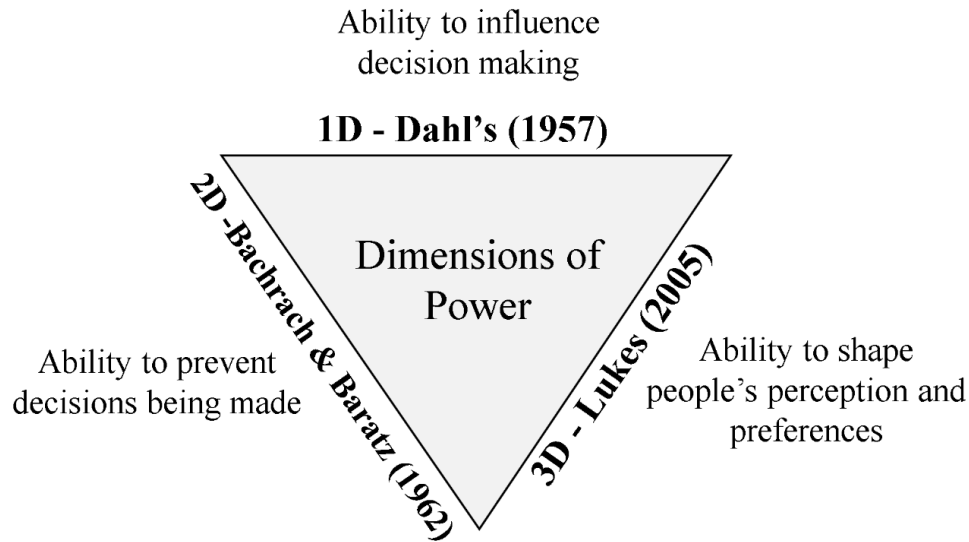


Figure 1.1: Dimensions of power - adapted from Lukes (2005)

Thus, I use an organizational power-based approach to understand the dynamics of managing external stakeholders using strategies. Hence, the main objective of this thesis is as follows,

Main Research Objective

- To create a framework to explain external stakeholder management strategies in Infrastructure Megaprojects from an organizational power perspective

With this understanding of the dimensions of power framework (Lukes, 2005), I study *how* these dimensions are mobilized in practice in managing external stakeholders.

1.7 STRUCTURE OF THESIS

This thesis is organized into nine chapters with the Chapter 1 contextualizing this thesis and Chapter 2 exploring a feasible research direction. Chapter 3 reviews literature to arrive at research gaps and research questions while Chapter 4 discusses the methodology to address these research questions. Chapter 5, 6, 7 and 8 discuss the findings pertaining to strategies to manage external stakeholders and Chapter 9 highlights the contributions, limitations and future directions of

research. The structure of the thesis is depicted in Figure 1.2 and the salient points are highlighted below.

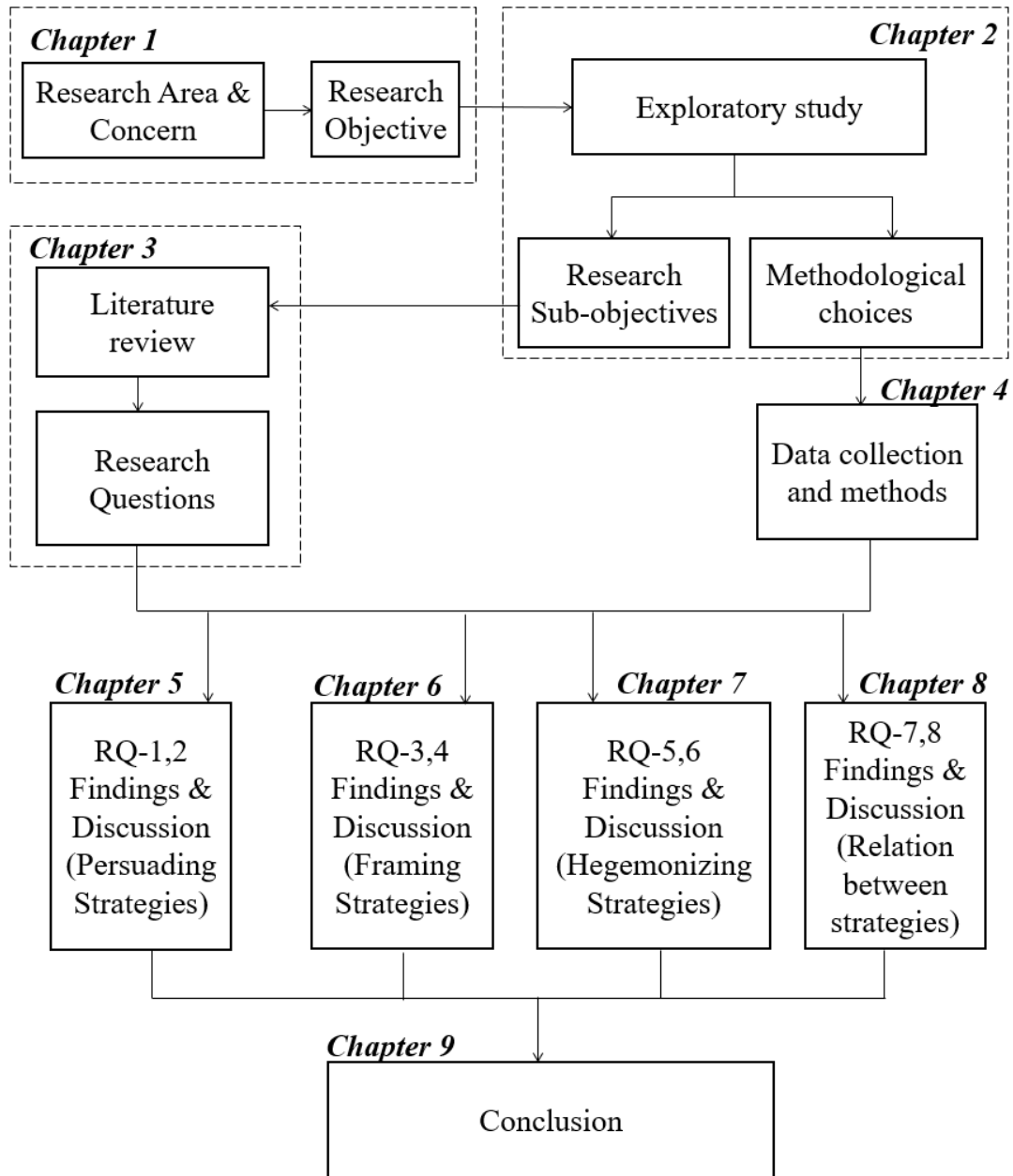


Figure 1.2: Structure of the thesis

The present chapter (Chapter 1) introduces the area of study – external stakeholders in infrastructure megaprojects. After reviewing the need for investment in infrastructure, I highlight why these infrastructure investments are planned as megaprojects. However, these megaprojects

are plagued with inefficiencies and failures. Scholars emphasize scope creep, escalation of commitment and goal displacement as causes of under-performance, all of which can be attributed to external stakeholders and their demands. Since governance instruments such as contracts, rules and regulations are not available to manage external stakeholders, megaproject team resorts to strategic action. Hence, the research motivation is that understanding external stakeholder management strategies is critical for the performance of infrastructure megaprojects. I chose organizational power theories as my theoretical lens, as it has multiple dimensions that can explain strategy and also considers the social fabric in which these strategies exist. Thus, the main research objective for this study is, ‘to create a framework to explain external stakeholder management strategies in infrastructure megaprojects from an organizational power perspective.’

Chapter 2 presents two exploratory case studies undertaken to check the suitability of organizational power theories to explain the external stakeholder management strategies observed in infrastructure megaprojects. These studies would also help to arrive at a research agenda in the form of research sub-objectives and possible methodologies for subsequent in-depth study. The case studies of a metro rail megaproject in India and a city re-building megaproject in Australia are presented. The take-aways from these exploratory studies are presented which helped me make research direction choices in the form of research sub-objectives, research theories and research methodology.

Chapter 3 presents the literature review of organizational power theories and the megaproject strategy literature pertaining to each of the persuading, framing and hegemonizing strategies that are integral parts of the dimensions of power framework. I also explore the power theories which can help integrate the strategies. I thus review the influence tactics framework (Yukl & Tracey, 1992) and bases of power framework (French & Raven, 1959) for persuading strategies, frame analysis theory (Goffman, 1974) for framing strategies, governmentality theory (Foucault, 2007) for hegemonizing strategies and circuits of power theory (Clegg, 1989) for the relation between these strategies. Theoretical gaps emerge from the literature review and research questions are proposed to address these gaps.

Chapter 4 discusses the research methodology adopted to address the research questions posed. The reason for choosing the metro rail megaproject in India is highlighted as well as the salient

case features. The methodological choices are guided by the take-aways from the two exploratory studies conducted in Chapter 2. I chose a single in-depth case study to address the research objectives. I used semi-structured interviews for persuading strategies, news media articles for framing strategies, social media posts for hegemonizing strategies and all the data together for the relation between strategies. The research design adopted to arrive at the external stakeholder management strategy framework is discussed. Grounded theory and qualitative content analysis are used to analyse the data and answer the research questions. The steps taken to ensure qualitative rigor are also highlighted.

Chapter 5 presents the findings and discussion of the persuading strategy observed from the metro rail megaproject in India. The data is collected from semi-structured interviews with the project team. I discuss the persuading strategies in practice anchored in the influence tactics framework (Yukl & Tracey, 1992) and the resources that enabled the strategic action anchored in the bases of power framework (French & Raven, 1959). The persuading strategies employed for managing external stakeholders observed from the case are persuasion, deputation, give and take, extra work for stakeholders and flexibility. The resources available to the megaproject team to manage external stakeholders are recruitment discretion, government backing and fund discretion. The relationship between the strategies and the resources which enable them are theorized with five propositions. Integrating the persuading strategies, the resources that enable them and the relationship between them, I finally arrive at a persuading strategy framework.

Chapter 6 presents the findings and discussion of the framing strategies observed from the metro rail megaproject in India. I used a mix of data from news media articles, their user comments and semi-structured interviews with the project team. The data is analysed using grounded theory and I arrived at the framing strategies used for managing external stakeholders – goal framing, pride framing, community-centric framing and blame framing. The effects of the use of framing from the comments of the news articles were the solution frame, the trend-setter frame, the important frame and the own-up frame. The relation between the framing strategies and the framing effects are theorized through four propositions and the framing strategy framework is proposed.

Chapter 7 highlights the findings and discussion from the hegemonizing strategies employed to manage the external stakeholders. For this, I used a mix of social media data and semi-structured interviews. For analysing the data, I used a mix of qualitative content analysis and grounded theory and anchored it on the governmentality theory (Foucault, 2007). I was thus able to arrive at the hegemonizing strategies in use for managing the external stakeholders – promoting the organization, giving progress updates, appealing to the community and targeting sections of the population. The effects of the use of hegemonizing strategies observed from the metro rail case study are evident with the project community and the project team. The effects on the project community are support for construction activities, a positive brand image and creation of community brand advocates. The effect on the project team are attracting talents, an enhanced job perception and creation of project team brand advocates. The relation between the hegemonizing strategies and their effects are theorized in seven propositions and the hegemonizing strategy framework is proposed.

Chapter 8 records the findings and discussion on the relation between strategies employed to manage external stakeholders in megaprojects. For this I used data from semi-structured interviews, news media articles and social media posts. I used grounded theory to analyse these data and anchored it on the circuits of power theory (Clegg, 1989). The relation between framing strategies and persuading strategies, hegemonizing strategies and persuading strategies, persuading strategies and framing strategies and finally, framing strategies and hegemonizing strategies are highlighted from the case. The relation between these strategies are highlighted in five propositions. Finally, integrating the persuading strategy framework, framing strategy framework, hegemonizing strategy framework and all the five propositions of relation between strategies, I was able to arrive at the external stakeholder management strategy framework for infrastructure megaprojects.

Chapter 9 summarizes the contents of this thesis and discusses the contribution of this research. Contributions to organizational power theory, strategy theory and project management theory are highlighted. The methodological contributions from this work are also highlighted. The practical contributions that can improve the practice of external stakeholder management in infrastructure megaproject are also stressed. I also discuss some limitations of the work and the directions for future research.

CHAPTER 2

EXPLORATORY STUDIES

2.1 OBJECTIVES OF EXPLORATORY STUDY

In the previous section, I highlighted the role of strategies in managing external stakeholders in infrastructure megaprojects. I also arrived at the research objective to create a framework to explain external stakeholder management and propose organizational power as an effective theoretical lens which can be used for explaining the strategies used for managing external stakeholders in infrastructure megaprojects. In this chapter, I intend to (1) check the suitability of the organizational power theories to explain external stakeholder management strategies, (2) define specific research sub-objectives that can be pursued from an organizational power perspective and (3) explore the sources of data that can be collected to address them. Thus, for developing these directions for detailed study, I use two exploratory case studies in different infrastructure sectors, different project phases, and different institutional contexts. Scholars have suggested that such a case study method is apt for exploratory research when the aim is to gain familiarity with a problem or to generate new insights for future research (Scott, 1965; Eisenhardt, 1989).

2.2 CASES

Two cases from different infrastructural sectors, different project phases and different institutional settings are used to explore the external stakeholder management strategies from an organizational power perspective. The cases are described below.

2.2.1 Metro rail megaproject in India

The first case was the first phase of a metro rail megaproject in India that cost USD 2.2 Billion. This project displays all the special characteristics which qualitatively qualify it as a megaproject, such as being built in an existing city, disrupting many services, requiring coordination across a vast range of stakeholders and intense pressure to keep on schedule. It is built in one of the largest cities in India with its road overflowing with traffic. The metro rail was conceived with an aim to

integrate existing public transportation networks and to reduce the number of privatized vehicles used daily for commuting.

A quasi-government organization was incorporated with shareholding split equally between the Government of India and Government of the state for the planning, construction and operation of the metro rail project. Along with integrating existing public transportation networks and reducing traffic on roads, the project had other objectives such as to reduce pollution levels in the city and to boost the economic growth in the region.

The project started in 2009 and was commissioned in parts from 2015 with construction in multiple stretches still in progress during the study period. Thus, the first project is a metro rail megaproject in India currently in its construction and operation phases.

2.2.2 City rebuilding megaproject in Australia

The second case was a city rebuilding megaproject in Australia which started in 2016. The aim of the project was to expand the city and revitalize the city centre with a health and education agenda. This would attract investments in health, education and research. Health was important for the project as the city anticipated that health related spending would grow from 4% to over 7% of GDP by 2050. The city already has existing health assets in the form of hospitals and research institutes. The project core seeks to leverage these and establish a platform for additional investment from both the public and private sector in associated health, education and medical research activities as well as investments in new housing and transport networks. The city in which the project is housed has land available for development, a strong identity with the people, good transportation infrastructure and a lower cost of living and housing. The city through this project seeks to be a 'innovation district' by attracting new jobs and opportunities.

The project brought together a core group of organizations to this cause and a formal project organization was initiated. The group of organizations involved the Business Chamber, the local health district of the city, the health network organization, the city council, the city hospital, the department of education, the education commission, an applied medical research institute and three universities which have a 'school of medicine' operating in the area. The aim of bringing these

organizations together was to create a synergistic pool of organizations so as to make better and quick decisions relating to the project.

The project is still in its shaping process and hence does not have a fixed cost or timeline as of now. Even though there is no fixed cost at present, I found it relevant to the study of megaprojects as it satisfies the qualitative characteristics such as colossal, complex, controversial, captivating and laden with control issues with multiple number of stakeholders requiring decisions to be taken considering all these interests.

The salient features of both the project that were used for the exploratory study are tabulated in Table 2.1.

Table 2.1: Salient features of cases considered in exploratory study

	Metro rail megaproject	City re-building project
Country of project – Institutional context	India (developing country)	Australia (developed country)
Sector	Transport infrastructure	City infrastructure
Phase of the project	Construction and operation phase	Planning phase
Cost of the project	USD 2.2 billion	Not finalized
Timeline of the project	Construction started in 2009, operation partly started in 2015	Construction yet to start

Thus, through these two projects, I was able to study a project in its construction and operation phases and another project in its shaping phase thereby enabling understanding of the relevance of organizational power theories in the life cycle of the project.

2.3 EXPLORATORY STUDY METHOD

The methodology used for the exploratory study was semi-structured interviews (Spradley, 1979). I was looking at specific instances of external stakeholder management through strategies in both the projects. I adopted the working definition of external stakeholders as stakeholders who

are external to the project core and who influence the project or are influenced by the project (Aaltonen et al., 2008). I tried to explore the types of external stakeholders, their demands, complexity and the strategies employed by the megaproject to manage them. Questions relating to these guided my enquiry and hence the interviews were semi-structured.

With the metro rail megaproject in India, I conducted 19 semi-structured interviews in 2016-17. I sought to interview the project team, which comprised of members of the project organization, management consultants and project contractors, as I wanted to know the complexities with external stakeholders and the management strategies employed by the project team. The interview duration ranged from roughly 1 hour to 3 hours each. The details of the interviews conducted in the metro rail project are recorded in Table 2.2.

Table 2.2: Details of exploratory study interviews conducted in metro rail project

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
1	Metro rail organization, Elevated section, Deputy General Manager	26 th October 2016	3 hr 15 minutes
2	Metro rail organization, Design Head, Deputy General Manager	10 th November 2016	58 minutes
3	Metro rail Organization, Tracks Head, General Manager	11 th November 2016	57 minutes
4	Metro rail Organization, Elevated section, General Manager	18 th November 2016	1 hr 45 minutes
5	Metro rail organization, Elevated section, Deputy General Manager	21 st November 2016	1 hr 46 minutes
6	Metro rail Organization, Elevated section, General Manager	21 st November 2016	53 minutes
7	Metro rail Organization, Airport stretch, Deputy General Manager	25 th November 2016	1 hr 10 minutes
8	Metro rail Organization, Tracks, Manager	9 th December 2016	1 hr 27 minutes

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
9	General Consultant, Deputy General Manager	31 st December 2016	55 minutes
10	Metro rail Organization, Airport stretch, Assistant Manager	4 th January 2017	1 hr 5 minutes
11	Contractor, underground stretch, Deputy General Manager	5 th January 2017	45 minutes
12	Metro rail Organization, Human Resource Head, General Manager	10 th January 2017	1 hr 7 minutes
13	Metro rail Organization, Tracks, Assistant Manager	11 th January 2017	50 minutes
14	Metro rail Organization, Public Relations, Manager	11 th January 2017	1 hr 13 minutes
15	Metro rail Organization, Airport stretch, Manager	12 th January 2017	56 minutes
16	Contractor, utility shifting, Manager	18 th January 2017	1 hr 4 minutes
17	General Consultant, Deputy General Manager	19 th January 2017	1 hr 10 minutes
18	Metro rail Organization, Ex-Managing Director	1 st March 2017	46 minutes
19	Contractor, underground stretch, Project Manager	6 th March 2017	55 minutes

In the case of the city re-building project in Australia, I conducted 14 semi-structured interviews. The interview durations were shorter in comparison to the metro rail project as I knew the kinds of questions to ask based on responses received from the metro rail project. The interview duration ranged from 20 minutes to 1 hour and 30 minutes. The core project team was more diffuse in the city re-building project compared to the metro rail project and included government hospital constructions, local health bodies, research institutions, educational partners, etc. On the rationale

of having multiple owners for the project, the director of the government school construction remarked,

“We have multiple champions in this project ... If it’s a single head snake and the head dies, the whole snake dies”

To facilitate partnership between these diverse stakeholders and bring them into a project core group, a Memorandum of Understanding (MOU) was signed with each partner. The terms of the MOU involved a strategic partnership among the players and also an equal fixed contribution yearly to facilitate the partnership. Each player of the partnership could nominate a member to the steering committee. Monthly meetings were convened among the project core, comprised of members of the standing committee, to make strategic decisions relating to the shaping of the project. All decisions of the steering committee were to be determined by simple majority. With the fixed contribution, the steering committee hired an independent chair, paid for administrative support such as circulating invitations and minutes of meetings and also hired a project management consultant who would organize committee meetings, plan media activities and promote the project. The details of the interviews conducted in the Australian city rebuilding project are recorded in Table 2.3.

Table 2.3: Details of exploratory study interviews conducted in Australian city rebuilding project

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
1	Government health constructions, Assistant Director	22 nd February 2018	1 hr 24 minutes
2	Local health, construction division, Director	7 th March 2018	44 minutes
3	Local health, planning, Manager	13 th March 2018	52 minutes
4	Consultant, Head	16 th March 2018	34 minutes
5	Government School constructions, Director	7 th May 2018	47 minutes

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
6	Treasury, Manager	7 th May 2018	25 minutes
7	University Partner A, Strategic Projects Manager	4 th June 2018	32 minutes
8	Health network, CEO	5 th June 2018	34 minutes
9	University Partner B, Head Doctor	5 th June 2018	21 minutes
10	Research Partner, Chief Operating Officer	8 th June 2018	20 minutes
11	Business Chamber, Senior Manager	28 th June 2018	29 minutes
12	City Council, Assistant Director	2 nd July 2018	25 minutes
13	City Council, Innovation officer	2 nd July 2018	27 minutes
14	Research Partner, Chief Executive Officer	3 rd July 2018	35 minutes

In both the cases, I triangulated the interview data with news articles, social media data and project documents. I used open coding of the data to relate it with the organizational power theories. I looked for common codes in both the projects thereby studying what is relevant in diverse institutional contexts, different infrastructure sectors and in different phases of the project. I followed multiple cycles of coding, cross-checking and theoretical review (Strauss & Corbin, 1990) to arrive at the different forms of strategies used for managing the external stakeholders. This research followed the guidelines of Eisenhardt (1989) on ‘building theories from case study research’ by anchoring the new theory in existing literature to increase the internal validity and generalizability. The findings from the cases are discussed in the next section.

2.4 FINDINGS AND DISCUSSION

The findings from both the exploratory cases are discussed together to understand the commonalities in diverse institutional contexts, infrastructure sectors and different phases of a project. I anchored the findings in the dimensions of power framework (Lukes, 2005).

2.4.1 First Dimension of Power and Persuading strategies

Persuading strategies were used for enabling discussions with the affected external stakeholders thereby ‘persuading’ them to favour the project by improving coordination and speeding the approval process. These strategies led to external stakeholders doing what they would not have done otherwise through an active discussion and mutual agreement.

In the case of the metro rail project, there were visible exchanges to facilitate cooperation with the external stakeholders. The metro rail organization agreed to construct an extra parking facility for the airport authorities in exchange for the permission to build the airport metro rail station in the airport land. During an interview, the design head of the metro rail organization said,

“They [airport] also want something from us [metro rail organization] ... This [parking] is an added facility for them ... these kinds of projects work that way only ... give and take ...”

Similarly, with the city re-building project in Australia, the project team sought to show the project community how a part of the project would look like, get their feedback on it and rework the design in an attempt to obtain the community’s approval. They did this through open events, news media or social media. The director of the local health’s construction division was quoted as saying,

“We show them [community] how this is going to look like. We get feedback, document it and work on them”

The dynamics of persuasion observed here constitutes the first (overt) dimension of power, which depends on the actor’s ability to mobilize resources to realize certain goals, external stakeholder support in this case, as Avelino (2011) notes. The first dimension of power involves the ability to affect decision making by enabling discussions or negotiations to arrive at a mutual solution. Since these strategies are easily visible and understood, they can be captured through semi-structured interviews with the project team.

2.4.2 Second Dimension of Power and Framing strategies

In any power relation there will be some parties for whom issues are legitimated while other parties will seek to delegitimize these or position other issues as more legitimate. Framing strategies were used as a strategic tool by the project team to highlight certain issues while communicating with the external stakeholders and make those issues more legitimate or important than others.

In the case of the metro rail project, the project team expressed restraint while talking to the media. The public relations officer is the only one permitted to talk or address the media, that too with an agenda approved by the public relations head and managing director of the metro rail project. The public relations officer of the metro rail quoted,

“While talking to press, they [PR Head, MD] tell us exactly what to say and we say based on that... generally, the rule here is that no employee is supposed to talk to the press apart from the authorized spoke person”

Similar to this, in the city re-building project in Australia, the director of local health’s construction division who was also responsible for talking to the media about the project, quoted during the interview that,

“I am given a sheet of paper with a prepared list of questions and their responses ... thus, the same story is told by everybody ... If there is a question outside of the list prepared, we say we will get back to you”

These strategies enable the project team to keep topics off the agenda (Bachrach and Baratz, 1962) and not facilitate discussion on certain topics, in contrast with the ‘persuading’ strategy. It also enables the diversion of attention to an issue which seems more favourable to the project and hide others. Similarly, in the case of the city re-building project in Australia, the full project was framed to be centred around the important hospital in the city. Through this they justified the need of the city rebuilding project by anchoring it on the hospital infrastructure. The Assistant director of the health construction quoted,

“We build the case around hospitals ... hospitals are great anchor points ... it is easy marketing”

Thus, with the use of the framing strategy, there is an implicit shaping of issues which are considered relevant (Fleming and Spicer, 2007). Very similar to this, Gil and Lundrigan (2012) mention how the 2012 London Olympics bid team morphed and framed the Olympics megaproject as an urban regeneration project for one of the most deprived areas in London to gain external stakeholder support. Goffman (1974) claims that framing is the way something is presented to others and it affects the actions and choices individuals make. The dominant frame is an interpretation with the highest probability of being noticed, processed and accepted by most people (Entman, 1993). The strategic use of framing is quite similar to the findings from Kornberger & Clegg (2011), in which the techno-rational discourse of the planner is substituted with the seductive, media-focused language of the strategist, thereby hiding certain issues.

While the ‘persuading’ strategy uses strategy as a discussion tool and facilitates two-way communication, here in ‘framing,’ there is an attempt to keep issues off the agenda. This power in the second dimension is also called power in non-decision making (Bachrach and Baratz, 1962). Thus, while the persuading strategies can be easily understood from the interviews with the project team, I cannot understand the covert framing strategies, as it’s not possible to understand what exactly is communicated and what strategies are used to frame one issue as more important than another. Thus, I have to rely on naturally occurring data such as news media articles to understand how the megaproject frames a situation and presents it to the external stakeholders. News articles are a good source to understand the framing strategies employed in megaprojects as these projects attract significant news coverage compared to smaller projects.

2.4.3 Third Dimension of Power and Hegemonizing strategies

Hegemonizing strategies are used to change the behaviour of the community making them subjects of power. There is a great economy to that power which finds it unnecessary to intervene in existing relations because these relations already represent the issues that it seeks to reproduce.

In the case of the metro rail project, the stations of the megaproject were getting popular with the community and it became a tourist attraction with multiple people primarily coming to visit

and experience the metro rail rather than to commute. The public relations officer of the project quoted,

“It [the metro stations] was a hub for youngsters to come and see, take selfie. It became a tourist attraction. That’s how we pull crowd.”

This preference of the community to come to these stations as a tourist spot resulted in the metro rail getting more ridership.

A similar discourse was found in the case of the city re-building project too. There was an emphasis on promoting the project and raising its profile to make it more appealing to the community. The senior manager from the business chamber was quoted as saying,

“We have to promote this [Australian city rebuilding project] and raise its profile... through logo, website, media content”

Even though the city re-building project was in its starting stage with undefined costs and timelines, it had allotted money for promoting the project to get support from the project community.

Both the metro rail megaproject and the city re-building project were active in social media and found it as an efficient way to promote their organization. The innovation officer of the city council of the city re-building project in Australia quoted,

“We are aiming to create a series of social media advertisements of 30 second each ... about how the private hospital is beneficial to this area ... video contents are very engaging ...”

Social media was used to influence the project community by articulating their preferences, recursively feeding them back, subtly shaping concurrence, consensus and communication. Social media communications offer more intense and more dynamic representation than simple management messages (Hassard & Holliday, 1998). Such initiatives through social media encodes a new culture of national and regional pride subsequently reproduced through everyday activities (Edensor, 2002). This subtle strategy of shaping preferences and creating hegemony (Gramsci,

1971) aligned with what is already thought and experienced can be categorized as the third dimension of power (Lukes, 2005). Hegemony is the process by which ruling elites secure consent from the society to the political order through the production and diffusion of meanings (Gramsci, 1971). In hegemonizing, the structure of power relations is fully legitimized by an integrated system of cultural and normative assumptions (Hyman & Brough, 1975).

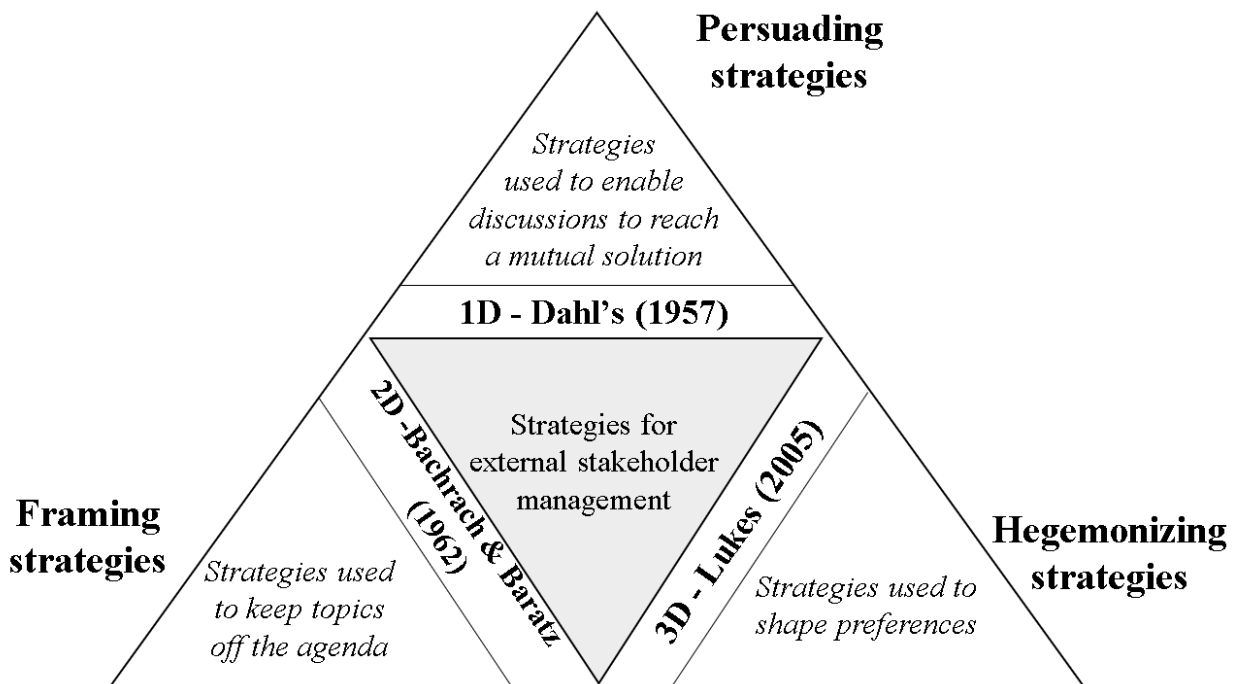


Figure 2.1: Strategies for external stakeholder management from the exploratory case studies

The social media page was strategically used here to fuel this community pride, wherein the community is proud of the project. This ‘community pride’ is mentioned as one of the benefits of a megaproject by Frey (2016) where everyone in the community loves to tell stories of the big things their community achieved through these megaprojects and is highlighted as the fifth sublime of megaprojects in the work of Söderlund et al. (2017). The ability of social media to create positive effects on customers is supported by Laroche et al. (2013). Very similar to the ‘framing’ strategies, these ‘hegemonizing’ strategies are also subtle and cannot be captured through interviews with the project team. For this also I have to rely on naturally occurring data such as social media exchanges to make sense of the hegemonizing strategies and their effect on the external stakeholders. In contrast to news media articles, megaprojects have more control on what

appears on their social media page and thus they can promote the project through multiple contents such as discourses, simulated images and video contents.

Thus, the strategies used to manage the external stakeholders observed from the metro rail megaproject in India and the city re-building megaproject in Australia can be mapped on to the dimensions of power theoretical framework (Lukes, 2005). The definitions of the strategies corresponding to each dimension derived from the cases are highlighted in Figure 2.1.

2.4.4 Relation between Dimensions of Power and relation between strategies

The persuading, framing and hegemonizing strategies are not independent of each other, but are related. The city re-building project was in its shaping stage but had a vision to socially engineer and re-shape the entire fabric of the city, i.e., create hegemonizing effects. The assistant director of the government health constructions remarked,

“We have to get the mayor to talk in favour of the project ... the vision is to get momentum for the project ... and attract more people”

This quote shows the framing strategy of getting the mayor to talk in favour of the project, thereby only projecting the positive side of the project. This positive framing of the project would help in getting momentum for the project thereby resulting in community support and attracting more people which shows the hegemonizing effect. Thus, the strategies are related, and one shapes the other.

2.5 TAKE-AWAYS

The findings from the two exploratory case studies in India and Australian helped plan for the in-depth study discussed in the remaining chapters of this thesis. The in-depth study would help to create a framework that can explain external stakeholder management strategies in infrastructure megaprojects. The following are the key take-aways.

1. The persuading strategies, framing strategies and hegemonizing strategies map on to the dimensions of power framework (Lukes, 2005) with power in decision making, power in non-decision making and latent power respectively as shown in Figure 2.1. Thus, all the

dimensions of power were observed in the external stakeholder management of megaprojects.

2. Since these dynamics of the dimensions of power can be observed in the external stakeholder management strategies context, a literature review of these dimensions and their corresponding strategies can be carried out to arrive at a set of research questions which can guide future enquiry.
3. The working definitions shown in Figure 2.1 for persuading strategies, framing strategies and hegemonizing strategies can help us identify these types of strategies in the external stakeholder management of megaprojects.
4. Persuading strategies are overt strategies and involve strategies used to enable discussions to reach a mutual solution based on power in decision making. These kinds of strategies can be easily captured through interviews and thus, interviewing the project team can help us understand how these strategies work in practice. These interviews would reveal the types of external stakeholders, their concern and the visible management strategies employed to address the concerns.
5. Framing strategies, based on power in non-decision making, are used to keep topics off the agenda and are mainly used in news media communications. These strategies are subtle and are not evident through the interviews. Observing how the project team communicates to the external stakeholders through news media articles can help us understand how these strategies work in practice. By observing these, various framing strategies to project some issues and hide others can be explored.
6. Hegemonizing strategies, based on latent power, are used to shape preferences and are mainly used in social media communications. These strategies are also subtle and are not evident through interviews with the project team. These are not observable in news media articles also as the megaproject do not have control over discourses, simulated images and video contents that are instrumental in hegemonizing strategies for shaping preferences of the project community. Hence, I choose to observe how the project team communicates to the external stakeholders through their social media pages to understand how these strategies work in practice.
7. Since the metro rail megaproject in India is currently under construction and operation, this project has featured multiple episodes of managing external stakeholders that can be

investigated through more semi-structured interviews for the detailed study on persuading strategies. Adding on to this, the project has a long record of news articles and social media posts which can be considered for the detailed study on framing and hegemonizing strategies. Also, all the dimensions of power were observed in the project as part of the strategies to manage external stakeholders. Hence, the metro rail megaproject in India is a critical case for theory building at the intersection of strategies, external stakeholders and organizational power. So, the project is chosen for an in-depth case study.

The summary of the key take-aways in the form of strategies, characteristics and data source corresponding to each dimension of power are consolidated in Table 2.4.

Table 2.4: Summary of key take-aways from exploratory study

Power Dimension	Strategy	Characteristics	Data source
First Dimension	Persuading strategies	Visible strategies based on overt power	Semi-structured interviews
Second Dimension	Framing strategies	Invisible strategies based on covert power	News media articles
Third Dimension	Hegemonizing strategies	Invisible strategies based on covert power	Social media posts
Relation between dimensions	Relation between persuading, framing and hegemonizing strategies	Visible strategies based on overt power and invisible strategies based on covert power	Semi-structured interviews, news media articles and social media posts

2.6 RESEARCH OBJECTIVES FOR IN-DEPTH STUDY

From the take-aways of the exploratory case study, I have attained some insights that can guide the in-depth study. I chose to pursue the following research sub-objectives.

Research Sub-Objectives:

1. To understand how persuading strategies are practiced by studying the interview data.
2. To understand how framing strategies are practiced by studying the news media data.
3. To understand how hegemonizing strategies are practiced by studying the social media data.
4. To understand how each strategy, affects another by studying all the data together.

2.7 SCOPE OF THE STUDY

The scope of this study is restricted to an in-depth single case study. Therefore, even though external stakeholders include stakeholder in land acquisition, utilities, project community, NGOs, interest groups, etc., the stakeholders considered in this study will be limited to the ones that are evident from the case study selected. Even within the case study, the data collections are limited to interview data, news media data, and social media and do not cover community interactions, external circulars, etc., through which also the project team communicates with the external stakeholders. It should also be noted that even as multiple perspectives can be used to explain external stakeholder management in megaprojects, this thesis uses an organizational power perspective and do not cover other theoretical lenses.

2.8 CONCLUDING REMARKS

This chapter summarized the two exploratory case studies of a metro rail project in India and a city re-building project in Australia. It was seen that the strategies observed for managing external stakeholders in these projects map on to the dimensions of power theoretical framework (Lukes, 2005) showing that it is a very valid framework for addressing the research objective. A working definition for the three strategies – persuading strategies, framing strategies and hegemonizing strategies are derived from the two exploratory studies which would help understand the strategies used to manage external stakeholders. The key take-aways from these case studies are discussed which helps set the research sub-objectives for the in-depth study which

will be undertaken in the remaining chapters of this thesis. The take-aways also help in making methodological choices for studying these strategies as well as for selecting a project for an in-depth study. In the next section, I review the organizational power literature and the megaproject literature pertaining to each of these strategies to arrive at a set of research questions which would guide future enquiry.

CHAPTER 3

LITERATURE REVIEW AND RESEARCH QUESTIONS

3.1 INTRODUCTION TO ORGANIZATIONAL POWER THEORIES

In the previous chapter it was seen that the three dimensions of power can explain the strategies employed to manage external stakeholders in megaprojects highlighting that an organizational power perspective can be used as a theoretical lens for the research problem. This chapter reviews the organizational power literature and the megaproject literature pertaining to each of strategies that were anchored in the identified dimensions of power - persuading, framing and hegemonizing strategies. The power theories that explain each of the dimensions of power and their relationship are discussed in detail along with their gap in the megaproject literature, to address which research questions are proposed.

For persuading strategies, I chose the power theory of influence tactics framework (Yukl & Tracey, 1992) as it explains the visible strategies employed to arrive at a mutual solution. Influence tactics are tactics used by people to influence their co-workers, supervisors, and subordinates popularized in the organizational psychology literature. Kipnis et al. (1980) record these tactics as assertiveness, ingratiation, rationality, sanctions, exchange, upward appeals, blocking, and coalitions. Subsequent work by Yukl & Tracey (1992) consolidated influence tactics into nine types: rational persuasion, inspirational appeal, consultation, ingratiation, exchange, personal appeal, coalition, legitimating and pressuring. (Yukl & Tracey, 1992). As seen in the following review, the Yukl & Tracey (1992) work has been subsequently used to study how influence tactics vary with different resources and hence is selected as a suitable theoretical lens to study persuading strategies that are in use for managing external stakeholders from a power perspective. For explaining the enablers of these persuading strategies, the bases of power theoretical framework (French & Raven, 1959), that can explain the resources available for visible strategic action is chosen. French & Raven (1959) was selected instead of other works that explain resource-based power such as Etzioni (1964) or Kelman (1958) because it was the most influential work while also having significant similarities with others.

For framing strategies, I chose frame analysis theory by Goffman (1974) wherein he proposes to compare and contrast the natural frame and the social frame of an event. Existing framing

theories such as media framing (Hallahan, 1999) reduce the frames to story topics, attributes, and issue positions, and neglect frame sponsorship and the asymmetries in power that influence the ability of sponsors to shape the media agenda. In contrast, Goffman (1974) considers the role of the agency that propagate their frame while comparing the natural frame and the social frame. Hence, Goffman (1974) is selected as a suitable theoretical lens to study framing from a power perspective to interpret strategies used by the project team to manage external stakeholders. This would enable us to look at how megaprojects highlight some issues and hide others.

Hegemonizing strategies aim to create hegemony which is political leadership based on the consent of the lead (Bates, 1975). Theories that can explain hegemonizing include institutionalization (Zucker, 1977) which considers the processes by which social structures become established as authoritative guidelines that guide social behaviour. In contrast to this, governmentality theory considers an organizational power perspective as it focuses on the agents who exercise covert power to achieve their will on the subjects. For this, I chose governmentality theory (Foucault 2007) which stresses self-governance or self-surveillance. Governmentality theory would help understand how megaprojects shape preferences of the community and make them subjects of power, altering their decisions subconsciously.

For integrating all these strategies, I chose the circuits of power theory (Clegg, 1989) as it highlights how power acts in different circuits. Even though multiple researchers record that power is dynamic (Bourdieu, 1977; Foucault, 1980) and it can be acquired, retained or lost (Anderson & Brion, 2014) there has not been any other framework which explains the dynamics. Power in multiple circuits, as explained by Clegg (1989), fix or re-fix existing practice thereby making power dynamic and would help understand how one strategy affects another. Understanding how all these strategies work together can help create a framework that can explain external stakeholder management strategies in megaprojects.

By adopting these organizational theories in the context of external stakeholder management strategies this research seeks to achieve twin objectives – to help explain external stakeholder management strategies from an organizational power perspective, and also to explore the construction field as a field to test and contribute to organizational theories. The organizational

power theories selected for each strategy is depicted below in Figure 3.1 and each of these theories are discussed in detail in the remaining sections of this chapter.

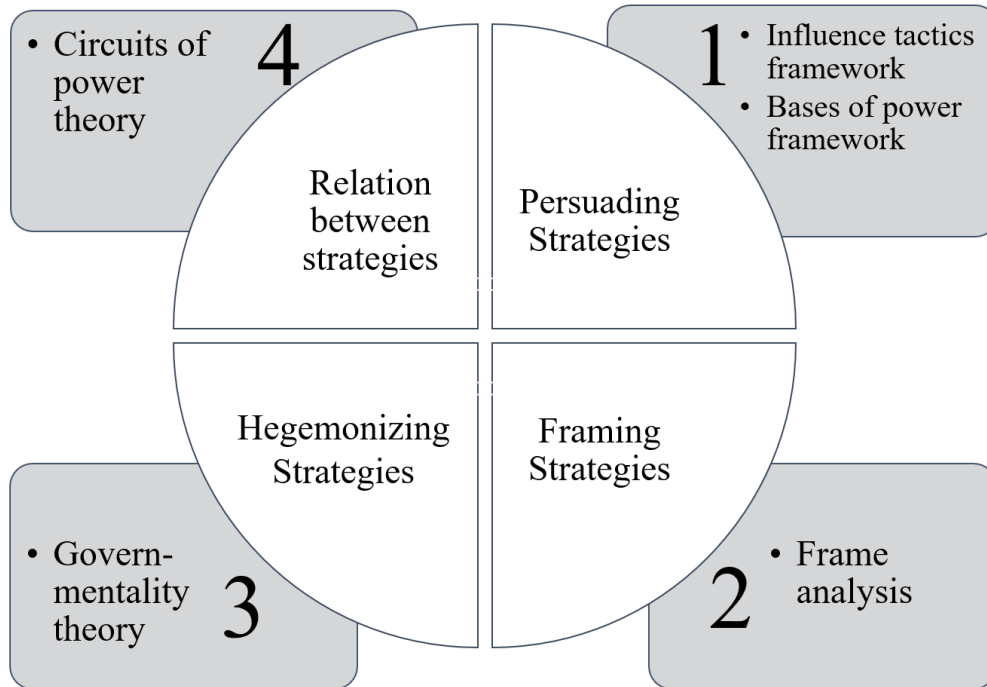


Figure 3.1: Organizational power theories for explaining strategies

3.2 INFLUENCE TACTICS FRAMEWORK AND BASES OF POWER FRAMEWORK

The first dimension of power involves the power in decision making. It involves the direct mobilization of power (Dahl, 1957) and depends on the actor’s formal position or possession of valuable resources (Fleming & Spicer, 2014).

Influence tactics framework (Yukl & Tracey, 1992) can explain how this power is mobilized through strategies that are used by the megaproject team to arrive at a mutually acceptable solution to manage the external stakeholders’ demands. These strategies are emergent from practices (Mintzberg & Waters, 1985) often in response to stakeholder resistance, and understanding their dynamics can help megaprojects manage their scope better. The bases of power framework (French & Raven, 1959) can explain how resources enable these strategic actions and thus help megaprojects acquire critical resources.

3.2.1 Influence tactics framework

Influence tactics have been broadly classified into nine types: rational persuasion, inspirational appeal, consultation, ingratiation, exchange, personal appeal, coalition, legitimating and pressuring (Yukl & Tracey, 1992; Kipnis et al., 1980).

Rational persuasion uses logical arguments and factual evidence to persuade subjects. Inspirational appeal makes a request that arouses enthusiasm by appealing to the subject's values or ideals. Consultation invites participation in planning an activity and offers to modify the proposal to deal with the subject's concerns. Ingratiation flatters the subject into a good mood before asking them to do something. Exchange exploits the norm of reciprocity where the agent offers an exchange of favours or promises a share of the benefits achieved if the subject helps accomplish a task. Personal appeal leverages loyalty and friendship before asking the subject to do something. Coalition is where the agent seeks the aid of others to persuade the subject to do something. Legitimizing claims the authority or right to make the decision. Pressure involves the use of demands, threats, or persistent reminders to influence the subject to do what the agent wants.

Tactics are used in combination as well as singly: for instance, Falbe & Yukl (1992) note that when ingratiation is used in combination with rational persuasion better outcomes are achieved. When these influence tactics are combined, sequencing also matters. Kipnis & Schmidt (1983) proposes to use rational persuasion and then follow it up with ingratiation or coalition for strong targets and pressure in case of weak targets. Rational persuasion is a very flexible tactic and can be used with any of the other eight influence tactics (Yukl, et al., 1993). So, strategies in practice to manage external stakeholders in a megaproject setting can be seen as a combination of multiple influence tactics.

Literature exploring the use of such tactics in organizations consider the direction of usage (Kipnis, et al., 1980), culture (Fu & Yukl, 2000), leader's quality (Cable & Judge, 2003) and sources of power (Yukl, et al., 1996). Based on the direction of usage, the traits in influence tactics are recorded for dealing with subordinates (downwards), peers (lateral) and supervisors (upwards). For dealing with subordinates, inspirational appeal, ingratiation and pressure works; while for peers, coalition, personal appeal, exchange and legitimating works; and for supervisors, coalitions

and rational persuasion works. Consultation was not noted to have any directional differences (Yukl & Tracey, 1992). Another work in this area notes that rational persuasion and ingratiation work in all directions (Kipnis, et al., 1980). The influence tactics also vary based on culture. Fu & Yukl (2000) compared influence tactics in the USA and China and found out that rational persuasion is effective in the USA while coalition is effective in China. Influence tactics are also found to vary with the agent's personality and leadership style. A longitudinal research on 189 managers across 140 organizations confirmed that managers who score high on openness are very unlikely to use coalitions and those scoring high on emotional stability are more likely to use rational persuasion (Cable & Judge, 2003). The sources of power possessed by the agent also influence the choice of influence tactics used by them. Agents with high expertise use rational persuasion compared to agents with low expertise (Yukl et al., 1996).

In this study of external stakeholder management strategies used by the megaprojects, the direction of usage of the influence tactics under consideration is from the megaproject team to external stakeholders. Also, since the aim is to look at the strategies of a megaproject within one particular cultural setting, the variation of influence tactics with respect to culture will be negligible. Adding on to this, since this research is focused on the strategies used by the megaproject team as a unit and not individual members, the effect of leadership on strategy is not considered. However, the influence tactics vary with the sources of power, i.e. the resources available to the project team. Hence, the study considers how influence tactics are affected because of the resources available to the project team, in the form of bases of power.

3.2.2 Bases of power framework

Overt strategies are dependent on the resources available with the project team. The bases of power framework (French & Raven, 1959) can provide insights on the resources that enable these strategic actions. Building upon Dahl's (1957) concept of power as providing 'one with the ability to make another do something they would not otherwise do,' consideration of what kinds of resources are capable of being mobilized to achieve the desired effect has ensued.

Representations of organizational power resources were provided by Etzioni (1964), Kelman (1958) and French & Raven (1959). While Etzioni (1964) denotes fear, money, and love as

coercive, utilitarian and normative power respectively, Kelman (1958) suggests compliance, identification and internalization. French & Raven (1959) suggest five generic bases of power: coercive, reward, legitimate, expert and referent power. These three different classifications of resource-based power have been compared by Sussmann and Vecchio (1982) who observed a good deal of similarity between them. Out of these, the most influential was French & Raven's (1959) five generic bases of power. Coercive power is the power to punish for non-compliance and is dependent on fear of the negative results from failing to comply, Reward power is the opposite of coercive power and is dependent on the positive rewards obtained by complying. Legitimate power represents the formal authority to control and use organizational resources based on one's structural position in the organization. Expert power involves the possession of some special knowledge, skill, or expertise. Referent power is the power of being a role model.

Even though the use of these resources is sensitive to context, they can be used as a means of advancing knowledge and building on past contributions. The act of acquiring, developing and using resources in power relations to obtain a preferred outcome (Pfeffer, 1992) is referred to as the use of influence tactics. Influence tactics in turn are dependent on the resources brought to bear on power relations (Wilensky, 1967).

3.2.3 Relation between influence tactics framework and bases of power framework

Agents with high expertise will seek to use rational persuasion (Hinkin, & Schriesheim, 1990; Yukl et al., 1996) while those that dominate power relations can often eschew rationality (Flyvbjerg, 1998). The dominant is more inclined to use coercive power as a source of pressure (Yukl & Tracey, 1992), while the use of legitimating rhetoric (Yukl & Michel, 2006) and rational persuasion (Hinkin, & Schriesheim, 1990) tend to be weapons of those that do not dominate, according to Flyvbjerg (1998). Agents with strong referent power resort to consultation and inspirational or personal appeals (Yukl et al., 1996) as well as rational persuasion (Hinkin, & Schriesheim, 1990). Exchange tactics involve a promise of reward in exchange for compliance, relying on reward power (Yukl & Falbe, 1990). The influence tactics of coalition and ingratiation differ from others as both are typically used from a position of lack of power (Hinkin, & Schriesheim, 1990). Figure 3.2 consolidates literature on how the use of influence tactics varies with the sources of power available.

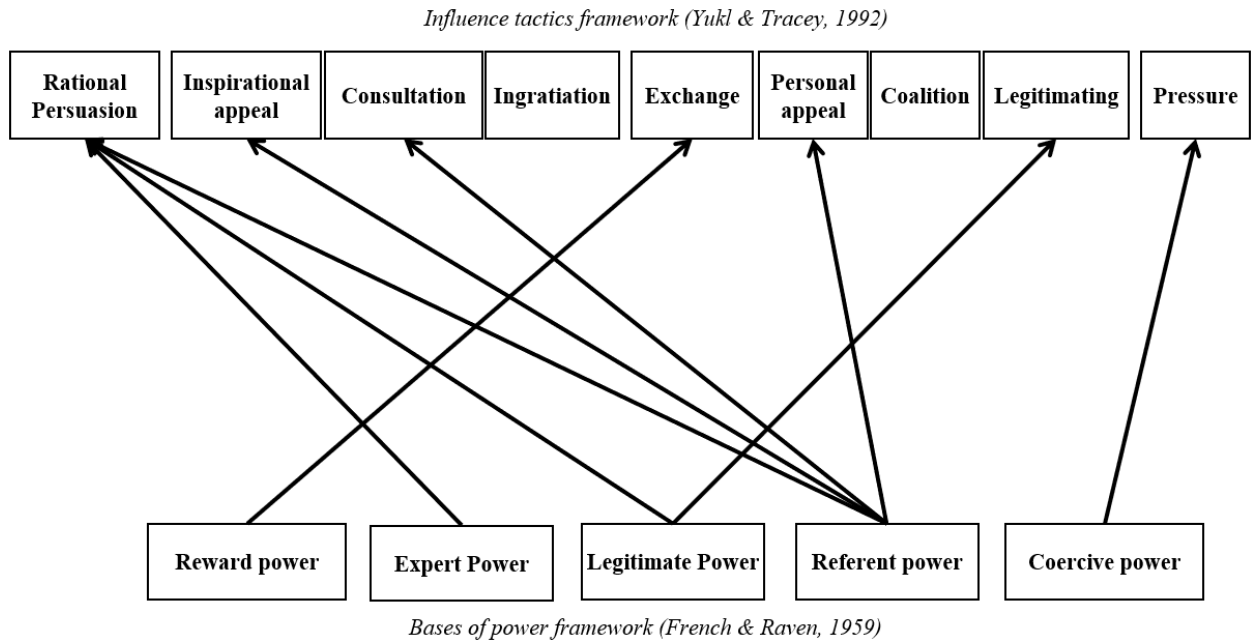


Figure 3.2: Relation between bases of power and influence tactics (compiled from literature)

3.2.4 Persuading strategies in projects

In managing external stakeholders, whose enactment as such is project specific and thus bounded by specific times and spaces, project managers typically use more visible strategies and overt power. Largely, this power is constituted in relation to stakeholders that strive to resist or influence the project in some ways.

Project teams' overt responses to the claims of external stakeholders may embrace any of adaptation, compromise, avoidance or dismissal as evolving responses to dynamic situations (Aaltonen & Sivonen, 2009). Some overt strategic responses recorded on the part of project teams include fair process approaches (Kim & Mauborgne, 2003) and other strategies such as the use of negotiations, trade-offs, incentives and concessions (Chinyio & Akintoye, 2008; Yang et al., 2014) for handling the relational consequences of interests being vested in megaprojects (Altshuler & Luberoff, 2003). While such literature has documented means to manage external stakeholders, there is a lack of evidence concerning when, why and how these overt strategies can be used in different contexts.

The literature on influence tactics (Yukl & Tracey, 1992) and bases of power (French & Raven, 1959) has largely been developed in social psychology, focusing on an individual's tactics for securing influence. These characteristic tactics are strongly oriented towards dyadic relations arranged hierarchically in terms of supervision and super ordination, being supervised and subordinated. It needs to be ascertained whether similar tactics can be identified in a multi-organization project level of analysis such as a megaproject, how they are enabled by configurations of resources and how clusters of such tactics can become represented as strategic action in contexts in which the presence of government and multiple superordinate agencies is paramount in shaping the arenas in which stakeholders operate. The research questions that can address these issues are given below.

Research Question – Influence Tactics framework and Bases of Power framework

1. What bundles of tactics characterize the emergent strategies used in managing external stakeholders?
2. How do these strategies relate to available power resources?

Stakeholder theory emphasizes that investing a firm's resources to address stakeholder's concerns and issues is a justifiable managerial activity (Freeman, 1984). However, as the introduction section underlines, such investment often leads to scope overrun, escalation of commitment and goal displacement frequently cited as reasons for underperformance in megaprojects. These strategies are criticized for being characterized by spontaneity and casual actions often as a reaction to stakeholder's concern (Karlsen, 2002) especially for the concerns of the noisy stakeholders and not the most legitimate. Also, these persuading strategies are built on the dyadic interaction between the project team and the external stakeholders without considering the complex settings which shape these strategies. These complex setting are based on the covert powers. So, I next explore the covert power-based theories that can be used for the study of the framing and hegemonizing strategies. These strategies manage the external stakeholders by hiding issues or by making them subjects of power.

3.3 FRAMING THEORY

The idea of power in non-decision making was developed by Bachrach and Baratz (1962) as the ability to keep topics off the agenda. In contrast to power in decision making, there is no direct mobilization of power instead there is a shaping of discourses surrounding an issue through which some issues are considered more important and relevant than others (Fleming & Spicer, 2007).

Frames are the means by which people make sense of information from their environment (Kaplan, 2008). It helps audience 'locate, perceive, identify and label' the flow of information around them (Goffman, 1974). Gramson (2004) uses the illustration of a picture frame to explain the notion of a 'frame' as a border around something that spotlights our attention to certain aspects of an issue and directs it away from other aspects. The major premise of the theory is that an issue can be framed in a variety of perspectives thereby causing multiple considerations (Chong & Druckman, 2007).

Frame divergences might lead to delayed decisions because of the lack of clarity about the desirable course of action. Frame divergences are often resolved by the emergence of a predominant frame. Predominant interpretations mobilize actors and influence their choices in the decision-making process. Thus, predominant frames are necessary to bring about collective action else the frames will remain divergent (Kaplan, 2008). Frame divergences are as analogous to conflicting objectives in megaprojects. As predominant frame is a single solution which stands out, it makes the conflicting objectives of the multiple stakeholders merge with the main frame and thereby bring about a solution to the conflicting objectives scenario. In infrastructure megaproject setting, Matos et al. (2015) looked at design decisions to understand how predominant frames emerge. They highlight how different frames can impact the way in which each actor approaches the problem-solving process.

3.3.1 Framing

Framing is the process through which these frames are created. It is the process through which a communication source constructs and defines a social or political issue (Nelson et al., 1997), thereby reorienting the audience's thinking about an issue (Chong & Druckman, 2007). Framing can be seen in the way in which the story is written or produced, the headlines and word choices

used, the narrative form or rhetorical devices employed, etc. (Cappella & Jamieson, 1997). The seven distinct models of framing recorded in the work of Hallahan (1999) are the framing of situations, attributes, choices, actions, issues, responsibility and news.

Highlighting the process of frame development, Lee et al. (2018) records two different processes – the bottom-up process and the top-down process. While in the bottom-up process the frame is emergent through interaction among the participants, in the top-down process it is a result of independent perception and goals of the strategic actors. This top-down process is mentioned as strategic framing which involves the purposeful use of the framing techniques or strategies by organizations to focus audience attention on certain aspects of a topic in order to gain favourable response (Hallahan, 2008). Here, frames are chosen by the actor with the audience in mind and according to the preferences of the audience (Chong, 1996).

Framing strategies can be the activities used in highlighting some aspects of a perceived reality ‘in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described’ (Entman, 1993). Thus, framing strategies aim to narrow the available political alternatives (Tuchman, 1978). These new frames play an important role in shaping inferences made about a situation’s definition, causes and remedy (Entman, 1993) which are referred to as framing effects (Chong & Druckman, 2007).

These framing effects through subtle alterations in the definition or choice of problems can cause changes in subject’s judgment (Iyengar, 1987) and thus are instrumental in legitimatizing the actor’s perspective in an issue (Iyengar & Simon, 1993). Even though framing is strategic, the current literature on framing overlooks the power perspective in framing (Verduijn et al., 2012; Carrage & Roefs, 2004).

3.3.2 Framing and Organizational Power

In the second dimension of power, there is an implicit shaping of issues considered important or relevant as a result of their inclusion or exclusion from agendas (Fleming & Spicer, 2007). This power in non-decision making is exercised as framing, manipulation and agenda-setting (Fleming & Spicer, 2014).

However, such a power perspective of framing is often neglected in the literature on framing. Carrage & Roefs (2004) argue that framing is reduced to a form of media effects and power must be brought to the discussion on how frames are sponsored by political actors. They argue that the asymmetries in power influence the ability of sponsors to shape media agenda. They discuss power as a framing enabler that is instrumental in creating frames through the control of media houses. However, the ability of framing strategies to create power and maintain power is still less explored. This research seeks to understand how megaprojects use framing strategies and how these strategies influence power through the framing effects.

Frame analysis by Goffman (1974) can be used for analysing the frames that are created in a social setting. It helps by contrasting the natural frame and the social frame. The natural frame is the real frame and the social frame is the socially constructed frame, often by the agency that wants to propagate their frame. He says in natural frame, occurrences are seen as undirected, unoriented, unanimated, and unguided. There is no wilful or intentional interference from an agency and no actor guides the outcome. In contrast, in social frames, the events incorporate the will, aim, and controlling effort of an intelligence or agency. These are 'guided doings' with the motive and intent of the agency selecting which of the multiple social frames needs to be applied to the event.

Goffman says that in the modern world, the relationship between beliefs and objects is not always transparent and often times it is antithetical. He adds on that, interpretive issues of people in the everyday world is dependent on the readily available observation that people make. The agency can build this social frame through multiple frame alignment processes. Building upon Goffman's work, Snow et al. (1986) highlight four frame alignment processes – frame bridging, frame amplification, frame extension and frame transformation. Through frame bridging, two or more ideologically congruent but unconnected frames regarding a particular issue are linked. Frame amplification is the process by which a particular frame is invigorated. With frame extension, the organization promotes issues with values and beliefs that may not be especially salient or readily apparent. Frame transformation is the process by which old meanings are jettisoned and new ones are planted and nurtured in order to garner support and secure participants.

Goffman (1974) refers to these frame alignments as 'keying' wherein activities or events that are already meaningful from the standpoint of some primary framework, are redefined into another

framework, in such a way that they are now seen by the participants to be something quite else. Such re-framings and frame transformation reduce ambiguity and uncertainty and decrease the prospect of frame disputes (Snow et al., 1986). This builds legitimacy of the frame to the subjects. Even though the social frames are strong, they need not be morally or intellectually superior arguments (Chong & Druckman, 2007).

Such a power perspective on frames is not widely accepted in the mass media communication research. Miller et al. (1998) in their study on presidential elections, examined 298 news articles and identified 28 frames such as crime, welfare and economy. However, rather than considering these as frames, it is apt to consider them as story areas as the classification of news articles is as per their subject or content of the news articles as argued by Carragee & Roefs (2004). Frames look for the pattern of emphasis, the pattern of interpretation and the pattern of exclusion. Such strategies relating to framing aim to re-frame or alter the public perception of an issue (Semetko & Valkenburg, 2000). Kornberger & Clegg (2011) have recorded the power effects of these strategies as it changes the participant's thinking.

3.3.3 Framing in megaprojects

In their work on internal stakeholders, Matinheikki et al. (2018) records how during project meetings, different organizations framed their own problems as the most important. In the work of Miller et al. (2017) the role of frame agreement between the project sponsors is stressed as a major issue in the shaping of megaprojects. Mastos et al. (2015) studied framing in the design stage of an infrastructure project. They analyse the influence of frames in the decision-making process and note that frame differences have an effect on the definition and selection of functions of these projects. From the case, they highlight that frames act as filters of how actors perceive a problem, how they shape their interests and how they act.

In the case of the planning phase of a megaproject, Flyvbjerg (2003) mentions how strategic misrepresentation, wherein the benefits of a project are overestimated while the costs are underestimated, is used strategically to get megaprojects selected. This is framing as only the benefits of the projects are highlighted leading to the selection of the project. In terms of frame analysis by Goffman (1974), the natural frame is the unbiased selection criteria of the project,

while the social frame backed by proponents of the project focus on overestimating or strategically emphasizing the benefits and underestimating or strategically understating the costs incorporating their will to get the project selected. Due to this framing, the perception of the decision makers changes in favour of the project resulting in it getting selected. Salet (2007) notes how decision-making processes in these projects are framed in different ways such as framing of cognition, framing of alliances and framing of democratic processes to get these projects started. Gil and Lundrigan (2012) highlight how the 2012 London Olympics bid team morphed and framed the megaproject as an urban regeneration project for one of the most deprived areas in London to gain external stakeholder support. Chung et al. (2010) in their study on the Brisbane North South tunnel, highlight how the media is a powerful channel through which the Public Private Partnership (PPP) scheme is embraced or rejected by the public. They highlight that media was effective in framing the benefits of bringing the private sector into the project and it translated into positive public perceptions of the PPP scheme for the project. While these works on external stakeholders in infrastructure megaprojects focus on framing during the initial stages of the megaproject, the framing processes during the construction and operation phases of a megaproject are not studied. Also, the literature does not explore the different framing strategies that are in use to garner support from the external stakeholders.

There is a need for megaprojects to achieve legitimacy in the eyes of diverse external stakeholders such as the local community (Di Maddaloni and Davis, 2018). In the work by van den Ende & Van-Marrewijk (2019), they highlight the role of insufficient legitimation of the project in creating social unrest and community resistance. Thus, this study also aims to understand the effects of the use of framing and whether it creates legitimacy in the eyes of the external stakeholders. The following research questions aim to investigate the role of framing strategies during the construction and operation phases of a megaproject and their role in generating legitimacy for the project.

Research Questions – Framing theory

3. What framing strategies are used by megaprojects to manage external stakeholders during the construction and operation phases?
4. What are the effects of these framing strategies on the external stakeholders?

I plan to address these research questions by analysing the news media articles of a megaproject. While framing strategies explore how an issue is framed to the external stakeholders, I look at hegemonizing strategies anchored in governmentality theory (Foucault, 2007) to understand how megaprojects change actions of the project community.

3.4 GOVERNMENTALITY THEORY

Latent power works by shaping a subject's self to making them subjects of power (Lukes, 2005). In contrast to power in decision making where there is an implicit shaping of issues considered important or relevant as a result of their inclusion or exclusion from agenda, in latent power, there is a shaping of the subject's self or behaviour (Fleming and Spicer, 2007).

It is said that power can be most effective when it is least observable (Lukes, 2005) and hence this research relies on the theory of governmentality – a key construct in the literature on covert power (Milani, 2009). Governmentality fuses 'government' and 'mentality' and means, actively, governing through mentalities (Muller et al., 2014). Foucault defines governmentality as an 'ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics, that allow the exercise of this very specific albeit complex form of power' (Foucault, 1991).

3.4.1 Governance

Governmentality differs in meaning from the more familiar term, governance. Governance is a broad term defined as 'the sum of the many ways individuals and institutions, public and private, manage their common affairs' (Carlsson et al., 1995). While corporate governance is the system of financial control through the board of directors, the term governance has also been used relationally. Relational governance aims at influencing networks to create innovation, reciprocity, trust and self-organization, recommended by Gorod et al. (2018) for organizations that require

collective action, such as megaprojects (Gil, 2016). The concept of relational governance comes closer to the meaning of governmentality than the more common term, corporate governance, while not capturing its subtlety. Relational governance is oriented more to governing per se rather than rationalities that produce mentalities that create subjectivities that choose those forms of governing proffered.

Unlike governance, with its emphasis on policing prescribed forms, often legally framed, governmentality is an alternative to policing and is often referred to as self-policing or self-surveillance (Sewell, 1998). It is also conceptualized in terms of subjectification where the governed become subjects of the exercise of covert power (Fleming & Spicer, 2014). Governmentality can also be categorized as a soft power as it achieves outcomes through attraction rather than coercion or payment (Nye, 2008) similar to strange attractor concept in complexity theory (Hasse & Bekker, 2016). It is seen as the culmination of ‘the search for a technology of government that can address the recurrent complaint that authorities are governing too much’ (Rose et al., 2006). Through this neo-liberal form of governance, the personal ambitions of the governed become enmeshed with those of organizations and their top management teams. For the latter, the intent is managerial control; the former is designated as the targets of this governmentality, designed to create willing subjects.

3.4.2 Governmentality

Michel Foucault referred to discipline in prisons and schools as an instrument of power through which prisoners and students become self-governed (Foucault, 1977). Subsequently, he focused more closely on the processes of government, the art of government, looking at a broader range of strategies than those of the panopticon that he focused on in ‘Discipline and Punish’. To do so Foucault developed the concept of governmentality, particularly in his lectures at the Collège de France during 1977-1984.

Governmentality can be understood in various ways. For application in the context of megaprojects the most appropriate is a focus on the organized practices through which non-contractual subjects are governed. The focus is very much on the practical arts of ‘government’, conceived in the broad sense as management of a specific population through specific techniques

and strategies. Governmentality combines a focus on techniques embedded in specific rationalities that are oriented towards creating certain sorts of subject mentalities. Essentially, the objective is to generate liberal subjects whose compliance with governmentality is premised on their freedom to choose rather than their subordination. Those subject to the normative control of governmentality, at best, believe themselves to be free of extraneous power and free to choose, a subtle type of concord that has parallels with Gramsci's prison notes on hegemony, which discusses 'rule by consent' (Anderson, 1976) in which the end justifies the means (Machiavelli, 1882). Such freedoms, however, are socially constructed.

Focusing on the analytics of governmentality helps us understand how political processes work and how they include cultural processes of self-formation and subjectivity (Barnett et al., 2014). Governmentality is constructed through three processes, which Foucault (2007) describes as the core of governmentality. The first process involves creating taken for granted practices, drawing both from existing institutions and procedures as well as de novo reflections, calculations and tactics. Foucault (1997) emphasizes that these practices are not invented by the individuals, but are imposed upon by their culture, society and social group. The second process involves deploying knowledge via a power-knowledge nexus that includes the state and the learned professions. Foucault (1980) calls this knowledge, that is both the creator and creation of power. The third process involves developing 'technologies of the self' resulting, at best, in a changed personal identity of those governed. These technologies revolve around the question 'who we are?' (Foucault, 1982) and represents a broader epistemological shift characterized as being 'entrepreneurs of selves' (Foucault, 2010). Together, these three processes help us understand the ways in which governmentality operates (Mitchell, 2006).

3.4.3 Governmentality in Projects

Empirical governmentality studies problematized taken-for-granted systems which often appear natural and seem neutral (Lövbrand et al., 2009). Research on governmentality focuses on micro-practices and minor aspects of governance seen through a power perspective lens (Merlingen, 2011). The art of achieving governmentality involves the use of devices, including instruments, technologies and techniques, as forms of administrative powers and knowledge shaping everyday lives. Such instruments are frequently seemingly innocuous devices that

penetrate deep into the fabric of social life (Merlingen, 2011). Project-based organizations are temporary; thus, the key attribute of project organization governmentality is the rapid ability to develop a team of self-responsible and self-organizing people (Müller et al., 2014) blended from a larger number of organizations.

The successful use of governmentality will have positive impacts on outcomes at both the project and organizational level (Müller et al., 2017). In construction projects, Clegg et al. (2002) studied the practices of surveillance and control in alliance contracting and how they achieved governmentality within the project team. Subtle instruments were prominently displayed in the project headquarters, such as banners bearing images of the desired outcome of the project, slogans proclaiming team members to be guided by ‘whatever is best for the project,’ as well as stories of the project from media reports and notices of project-related social events were used. While Clegg et al. (2002) explore the practices of governmentality internally, within the project team, where the incentives of actors are interconnected through contractual obligations, this research explores how project teams use strategies in practice to infuse governmentality externally to the project team, within the larger stakeholder community. One such practice of governmentality, adopted from the sphere of consumption, is branding (Binkley, 2007). Specifically, this research aims to contribute to the discussion on community engagement practices in megaprojects by highlighting the subtle use of branding instruments to create governmentality effects that in turn allow for the management of project stakeholders.

3.4.4 Governmentality through Branding

A ‘brand’ is not limited to just a name, but it extends to a complex set of meanings, associations and experience which create emotional, relational and strategic elements in the minds of those perceiving and enacting dispositions towards brands (Aaker, 1996). Branding increasingly penetrates everyday life, ranging from business communications to interpersonal relationships (Lect, 2012). The use of diverse forms of branding to influence consumers has some similarity to governmentality practices: both make the exercise of power seem rational and natural (Lemke, 2002) - consumption of specific brands as a matter of brand loyalty is often a part of everyday rationality, as Marcuse (1964) outlined in an early critical account.

Branding techniques include various forms of organizational self-presentation and promotion (Scott, 2010), including product and corporate branding (Fan, 2010). While product branding is largely oriented to improving sales, corporate branding aims to enhance reputation and is an apt vehicle through which to study governmentality. The ultimate goal of branding is to enhance customers' brand loyalty (Shen & Bissell, 2013). There are many advantages of increased customer loyalty, such as customer's insensitivity to prices with the main game being an increase in company's profitability (Dawes, 2009) but branding can also, when successful, have a positive impact on employees by increasing job attraction (Dineen & Allen, 2016), enabling recruitment of a talented workforce (Tumasjan et al., 2016) and helping retain employees (Tumasjan et al., 2016).

There is a dearth of literature on branding in construction (mega)projects. Langford and Male (2008) argue that the marketing and promotional approaches embraced by companies in other sectors should be championed by construction companies. They claim that in the construction industry, branding of construction contractor companies is difficult compared to design companies, where the design companies' output is on view to the public. In commercial organizations, this direct communication through branding is invariably oriented to sales promotion; in construction companies it is more likely to be oriented towards specific stakeholder publics whose potential impact on the progress of a project is significant. Hence, branding in construction is much more targeted, which makes it an appropriate vehicle for governmentality.

In summary, as Clegg et al. (2002) indicate, while governmentality has been applied to the study of construction project organizations, it has not really been applied to understand how stakeholders in the project community are managed – an application gap in terms of Sandberg and Alvesson's (2011) framework. More specifically, the use of branding as a tool to shape governmentality is relatively neglected and under-theorized. This research seeks to understand how governmentality of a project network is sought through branding aimed at making the exercise of power seem rational and natural (Lemke, 2002). I attempt to use this lens to explore subtle and mundane branding strategies used to manage external stakeholders in the case of infrastructure megaprojects. I also investigate the effect of governmentality through branding on internal stakeholders, i.e., the project team and how their normative universe is shaped as they engage in strategies to manage external stakeholders, i.e., the project community.

Research Questions - Governmentality theory

5. How is hegemonizing through branding used to manage the megaproject community and the project team?
6. What are the effects of hegemonizing through branding on the project community and the project team?

I plan to address these research questions by analysing the social media discourses surrounding the project and the branding that they create. In doing so, this research intends to theorize at the intersection of governmentality, branding and social media by understanding how these constructs contribute to stakeholder management in megaprojects.

The above sections explore the research gaps pertaining to persuading strategies, framing strategies and hegemonizing strategies. How these strategies act together in a systemic way needs to be explored, for which the circuits of power theory (Clegg, 1989) is discussed.

3.5 CIRCUITS OF POWER THEORY

The exploratory study discussed in Chapter 2 highlights that strategies are related to one another and affect and shape each other. Power and strategy interact, and one leads to the other (Clegg & Kornberger, 2015). Strategy is defined by Freedman (2013) as the art of creating power. However, power occurs in multiple dimensions with different concepts and interpretations making it a ‘family resemblance’ concept wherein there is no single best definition of power (Haugaard, 2010). The definition of power changes depending upon the context of usage. Thus, strategy much like power can be a multi-dimensional concept. Supporting this, Clegg & Kornberger (2015) emphasize the difference between ‘strategy’ as noun, ‘strategizing’ as verb and ‘strategic’ as adjective. While anchoring strategies in the dimensions of power can help us better understand the interaction between strategy and power, anchoring strategies in the circuits of power (Clegg, 1989), which highlights the role of power in dictating episodic actions in a circuitry fashion, can help us understand the relation between strategies.

3.5.1 Circuits of Power theory

Power relations in practice are rarely static and are produced, reproduced and transformed through the everyday practices of agents (Bourdieu, 1977; Foucault, 1980). Power can be acquired, retained or lost (Anderson & Brion, 2014). The dynamic nature of power can be best understood through the circuits of power framework developed by Clegg (1989) who consider power similar to electricity, that circulates through social relations, working practices and techniques of discipline (see Clegg, 1989, p. 214 for the circuits of power model).

The model considers power as flowing through three dependent circuits integrated through Obligatory Passage Points (OPP). Obligatory passage points are yardsticks against which to measure the acceptability, appropriateness and legitimacy of actions (Callon, 1986). The first circuit, the episodic circuit, is based on the first dimension of power (Smith et al., 2010) where different social agents interact. The second circuit, the social integration circuit, focus on the rules of meaning and membership that have an impact on social relations. This circuit provides one with the resources and legitimation to exercise power over another (Backhouse et al., 2006; Heracleous & Barrett, 2001). The third circuit, the system integration circuit, relates to innovations in techniques of discipline and production that empower or disempower the agents (Vaara et al., 2005).

Haugaard (2010) uses the example of a traffic police officer who directs a car left or right as an exercise of episodic power. This power is conferred upon the officer by the state which gives the officer certain dispositions that define their power. This dispositional power, a part of the social integration circuit, exists outside of action, even when the officer is asleep and therefore has them outside the exercise of power. Haugaard notes that a police officer is considered very powerful because he/she has these dispositions when asleep and in everyday speech. However, these dispositions are not inherent to him and exist as a reflection of a particular system of power, in which such things as 'police officers' exist, which is part of the system integration circuit. Interventions in the circuit are introduced by exogenous factors, such as regulations, mimetic forces, or changes in the industry. These interventions bring about alterations either in the rules of practice or in the techniques of discipline. Power acts within the circuit through technologies of power (Foucault, 1977).

3.5.2 Technologies of Power

Technologies of power are those ‘technologies imbued with aspirations for the shaping of conduct in the hope of producing certain desired effects and averting certain undesired one’ (Rose, 1999). They are the mediums through which power acts. Since this study deals with external stakeholder management strategies, the technologies are the mediums through which the project interacts and communicates with the external stakeholders. Of these in the megaproject context, Information Communication Technologies (ICTs) provide the reach to engage and manage the large numbers of external stakeholders. Rather than being a single technology, ICT is an umbrella term which refers to a wide range of technology applications used to address diverse issues in the industry via the communication of information (Lubbe & Singh, 2009). Taking a sociomateriality lens this research demonstrates how ICTs are used for diverse unintended uses to manage external stakeholders.

It is useful to conceptualize ICTs as analogous to the construct of ‘materialities’ in the Information Systems’ literature (Robey et al., 2012). Organizing revolves around the interaction between people and materials, in the form of ICT’s in the external stakeholder management context. Orlikowski (2010) highlights three perspectives in which people and technology are studied in management research. She calls the first perspective ‘absent presence’ wherein she claims that technology is unacknowledged by organizational researchers and thereby not part of their study. Acknowledging this, Barad (2003) highlights that in organizational studies, the only thing that does not seem to matter anymore is ‘matter.’ Similarly, in the context of ICT, Orlikowski & Iacono (2001) calls for management scholars to seek ‘it’ in the IT (Information Technology) studies and consider it as seriously as its effects, context, and capabilities.

Unlike the first perspective, the materiality of technology is considered in the second perspective discussed by Orlikowski (2010). In the second perspective of technology as ‘exogenous force’, she highlights that some researchers treat technology as a powerful driver having determinate impacts on organizational life. She claims that in this perspective technology is seen as a ‘hardware’ which is separate from agencies but having direct impact on human behaviour. However, it is assumed that these technologies serve only the purposes for which they were designed. The technologies are autonomous, context-less, predictable, stable, and satisfying

the general use for which it was designed. Highlighting the contextual use of technology, Orlikowski and Iacono (2011) draws on the example of ‘being on the internet’ and records that it is different for users in China from that of users in United States.

Considering the situated nature of technology, Orlikowski (2010) highlights the third perspective ‘emergent process’ wherein technology is positioned as an emergent product of ongoing interactions of human choices, actions, social histories and institutional contexts. Here, she claims that social and material are entangled in multiple and dynamic ways in everyday life. This perspective is a shift away from abstract and general understanding of technology to an understanding grounded in historical and social contexts dictated by the people engaging with them. Barley (1986) in his study of the implementation of Computed Tomography (CT) scanning technology in two different hospitals notes that different users engage differently with the same technology. Similarly, Leonardi & Barley (2008) note that technologies in use are a product of negotiations, human agency, and personal interest. Thus, the social and technology are ontologically inseparable (Orlikowski & Scott, 2008). This entanglement of users and technology much above the agency of the humans and the features of the technology is called as sociomaterial assemblage (Wagner et al., 2011). Such sociomaterial entanglement dictates the meaning of the material in everyday practice (Suchman, 2007) and can produce intended as well as unintended outcomes, such as for practices it is not designed for (Orlikowski & Scott, 2008) in the form of affordances (Leonardi & Vaast, 2017). Technologies have the ability to be recontextualized across diverse social and cultural studies (Lamprou et al., 2014). Thus, identical technologies, such as ICT’s in our study, could trigger different dynamics and outcomes depending on the intricacies of the social context (Leonardi & Barley, 2010) in which megaprojects operate.

The consideration of socio-material perspective of ICT helps us understand the multiple and emergent uses of ICT for managing external stakeholders in megaprojects. Organizational power theories can help understand the diverse recontextualizations of ICT, along with the intended and unintended outcomes (Orlikowski & Scott, 2008) from their strategic use. Such an approach can help us make sense of different strategic action and hence afford a holistic understanding of ICT’s use in a strategic role, such as with visualizations, simulations, etc.

3.5.3 Circuits of Power in projects

In megaprojects, Flyvbjerg (1998) discusses how external stakeholders exercise power on the project. Flyvbjerg, using an ethnographic case study of the Aalborg city building project highlights how the media, police and business chamber work as a nexus to influence the project. Clegg (2008) on his appreciation of Flyvbjerg's work noted how although the play of power was very fluid in the Aalborg project, the underlying social integration seemed to mean that the business people were the prevailing winners in the many struggles. Even though the whole project was never rejected, specific parts of the project became areas for the many struggles and were won by these external stakeholders. Clegg (2008) notes that these small wins in specific episodes of power shifted the configuration of the overall circuitry through which power relations flowed. Thus, the relations of meaning and membership in the various locales were contested, reproduced or transformed. The outcome of the ambitious Aalborg project subsequent to these power dynamics were an increase in car traffic by 8 percent instead of reducing it, the presence of unconnected stretches of cycle paths in what was planned as integrated cycle paths, and an increase in the number of cycle fatalities by 40 percent. While the study on the Aalborg project explores how strategies are used by the external stakeholders to influence megaprojects, this research aims to explore how megaprojects use strategies to influence the external stakeholder and get work done.

There are tools and technologies in the form of ICTs that are used for management of external stakeholders in the literature. ICT in the form of simulations is used in participatory modelling (PM) for engaging with the external stakeholders (Hedelin et al., 2017). This interactive and iterative process is used to solve wicked problems through joint decision making with those negatively affected (Davies et al., 2015). Evers et al. (2016) mentions how such participatory modelling was used in flood risk management through the use of maps presented in Google Earth. The use of ICT in these roles fosters trust, transparency, interest and thereby acceptance of the proposed measures by the participating stakeholders (Gooch & Huitema, 2008). Walker et al. (2008) mentions how ICT is used strategically to visualize external stakeholders, understand their influence and create stakeholder maps. Such clear pictures of stakeholder influence patterns can help reduce the chances of project failure (Atkin & Skitmore, 2008). Mok et al. (2015) advocate the use of Social Network Analysis (SNA) to identify the stakeholders. They note that the use of SNA can help evaluate the relational ties between the stakeholders, and the resulting overall

network structure provides more rigor to the analysis of stakeholder impact. They also note that SNA enables the project team the ability to visualize complex and abstract stakeholder relationships at different project stages through the use of socio-grams. However, the diverse intended and unintended use of ICTs for managing external stakeholders is still unexplored. This research aims to explore the technologies that are in use for managing the external stakeholders from an organizational power perspective.

Theoretically, Clegg (1989) talks about how power is dynamic through the circuits of power. He notes the interventions in the form of exogenous factors that alter the rules of practice and the techniques of discipline. However, the role of strategies to create, use, and maintain power in the circuit are understudied and can be made explicit. The dimensions of power and the circuits of power can also be integrated through strategies. Adding on to this, the technologies of power in the form of ICTs can be explored. This research aims to address these theoretical gaps through the study of external stakeholder management strategies in megaprojects. Thus, I ask the following research questions,

Research Questions – Circuits of Power theory

7. How are multiple strategies used together to manage external stakeholders?
8. What are the technologies of power in the management of external stakeholders?

3.6 CONCLUDING REMARKS

This chapter reviews the literature on power theories and external stakeholder management strategies of persuading, framing and hegemonizing along with the relation between them. While there exists literature on the use of the persuading strategy in megaprojects in the form of adaptation, negotiations, fair process approach, etc., there is a lack of holistic understanding on how these strategies work in practice. By anchoring these persuading strategies in multiple tactics from the influence tactics framework and given that influence tactics are dependent on the resources from the bases of power framework, research questions pertaining to megaproject practice are sought viz. (1) what bundles of tactics characterize the emergent strategies used in

managing external stakeholders? and (2) how do these strategies relate to available power resources?

In framing strategies, while there is megaproject research on how megaprojects are framed to resonate with the community during the shaping stages and how re-framing happens in infrastructure projects, there is still a gap on how framing is practiced daily during the construction and operation of a megaproject. Adding on to this, the effects of the use of these framing strategies on the external stakeholders are also unexplored. So, through frame analysis theory wherein I contrast natural and social frames of each instances observed in managing external stakeholders, I ask (3) what framing strategies are used by megaprojects to manage external stakeholders during the construction and operation phase? and (4) what are the effects of these framing strategies on the external stakeholders?

In the hegemonizing strategy, megaproject literature talks about how governmentality is achieved to manage the project team in an alliance contract. However, the role of hegemonizing strategies to self-govern the external stakeholders are still unexplored along with the effects on them. The role of hegemonizing in external stakeholder management is explored through governmentality theory. The following questions guide the enquiry (5) How is hegemonizing through branding used to manage the megaproject community and the project team? and (6) What are the effects of hegemonizing through branding on the project community and the project team?

In the relation between strategies, research on megaprojects highlight how the external stakeholders use different strategies and how they come together to affect the decisions of the megaprojects. However, the relation between strategies employed by the megaproject is a gap which I seek to address through circuits of power theory. Hence, the following questions are proposed, (7) how are multiple strategies used together to manage external stakeholders? and (8) what are the technologies of power in the management of external stakeholders?

The research sub-objectives, research theories, research gaps, and research questions are summarized in Table 3.1 for reference. In the next chapter, the research methodology adopted to address these research questions will be discussed. It explores the research design adopted to

address the research objective and how data from various sources would help in answering the research questions.

Table 3.1: Summary of research sub-objectives, research theories, research gaps, and research questions

Research sub-objectives	Research theories	Research gaps	Research questions
Persuading strategies	Influence tactics framework (Yukl & Tracey, 1992); Bases of power framework (French & Raven, 1959)	Use of strategies as response to external stakeholders are recorded (Aaltonen & Sivonen, 2009; Chinyio & Akintoye, 2008; Yang et al., 2014), but lack framework to explain their use. The resources that enable strategies are also missing.	RQ1. What bundles of tactics characterize the emergent strategies used in managing external stakeholders? RQ2. How do these strategies relate to available power resources?
Framing strategies	Goffman (1974)	Framing strategies in megaprojects are recorded in the planning phase (Flyvbjerg, 2003; Salet, 2007; Gil and Lundrigan, 2012; Chung et al., 2010), but not in the construction and operation phases; There is a need for achieving legitimacy in the eyes of external stakeholders in the case of megaprojects (Di Maddaloni and Davis, 2018; van den Ende and Van-Marrewijk, 2019). The role of	RQ3. What framing strategies are used by megaprojects to manage external stakeholders during the construction and operation phases? RQ4. What are the effects of these framing strategies on the external stakeholders?

Research sub-objectives	Research theories	Research gaps	Research questions
		framing strategies in creating such effects needs to be explored.	
Hegemonizing strategies	Governmentality theory (Foucault, 2007)	Governmentality in project team is explored (Clegg et al., 2002), but its role in managing project community needs to be explored. The effects of hegemonizing through branding is not explored in project context.	RQ5. How is hegemonizing through branding used to manage the megaproject community and the project team? RQ6. What are the effects of hegemonizing through branding on the project community and the project team?
Relation between strategies	Circuits of power theory (Clegg, 1989)	The role of different circuits of power used by external stakeholders on the project is explored (Flyvbjerg, 1998), however, the vice versa is not explored. Tools used for identifying external stakeholders are discussed (Mok et al., 2015), however, a framework to explain the use of these tools is missing.	RQ7. How are multiple strategies used together to manage external stakeholders? RQ8. What are the technologies of power in the management of external stakeholders?

CHAPTER 4

RESEARCH METHODOLOGY

4.1 RESEARCH DESIGN

A research design is described by Yin (1984) as the logical sequence that links the data to be collected and the conclusions to be drawn to the initial questions of study. He colloquially describes a research design as a logical plan for getting from *here* to *there*, where *here* is the initial set of questions and *there* represents some of the conclusions about these questions. In between *here* and *there* may be found a number of major steps, including the collection and analysis of relevant data. Philliber et al. (1980) recommends a much broader definition of research design as the steps which deal with what questions to study, what data are relevant, what data to collect and how to analyse the results. The research design created for the research objectives stated is shown in Figure 4.1.

For addressing the research objectives, I traverse through multiple theories and data sources. My main research objective is to create a framework to explain external stakeholder management in megaprojects from an organizational power perspective. Two exploratory studies, anchored in the dimensions of power theory (Lukes, 2005) and discussed in Chapter 2 have helped break down the main research objective into four sub-objectives as shown in Figure 4.1. The power theories corresponding to each sub-objective are also highlighted in Figure 4.1. The review of these literatures on power theories and megaproject management strategies relating to these four sub-objectives have helped identify gaps in the literature, for which eight research questions were proposed, as discussed in Chapter 3.

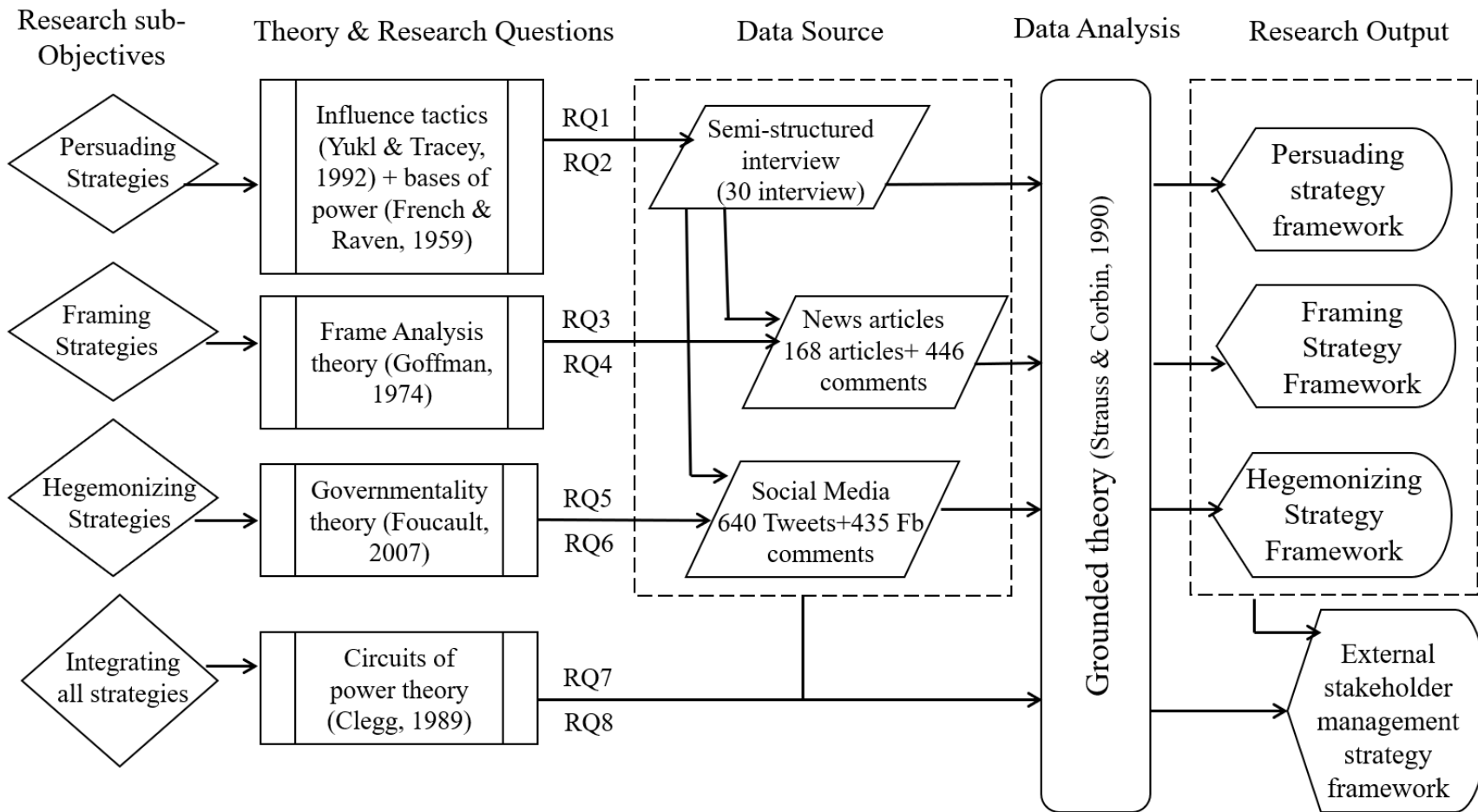


Figure 4.1: Research Design

The data for addressing these research questions were collected from semi-structured interviews with the project team, newspaper articles and social media posts. These data sources were chosen based on the take-aways of the exploratory study as discussed in Chapter 2. To the 19 semi-structured interviews conducted as part of the exploratory study, further 11 in-depth semi-structured interviews were conducted to explore the constructed derived from the exploratory study at greater depth. While I used these 30 semi-structured interviews to address the research questions relating to persuading strategies, I used a combination of these semi-structured interview data and news articles to address the research questions relating to the framing strategies. I used data from these two sources so as to triangulate the instances observed and validate the findings from each data source. I selected 166 news articles and 446 community comments from 1st January 2017 to 31st December 2017 for the study. The news articles would provide insights on the framing strategies employed while their comments would help understand the effects of the use of strategies. Study of such comments is required for framing strategies as it is a subtle strategy with its effects also being subtle in comparison to persuading strategies, which in contrast are an evident strategy and the changes made are highlighted by the project team itself. I used a combination of the semi-structured interview data and social media posts to address the research questions relating to the hegemonizing strategies. I selected 640 tweets from 2012 to 2017 and 435 Facebook comments from April 2017 to August 2017 for the study. The tweets would give insights on the hegemonizing strategies and the Facebook comments would help understand the effects of the use of these strategies. Data from all the sources in the form of semi-structured interviews, news media articles and social media articles can be used together to understand the relation between the strategies.

I analysed the data collected through grounded theory (Strauss & Corbin, 1990) as shown in Figure 4.1. Analysing the data collected would help me arrive at the persuading strategy framework, framing strategy framework and hegemonizing strategy framework. Integrating all these frameworks and also analysing all the data collected together, I was able to create a framework to explain external stakeholder management through a power-theoretic lens and thereby address the main research objective.

4.2 RESEARCH METHOD

The aim of this research is to identify the prevalent external stakeholder management strategies in infrastructure megaprojects and to understand the power dynamics surrounding them. For this, inductive research is apt as the researcher starts with participant's views, probes patterns and then finally creates theory – in this case to explain external stakeholder management strategies in an infrastructure megaproject. By using data from multiple sources, such as interview data, news articles and social media posts, this research uses qualitative methodologies in data collection and analysis. Qualitative methodologies enabled the researcher to better understand people's lived experiences and generate closer and empathetic understanding of these experiences in the context of analysis and dissemination (Pink et al., 2010; Pierce, 2008). These involved experiences of both the megaproject team and the external stakeholders in the case of this research.

For this study, an empirical case-based research methodology was adopted. I chose this qualitative research methodology, as it is useful to reveal new phenomena as well as capture their depth and richness (Ariño, et al., 2016). Qualitative research is defined by Strauss & Corbin (1998) as 'any type of research that produces findings not arrived at by statistical procedures or other means of quantification.' Qualitative research addresses questions about how experience is created and given meaning in social settings (Gephart, 2004). Qualitative research is descriptive and emphasizes the social construction of reality (Eisenhardt and Graebner, 2007). It focuses on how theory operates in particular contexts as it seeks to capture the insights on the qualitative characteristics of the environment.

Case study is a 'qualitative approach in which the investigator explores real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (observation, interview, audio-visual method, documents, etc.) and reports a case description and case themes' (Creswell, 2013). In case study research, the phenomenon under consideration, strategies to manage external stakeholders in this research, does not get isolated from its context, thereby enabling researchers to understand how these phenomena are influenced by organizational and environmental contexts (Yin, 1984). The case study method also allows researchers to learn from the state of the art and generate theories from practice (Benbasat et al., 1987). The case study 'allows investigators to retain the

holistic and meaningful characteristics of real-life events' (Yin, 2003) as it generates rich and thick descriptions of the study area. Case studies are also effective to capture complexity (Dyer & Wilkins, 1991), such as in this case with external stakeholder management in megaprojects. The focus of case studies is to answer the 'how' and 'why' questions (Yin, 2003) and hence is apt for this study on how external stakeholders are managed through strategies.

I chose a single case study method. Single cases in particular provide excellent opportunities to enhance contextual understanding because of their depth in data collection and analysis (Lundin & Steinthorsson, 2003; Flyvbjerg, 2006). Also, as noted by Ragin (1992) single case studies are not inferior to multiple case studies as even single case studies, especially in the case of megaprojects 'are multiple in most research efforts because ideas and evidence may be linked in many different ways.' That is, since these cases are investigated in detail, they have a compendium of mini-cases and therefore even one case can give sufficient insights for theorization. These mini-cases from a single case study are called stories (Eisenhardt & Bourgeois, 1988), micro-stories (Boje, 2001), vignettes (Stake, 2010), embedded case study (Mui & Sankaran, 2004), or even examples (Flyvbjerg, 2001), which are then analysed for theory building.

In this research, the mini-cases are collected from an infrastructure megaproject with an organizational power theoretical background. The researcher retained the reflexive awareness of how his work is informed by theory and self-consciously considered how theory and practice remain in dialogue throughout the research process (Pink et al., 2010).

4.3 THE CONTEXT AND CASE

I conducted a case study of the metro rail megaproject in India to understand the external stakeholder management strategies and their effects. The contextual setting and the case details are recorded below.

4.3.1 Context – India

India is expected to invest heavily in the infrastructure sector and multiple infrastructure projects are planned. For India to have a double-digit growth rate and to improve the social well-being of their citizens, these projects are inevitable. The need for infrastructure is emphasized by

Kelkar (2015) who claims that there are only two or three decades left for the country to transit from a low-income country to a high-income and developed country by overcoming the 'middle-income trap,' where a middle-income country fails to transit to a high-income country due to rising costs and declining competitiveness (Griffith, 2011). To avoid this trap, the present government is planning a 1.5 Trillion USD infrastructure investment in India for the next 10 years (PTI, 2016). Thus, India looks forward to big solutions for her big needs in infrastructure and hence many of these planned projects are 'megaprojects'. At present in India, big infrastructure investments are in progress in multiple sectors through megaprojects such as the Western and Eastern Dedicated Freight corridors, Delhi-Mumbai industrial corridor (DMIC), Gujarat International Finance Tec-City (GIFT), Diamond Quadrilateral, metro rail projects in different cities, etc.

Of these diverse infrastructural megaprojects, the need for public transportation infrastructure solutions is evident throughout India because of the growing population and the migration of people from rural to urban areas. As of 2014, eight cities in India have a population greater than 5 million (City population, 2014). As a general thumb rule, a population of 1 or 2 million in a city requires 50-60% of its population to be transported through public transport. This percentage share should reach 75% as the city reaches the 5 million population mark (Sekar & Karthigeyan, 2009). Predictions show that by 2030, 68 cities in India will have a population greater than 1 million and six cities will have a population greater than 10 million (McKinsey, 2010). In India, even with cities where the population is currently close to 10 million, less than 40% regularly use public transportation (Selvaraj, 2012). Thus, the state of infrastructure in India is far from the recommended figures. To narrow this gap, the current policy thrust is towards mega-transportation infrastructure projects for these megacities.

There are at present 160 metro rail systems covering a length of approximately 10,000 km throughout the world, found mainly in Europe and North America. Their existence there is an indirect reflection of the development status of the region (Sharma et al., 2013). India too embarked on this journey to develop its region through metro rail projects as early as 1972 with the Kolkata Metro and in 1998 with the Delhi Metro. Following the success of the Delhi Metro, multiple metro projects began to be taken up throughout the country (Asokan, 2015).

A majority of the infrastructure projects in India are significantly delayed due to land acquisition issues (Sawhney et al., 2014; Iyer & Sagheer, 2009; Thomas et al., 2003). Supporting this, Sankaran (2018) notes that land acquisition process in India is a tedious process administered by local government authorities who are not known for their speedy action. The process is very time consuming and can take up to three years, even when resistance is absent (Mahalingam & Vyas, 2011). Land acquisition policy in India, as in China, advocates ‘reasonable compensation’ for direct losses, meaning that only the value of the land will be compensated in contrast to the ‘value to the owner’ principle followed in Australia and Hongkong and the ‘just compensation’ policy followed in the USA and UK (refer Mahalingam & Vyas, 2011 for a comparison of land acquisition in India with other countries).

Bureaucratic inertia (Sawhney et al., 2014), permit risks (Iyer & Sagheer, 2009) and the lack of support (Thomas et al., 2003) are also stressed as critical factors for the delay in infrastructure projects in India. Regarding project sanctions in India, Gopalan & Venkataraman (2015) note that the process can take several years as it requires clearance from forty departments across the national and sub-national levels which includes the environment, revenue and water departments, fire, the traffic police and so on. They note that the situation is further aggravated due to the lack of transparent and clear regulation. Delays due to utility relocation are also significant, often observed to be in the range of 5-52 months in a study of 11 infrastructure projects in India (Vilventhan & Kalidindi, 2018). The critical factors causing these delays are slow response from utility agencies, difficulty in identification of the nature and location of underground utilities often due to lack of information, as well as conflict between agencies (Vilventhan & Kalidindi, 2016). Thus, the construction of a new project in collaboration with other infrastructure services is a complex process which requires multiple organizations to collaborate (Van-Marrewijk, 2018). Based on this context, I limit the research focus of external stakeholders to three main categories.

The three broad categories of external stakeholders considered for this in-depth study are,

1. Stakeholders in Land acquisition

The land acquisitions for an infrastructure megaproject are for two purposes – to construct the infrastructure or to provide working space to facilitate construction. For both these

purposes, when land acquisition is attempted, the landholders object. These lands have to be acquired from multiple landowners involving both private and government owners. The private owners include sensitive owners such as religious groups too. In some cases, the land was held and occupied legally and in other cases the land might be legally owned by an entity but occupied illegally by a section of the population squatting on that land – not an uncommon phenomenon in India. Explaining this, Gopalan & Venkataraman (2015) note that large portions of land in India are owned by public entities such as railways, ports, and defence authorities which lend themselves to proliferation of slums and squatter settlements as the authorities are often unable to monitor their holdings.

2. Stakeholders in services

The megaproject was situated within an existing urban system and during its construction and operation many existing services would be adversely affected. The agencies responsible for these services, not surprisingly, put the interests of their organizations before those of the megaproject. A network of services such as electricity, drinking water, sewerage, telecommunication etc., are required for the welfare of the population in the city and disruption to any of these affect the business and livelihood of many residents. Other infrastructure services include airports, railways, rapid transport system, etc., which too the megaproject disrupts. Most of the construction work for the stations and viaduct for the elevated stretch were located beside the highway, which was also the site of all underground utilities, all of whom represent external stakeholders.

3. Project Community

These are stakeholders who are active in the area surrounding the project. They are inconvenienced due to the construction activities of the project and are also the end-users of the project when the project becomes operational. These are also stakeholders who fund the project often as tax-payers. These stakeholders also comprise of eligible voters who have the power to change the government in the case of bad projects. Many infrastructure projects are victims to the social and political disturbances and have been performing poorly or even called off, such as the East-West link road in Melbourne, where the project

to be cancelled at the expense of \$1.1 billion due to public opposition and a subsequent change in government (Edwards, 2015). A recent example of community opposition in India is the statue of unity which resulted in public questioning the government on the rationale of spending tax-payer's INR 2,989 crore (418 million USD) on a statue when there is a need for development projects in the country (IndiaSpend, 2018).

The external stakeholders considered for this in-depth study in based on stakeholders relevant to the Indian context and are consolidated in Figure 4.2.

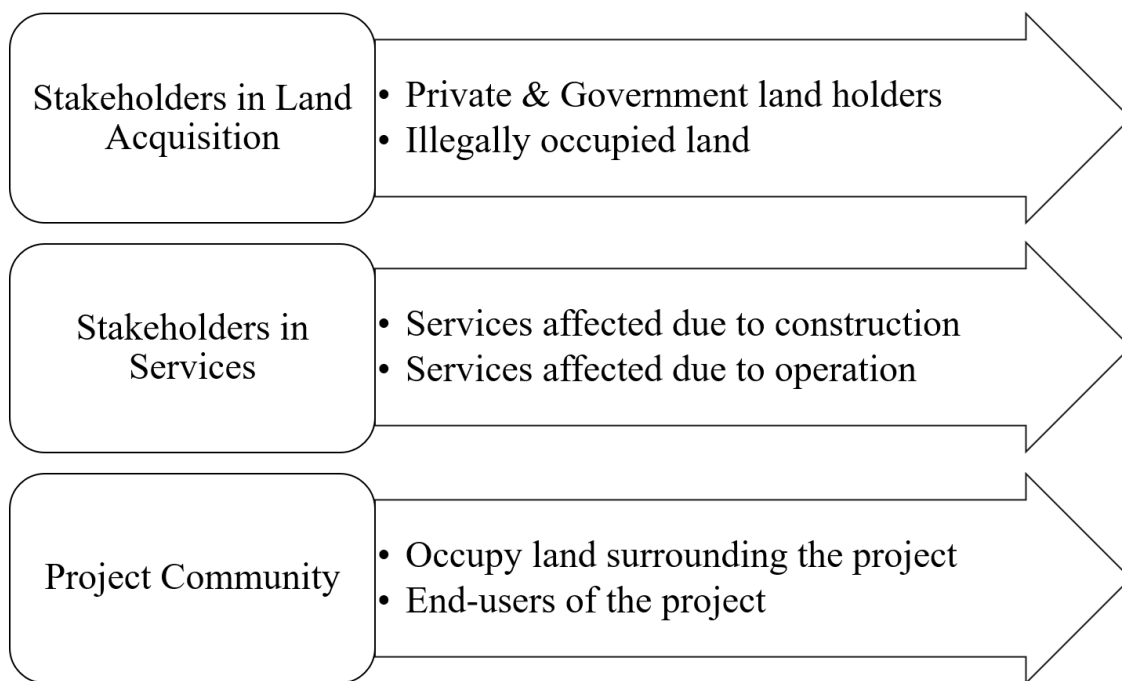


Figure 4.2: External stakeholders considered for the in-depth study

Even though there are other external stakeholders such as media, courts, non-governmental organizations and interest groups in any megaproject, this study is limited to the above external stakeholders as they are more the predominant ones in the Indian context as argued above. Adding on to this, the data collected regarding these stakeholders can be validated on the literature available from the Indian context.

4.3.2 Case – Metro rail megaproject

To answer the research questions and create a framework to explain external stakeholder management strategies, I studied an infrastructure megaproject in India. The city which houses the metro rail is one of the largest metropolitan city in India with a population of around 10 million people. The city has been growing rapidly and the traffic volumes on the road turn chaotic during the peak hours of the day. This is because the use of public transportation within the city does not match with the growth of population in the city due to the migration of people from rural to urban areas.

The city realized that it needed a metro rail transport network to solve the issues of the existing public transportation system, to accommodate the exponential growth of population fuelled by massive urban migration to the city and to achieve the city's intended economic growth. With an aim to reduce pollution and a vision of 'moving people, sustaining growth' the metro rail organization, a quasi-government organization, was incorporated in 2007 as a Joint Venture between Government of India and Government of the state with equal equity holding. In the same year, the detailed project report (DPR) for the project was also completed. Subsequently funding was approved in 2008 and construction activities commenced in 2009. Multiple small sections of the project were completed and opened to the public from 2015 to present, however the whole phase 1 of the project is not yet complete during the study period. The timeline of the project is shown in Table 4.1

Table 4.1: Timeline of the metro rail project

Year	Event
2007	Detailed Project Report (DPR) Prepared
2007	Joint Venture between Government of India and Government of the state
2008	Funding for project approved
2009	Construction activities commenced
2015	Multiple sections of the project were commissioned

The phase 1 of the metro rail project considered for this study has a planned cost of USD 2.2 billion and thus satisfies the quantitative requirement of being a megaproject (cost greater than USD 1 billion). The project was proposed as the answer to the traffic demands of a rapidly growing city. There was rapid urbanization in the city, which resulted in an increase in privately owned vehicles, road congestion and consequent air quality problems. Thus, the project was conceived with multiple objectives, such as boosting the economic growth of the city and reducing pollution. The project was also aimed at providing interconnectivity with existing public networks including buses, sub-urban trains and Mass Rapid Transit System (MRTS), and an eco-friendly alternative to existing modes of transport. The phase 1 of the project consisted of two corridors of a total length of 45.1 kilometres which had both elevated and underground sections with the majority (55%) being underground.

I chose this project for the in-depth study because it had many characteristics that can help theorize external stakeholder management strategies from an organizational power perspective as highlighted in the exploratory study in Chapter 2 and summarized below.

1. Evidence of external stakeholders

The elevated stretches in this project implied that there are multiple possibilities for interactions with the external stakeholders for land acquisition where lands are permanently acquired for depots, stations, running sections, ramps, car parking space, ventilation shafts, property development and power stations from both the private and government land holders. The community will also be concerned with the vibration and building cracks frequently reported during underground construction of metro rail projects. In the case of this project, even though the underground metro rail construction is roughly three folds costlier than the elevated, the planners decided to go for more of underground sections to safeguard the monuments, maintain the green cover of the city and reduce problems of land acquisition. There will also be numerous interactions with the project community as they are affected because of the noise, pollution and traffic diversions frequently found in metro rail construction projects. One of the managers of the metro rail project quoted,

“There is a lot displacement of traffic, so people are finding it very difficult. I myself have found it very difficult because I am also a two-wheeler rider”

The project would also cut across multiple utilities including sewers, water mains, telecommunication cables, electricity cables and so on and the megaproject construction would require these utilities to be uninterrupted during the construction.

2. Use of strategies to manage external stakeholders

The project team was proactive and wanted to complete the project often employing strategies to manage external stakeholders. An example of the use of such strategies as explained by a manager of the project during the exploratory study is quoted below,

“We generally do not inform people of tunnelling ... it will create panic ... people didn't know of our tunnels being dug ... we tried to make sure that as much as possible we will remain silent”

Another reason for choosing this project was the evidence of the dimensions of power used for managing external stakeholders. The exploratory study showed that the project team employed strategies that spread across all the three dimensions of power (Lukes, 2005) in the form of persuading, framing and hegemonizing strategies. Thus because of the fit suggested by exploratory study, the metro rail project in India has significant scope for an in-depth study to theorize at the intersection of external stakeholder management, strategies and organizational power.

3. Availability of data

As described in the exploratory study, covert strategies in the form of framing and hegemonizing cannot be understood through verbal accounts of events by participants. The respondents are unable to understand these subtle strategies and are unable to highlight them during the semi-structured interviews. However, observations of news articles and social media can help understand these strategies. Evidences of such covert strategies used

to manage external stakeholders are supported as the public relations officer of the project said,

“The only way to make people understand about the project is through media and awareness programs ... We are actually very active on social media network sites, Facebook page, Twitter page ... We are planning to open up a snap chat”

The metro rail project operated a social media page for the last five years and hence have accumulated a repository of social media data which can be analysed. Similarly, since the project is in construction from 2009 and in operation from 2015, it has accumulated plenty of news articles which can be analysed.

In the next section, I describe how the data was collected from the metro rail megaproject.

4.4 DATA COLLECTION

Data were collected from semi-structured interviews, news media articles and social media posts. While semi-structured interview enabled the study of the overt persuading strategies, news media articles and social media enabled the study of the covert framing strategies and hegemonizing strategies through observations of these naturally occurring data.

Power in the covert dimensions such as framing and hegemonizing would not come out through the semi-structured interviews. This is because the respondents would not have paid attention to these covert practices and hence would not be able to highlight them in the interviews. Rather, observation of the daily routines by researchers who have the theoretical sensitivity can help capture these covert practices. Such observations which would provide direct experiential and observational access to insider's world of meanings (Ritchie & Lewis, 2003). In this research, naturalistic data in the form of news articles and social media posts are collected to understand the covert practices the project used to manage external stakeholders. Miles & Huberman (1994) note that through using such naturalistic data the researcher would be able to capture data on subtle parameters such as perceptions from the inside through a process of deep attentiveness to the topics under discussion. They note that through these data, the researcher can gain a systematic, encompassing and integrated overview of the context under study.

The data collection process for the semi-structured interviews, news media articles and social media posts are described in detail below.

4.4.1 Semi-structured interviews

Here, the data was collected mainly through face-to-face semi-structured interviews (Spradley, 1979) with project team members. Given the primary interest in the strategies used by the project team, I interviewed members of the project team who enacted them. The research required insights concerning the external stakeholders encountered, the interests and demands these stakeholders posed for the project, and the resources and strategies used by the project team to manage the stakeholders.

Retrospective data was collected on the phase which had been completed and inaugurated six months prior to fieldwork, which enabled us to talk to the project team, still in situ carrying out some of the finishing items. Thus, the participants could recall several recent, specific incidents relating to their experience with managing external stakeholders both in the construction and operation phase. A sample of the questions asked during the semi-structured interviews is recorded in Appendix-A.

The first phase of interview data collection was conducted in 2016-2017. I conducted a total of 19 interviews with 16 members of the project team including the project organization, management consultants and contractor organizations which together added up to 23 hours of interview data as part of the exploratory study. I strengthened this with a further 11 interviews in 2018. These interviews were more in-depth and pursued detailed insights on constructs that were derived from the exploratory study, i.e., persuading strategies, framing strategies, hegemonizing strategies and the relation between these strategies. However, these interviews were shorter in duration as I was now able to ask specific questions relating to external stakeholder management in megaprojects based on the insights generated from the initial set of interviews. Such in-depth interviews will benefit the systematic collection of people's experience, interpretation and feelings without losing flexibility and spontaneity (Ritchie & Lewis, 2003). The total list of 30 interviews conducted in the metro rail case is detailed in Table 4.2. Together the interviews added up to 29 hours of data.

Table 4.2: Details of interviews conducted in the metro rail project

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
1	Metro rail organization, Elevated section, Deputy General Manager	26 th October 2016	3 hr 15 minutes
2	Metro rail organization, Design Head, Deputy General Manager	10 th November 2016	58 minutes
3	Metro rail Organization, Tracks Head, General Manager	11 th November 2016	57 minutes
4	Metro rail Organization, Elevated section, General Manager	18 th November 2016	1 hr 45 minutes
5	Metro rail organization, Elevated section, Deputy General Manager	21 st November 2016	1 hr 46 minutes
6	Metro rail Organization, Elevated section, General Manager	21 st November 2016	53 minutes
7	Metro rail Organization, Airport stretch, Deputy General Manager	25 th November 2016	1 hr 10 minutes
8	Metro rail Organization, Tracks, Manager	9 th December 2016	1 hr 27 minutes
9	General Consultant, Deputy General Manager	31 st December 2016	55 minutes
10	Metro rail Organization, Airport stretch, Assistant Manager	4 th January 2017	1 hr 5 minutes
11	Contractor, underground stretch, Deputy General Manager	5 th January 2017	45 minutes
12	Metro rail Organization, Human Resource Head, General Manager	10 th January 2017	1 hr 7 minutes
13	Metro rail Organization, Tracks, Assistant Manager	11 th January 2017	50 minutes

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
14	Metro rail Organization, Public Relations, Manager	11 th January 2017	1 hr 13 minutes
15	Metro rail Organization, Airport stretch, Manager	12 th January 2017	56 minutes
16	Contractor, utility shifting, Manager	18 th January 2017	1 hr 4 minutes
17	General Consultant, Deputy General Manager	19 th January 2017	1 hr 10 minutes
18	Metro rail Organization, Ex-Managing Director	1 st March 2017	46 minutes
19	Contractor, underground stretch, Project Manager	6 th March 2017	55 minutes
20	Tunneling contractor, Deputy General Manager	30 th August 2018	51 minutes
21	Metro rail Organization, Assistant Manager of Depot under construction	15 th September 2018	32 minutes
22	Metro rail Organization, Assistant Manager of Depot under construction	16 th September 2018	18 minutes
23	Assistant manager of underground metro rail works Contractor	18 th September 2018	35 minutes
24	Manager, Underground metro rail works Contractor	18 th September 2018	30 minutes
25	Underground metro rail works contractor, Assistant manager	18 th September 2018	20 minutes
26	Heating ventilation and Air conditioning (HVAC) contractor, Assistant manager	19 th September 2018	20 minutes

Sl. No	Interviewee organization and designation	Date of interview	Duration of interview
27	Heating ventilation and Air conditioning (HVAC) contractor, manager	19 th September 2018	25 minutes
28	Metro rail Organization, underground stretches, Deputy General manager	20 th September 2018	31 minutes
29	Mechanical Electrical Plumbing (MEP) contractor, underground stretch, Manager	21 st September 2018	33 minutes
30	Underground metro rail works contractor, Planning Engineer	21 st September 2018	22 minutes

I first met the Director of Projects in the metro rail organization who supported this research. The initial set of participants in the interview were based on the recommendation of the director of projects. The director asked his subordinates to give us some interviews during their free time. The researcher followed up with these participants through phone calls and set interview times according to the convenience of the participant. After the interview, the researcher would ask the participant for new contacts of participants who would be willing to take up a similar interview. Thus, a snowballing approach wherein the earlier participants suggested the names of new research participants was followed in this study. The researcher would contact the new person and ask them whether they would like to be interviewed. If they agree, interview times would be set up according to their convenience.

Table 4.3: Organizations from the project team interviewed

Name of Organization	No. of interviews
Metro rail organization	19
Main Contractor (multiple organizations)	5
Specialized contractors (multiple organizations)	4
Consultants	2
Total interviews	30

Another approach used for reaching out to the participants was to look at researcher’s personal and colleagues’ network of contacts - those who worked as part of the project team in the metro rail project. A similar snowballing approach was used for getting more participants from these networks too. The participants were assured that the anonymity of the project and the participants were guaranteed, and that under no circumstances would their personal details be disclosed. The profiles of the interview respondents are given in Table 4.3.

The participants varied from the top management team of the project such as General Managers, Deputy General Managers and Managers to the lower management such as technicians and site engineers. Whenever the project team cited challenges, I asked for specific vignettes from the project to anchor and triangulate instances with other respondents. These examples of organizational storytelling tap into deep experiences of project life as a source of scientific development as Flyvbjerg (2006) notes. I conducted a second round of interviews with three participants and compared comments made by various respondents on a given issue that emerged as the locus of the storytelling, to increase internal consistency and validity of the data (Yin, 1984).

4.4.2 News media articles

The project communicated to external stakeholders through multiple mediums such as community interactions, press releases, news articles and social media posts. I chose to study the news articles as it has a wider reach, gives naturally occurring data, and enables theorizing the

framing strategies employed for managing external stakeholders. These are discussed in detail below.

A megaproject due to its qualitative characteristics such as being costly, captivating, colossal and controversial, generates a vast amount of media coverage which would make such a study on news articles feasible. This extensive media coverage on megaprojects is supported in the works of Strauch et al. (2015) and Van-Marrewijk et al. (2008). Chung et al. (2010) records the presence of a dedicated media relation unit in the Brisbane North-South Bypass Tunnel to maintain an open dialogue with the public about the progress of the project through the media. In their research, they highlight how the organization 'Transurban' devoted substantial human resources to communicate the benefits of the project to the media, who in turn communicated these to the community. Van-Marrewijk et al. (2008) highlights that the media is interested in megaprojects because of their enormous budgets and their considerable social impact.

The study of news articles also has the added benefit of being naturally occurring data as I tried to make sense of the original text as the actors wrote it (Whittle et al., 2008) as opposed to their recollection and researcher's question bias issues observed in the data collected through interviews. The news coverage of the megaproject included positive press such as milestones achieved, neutral press such as contract awards, and negative press such as accidents and delays.

News media has the power to influence the public perception of an event through applying different frames (Clemente & Gabbioneta, 2017). Thus, a study of news articles meets this research's interest of exploring framing strategies and their effects. Hallahan (2008) notes that the important application of strategic framing is how stories about controversies and disputes are portrayed in the media. Due to this, framing has turned into a buzzword in mass communication research (Vliegenthart & Van Zoonen, 2011). While the news articles were studied for the framing strategies, the public comments to these articles were studied for the framing effects.

For collecting the news articles, I relied on Google news as it is one of the major aggregators of news on the web (Bandari et al., 2012). I chose Google news as they considered all the news articles in contrast to other news aggregators such as LexisNexis which missed a lot of articles from major newspapers (Weaver & Bimber, 2008). With the use of the news aggregator, I was

able to study news related to the metro rail organization from all daily newspapers predominant in the area and thereby reduce the bias of studying a single newspaper agency. Even though Google news omitted newspapers that are published in local languages, I found their selection adequate as it included all the English dailies. This is because the city in which the metro is built is one of the major English-speaking cities in India. After India obtained independence from the British in 1947, the use of English has continued to grow not only in her educational institutions but also in her commerce and mass media (Parameswaran, 1999).

I opted to study all the news articles which contained the name of the metro rail project from 1st January 2017 to 31st December 2017. This period was chosen as even though the construction of the project started in 2009, the operation started only in 2015. In 2017 around half of the stretch was under operation with the other half under construction. Hence, this period is apt for studying the framing strategies employed by the project team on the events of the construction and operation phase of the metro rail simultaneously as required by the research question. The search result of this period showed 176 news articles during the period as on 29th Oct 2018. Then, I manually filtered the news articles and omitted 10 articles as they were not directly related to the metro rail project. Thus, I selected 166 news articles which had 446 public comments for the study. The news media agency, date of publishing, title and number of user comments of each news articles is recorded in Appendix-B for reference. The news articles selected comprised of articles from Indian newspaper agencies such as Times of India, The Hindu, New Indian Express, The Hindu Business Line, Deccan Chronicle, etc. The number of articles and comments from these newspapers are consolidated in Table 4.4.

Table 4.4: Number of articles selected from each newspaper

Newspaper agency	Number of articles selected	Number of comments
Times of India	68	320
The Hindu	55	120
New Indian Express	14	0
The Hindu Business Line	7	6
Deccan Chronicle	5	0
Others (with number of articles less than 3 each)	17	0
Total	166	446

In the news articles, I looked for statements from the metro rail organization’s officials. This is because I was looking at how the megaproject communicates strategically and not the title of the news article or the page-wise placement of the story in the newspaper, as all of these would require significant power over the media to influence media’s frame production (Carragee & Roefs, 2004). Thus, I looked at how the metro rail organization’s officials framed the event and not how the media representative portrayed it.

I also looked at all the comments on news articles that are generated from the users. These comments allow the news readers to submit their views on the published news (Hermida & Thurman, 2008). Even though all the news articles I studied had provision to submit comments through a form positioned below the article, not all of them had user engagement. Also, I noted that the comments on one news article were not restricted to the contents of that article alone but to articles before that too.

4.4.3 Social media posts

To understand the hegemonizing practices of governmentality through branding, I sought to capture and content analyse discourses engaged in by the megaproject with the community. Discourses are a powerful tool in the study of governmentality as subjects are governed both through and by socially constructed vocabularies, grammars and rationalities (Prince et al. 2006).

There are multiple communication instruments that the megaproject uses to communicate with the community, such as press briefings, direct interaction and social media networking.

The social media interactions in the current context was used to summarize interaction efforts in other media. There are posts of press briefings, public meetings, community events and information regarding annual reports to be found in social media interactions. Social media interactions are also more frequent than other media, sometimes occurring multiple times on a given day. They act as giant word-of-mouth machines by catalysing and accelerating the distribution of information (Gallaughner & Ransbotham, 2010). Also, social media data has been treated as a valuable resource for research into customer sentiments, opinions and relationships (Mostafa, 2013).

This research aims to explore practices of branding as instruments of governmentality in the metro rail megaproject and the governmentality effects of these techniques on the project team and the project community by looking at social media discourses. For branding, organizations are no longer confined to traditional advertising, publicity, or endorsements and leverage the power of internet through social media (Geurin & Burch, 2017; Sivertzen et al., 2013). By using social media, organizations engage with consumers and influence consumer perceptions of the brand (Brodie et al., 2013). Social media also enhances the bond between the consumer and the organization by using user-generated content to achieve brand goals (Geurin & Burch, 2017); thus, social media creates opportunities for organizations to engage publics directly.

The number of users in social media are increasing as people turn to it for entertainment, news, information, socializing, self-status seeking (Park et al., 2009) and maintaining friendships. The effect of social media in creating gradual political change, animating social movements (Ghobadi and Clegg, 2015) and sometimes even toppling governments, is accepted in the literature (Shirky, 2011). Social media are now a significant tool of governmentality, as Marwick (2013) argues. While she looks at the effects of social media in governing the body and appearance, I am focused on the ways in which it is used to govern stakeholder publics. I look at the hegemonizing effects of branding using social media as an extension of businesses' innovative use of social media (Kaplan & Haenlein, 2010).

The metro rail organization's public relations team maintained social media accounts on websites such as Facebook, Twitter, Instagram and YouTube. The posts on Facebook and Twitter were similar and often the same post echoed across both media. Twitter offered a better medium to develop an initial set of codes related to the branding efforts because each post on Twitter was limited to 140 characters and hence was crisp and easy to code as it contained only one message. While Facebook allows more active user participation, Twitter provides concise updates and noteworthy information (He et al. 2013). For this reason, I used Twitter to capture the interactions of the project to the community and Facebook for understanding community's response.

The official Twitter page of the project organization had 5,137 followers and the official Facebook page had 240,954 followers as of 3rd October 2017. Kaplan & Haenlein (2010) note that social media is largely used by younger age groups who have substantial technical knowledge and digital familiarity as well as a willingness to engage online. Since the metro rail project is located in an urban setting with an increasing middle-class population, the 'income divide' in the representations received is not so significant: the target stakeholders were the digitally aware rather than the digitally excluded.

The Twitter page had 641 tweets from April 2012 (date of first posting) to August 2017. All of the tweets were in English except one which was a New Year greeting in regional language and was not considered necessary to code. Thus, a total of 640 tweets from the official Twitter page were considered for the content analysis. While the frequency of tweets varied, the project organization consistently tweeted every month. The construction activities of the metro rail project are still ongoing even though operation of a completed phase of the project started in June 2015. Since these tweets did not change significantly with the start of operations, it indicates that these continued to be aimed at the construction phase of the project to build support for construction activities.

This research uses Facebook data for understanding the effect of hegemonizing instruments on the project community. The Facebook posts act as a discussion forum with users' comments and debates available for each post concerning the project. 56 Facebook posts by the metro rail organization spread across four months from May 2017 to August 2017 received a total of 435 comments from the project community which were analysed – to capture the impact of

hegemonizing on the community. Thus, the average response rate was 8.1 community comments per metro rail organization posts. So, the data analysed to reach theoretical saturation were comparable at 640 project team posts vs 435 community comment posts. I do acknowledge that all comments were not positive and there were some dissenting voices but since they were few and did not add to the construct of governmentality but resistance to it, which is a separate topic, they are not discussed in this thesis.

The social media source, data and their time duration are consolidated in Table 4.5.

Table 4.5: Social media data considered for the study

Social media source	Data period	Data duration	Quantity of data
Twitter	April 2012 to August 2017	Five years	640 tweets
Facebook	May 2017 to August 2017	Four months	435 comments

Other than the three data sources mentioned above – semi-structured interviews, news media articles and social media posts, other project related documents and agreements were studied where available. These included the feasibility report of the project, the metro rail organization website, etc. These data sources helped triangulate the instances generated from the semi-structured interviews, news media articles and social media data.

4.5 DATA ANALYSIS

The data analysis includes ways to interpret or make sense of data. Frost & Stablein (1992) highlight that interpreting data is distinct from presenting data or summarizing data. They claim that presenting or summarizing data represents a mechanical process of recording and playing back the data and does not do justice to the effort and creativity required for researchers employing qualitative research. In this research, I used a mix of grounded theory and qualitative content analysis to interpret the data collected from interviews, news articles and social media posts.

4.5.1 Grounded theory

The aim of data analysis is to create a theory to explain external stakeholder management strategies in infrastructure megaprojects. A theory is defined as something that makes sense of a phenomenon by classifying events and attributes into groupings or variables. It organizes variables into systematic relationships that help predict and control the occurrence of the phenomenon (Dey, 1999). These relationships between variables by which the researcher can predict the occurrence of an event are called propositions. One of the most suggested methods to develop theory from the data collected is grounded theory.

Grounded theory was developed by Glaser & Strauss (1967) in their work on the ‘Discovery of Grounded theory’. They believed that theory could emerge from qualitative data analysis and be grounded in the data. Grounded theory can be used to ‘generate, identify and trace the phenomenon’s major concepts, which together constitute its theoretical framework’ (Jabareen, 2009). This approach focuses on the inductive phase of the research cycle by generating theory from natural situations (Strauss & Corbin, 1990). Grounded theory is apt for areas where a concept is not well developed or where the relationships between concepts are poorly understood, or poorly defined. In these situations, scholars can focus on natural situations and generate theory that is grounded in that area of study. Also, grounded theory is less prescriptive and more flexible to meet the specific needs of the research situation.

Grounded theory uses an intensive, open-ended and iterative process in which data collection, data analysis through coding and theory building through memo-writing are carried out simultaneously (Groat & Wang, 2002). The primary purpose of grounded theory is to discover constructs and their relationships, strategies and the relation between them in this research and not to judge which of these constructs are important, what their properties are, or how they vary dimensionally (Strauss & Corbin, 1998). The applicability of grounded theory to generate robust propositions and build theory is well acknowledged in the literature (Davis and Marquis, 2005; Shepherd and Suddaby, 2017).

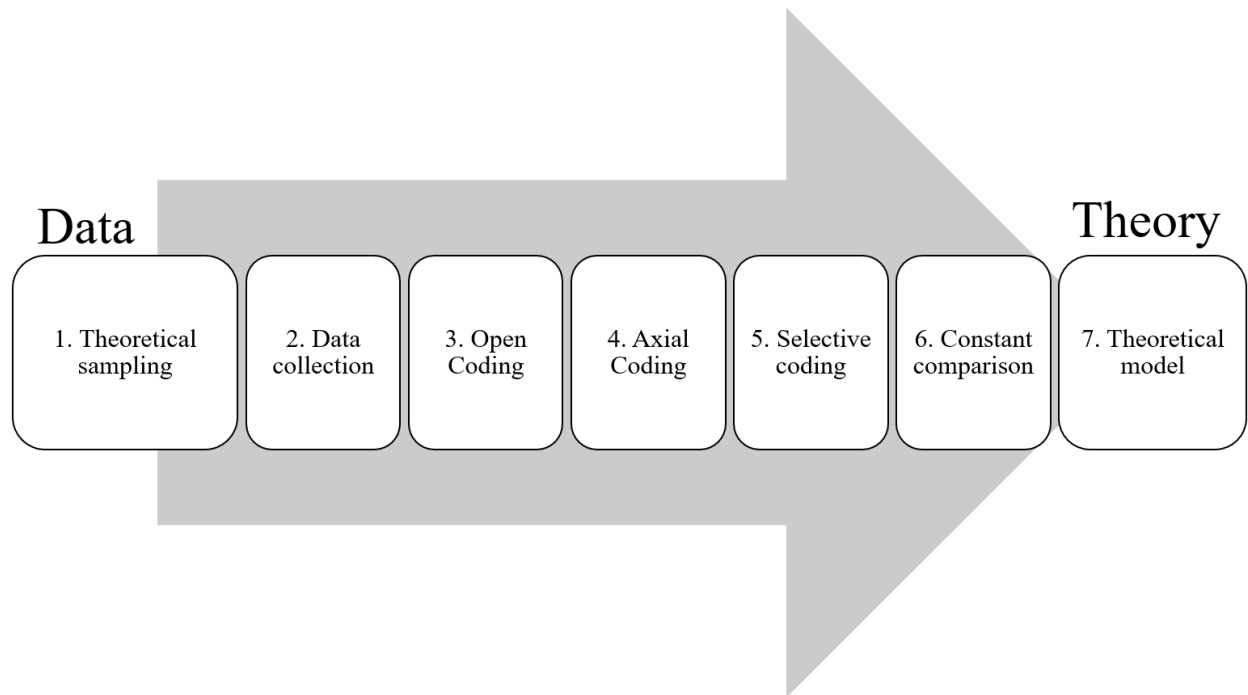


Figure 4.3: Grounded theory flow chart

The benefit of using grounded theory as also show in Figure 4.3 is that the research begins with raw data and through multiple stages of collecting, refining and categorizing the data, a substantive theory will emerge. The grounded theory process comprises of multiple stages such as theoretical sampling, data collection, open coding, axial coding, selective coding, constant comparison and generating a theoretical model. Each of these stages are discussed below.

The first phase of grounded theory is theoretical sampling. Quantitative methods target samples that are representative of larger populations such that the findings can be generalized to these larger samples. In contrast, qualitative research, considers phenomena in their natural setting and hence such larger generalizations are not possible. However, it focuses on theoretical sampling wherein the aim is to select a case which is theoretically important for the study (Boyatzis, 1998) and therefore extends the theoretical understanding of a phenomena. In the case of this research, I selected the metro rail case which was studied through the exploratory study discussed in Chapter 2. The project showed characteristics which are important for theorizing at the intersection of external stakeholders, project team strategies and organizational power. The case showed evidences of all the dimensions of power (Lukes, 2005) and the use of power in the form of

strategies across the dimensions to manage the external stakeholders. Therefore, the case was selected for theoretical reasons because it provided a critical case for studying external stakeholders, project team strategies and organizational power simultaneously.

The next phase of grounded theory is data collection. In this research, I looked at data from semi structured interviews, news media articles and social media. The data were collected as described in the earlier section on data collection. In grounded theory, the data collected is analysed simultaneously with the results of analysis guiding further data collection.

Parallely with data collection, the data collected were analysed through open coding. It involved breaking down, examining and categorizing the data into open categories (Strauss & Corbin 1990). In this study, the data from semi-structured interviews, news media articles and social media were open coded. During the process of coding, the researcher went through each of these data sources and looked for instances that involve external stakeholders discussed in section 4.3 specific to the Indian context. From the data relating to external stakeholders, every reported incident or story regarding their concerns, demands and the ways in which the project team managed them were extracted. Each of these incidents were coded and assigned to a category. For this, I relied on manual coding as automatic methods can create a barrier to understanding (Kozinets et al., 2014). As a result of this systematic coding and categorizing of incidents, I was able to arrive at the list of strategies that were employed to manage the project community. These codes are found directly from the text or constructed from the text (Alvesson & Sköldberg, 2010). After coding the strategies, the researcher coded the resources that enable the persuading strategies and the effects of the framing and hegemonizing strategies.

The next phase of grounded theory is axial coding. This involves putting categories back together in new ways to provide new insights (Strauss & Corbin 1990). The open coding of strategies employed by the megaproject team, the resources that enable them and their effect were analysed using axial coding techniques to find the relation between the codes. For the initial analysis, persuading strategies, framing strategies and hegemonizing strategies were taken up separately to find the relation between each of these strategies and their enablers or effects. In the final analysis, wherein the relation between the strategies is explored, these strategies are taken together and axially coded.

The next phase of grounded theory is selective coding. In selective coding, additional data is collected based on the findings from the earlier codes. In the case of the metro rail megaproject, the 19 semi-structured interviews conducted as part of the exploratory study were coded initially arriving at the open codes and axial codes. The insights generated from this theory building exercise, enabled the researcher to look for more specific instances relating to these constructs and their emerging relationships in the subsequent set of 11 semi-structure interviews along with the news articles and social media posts collected as part of the in-depth study. Since the 19 semi-structured interviews were exploratory in nature, the researcher couldn't ask relevant questions according to the research questions. However, since these earlier interviews were open ended, the researcher was able to code them and then use the subsequent 11 in-depth interviews for selective coding which helped refine the theory created as per grounded theory through constant comparative methodology. Grounded theory recommends parallel coding and data collection, with the subsequent data being collected for selective coding.

The next phase of grounded theory is constant comparison. The new data coded subsequently as a result of selective coding is compared with the codes created from the open codes and axial codes. The codes are refined by constant comparison with the generated codes and new data, to improve the quality of the theory generated. Refining of codes in this process increased the validity of the findings and grounded the new theory in data. Constant comparisons are not just made with the previous data but also with the literature as per the suggestions of Strauss & Corbin (1990). The process of comparison of concepts and findings from the study with the literature helps make meaningful contributions to knowledge (Stablein, 1996). Hence, both open codes and axial codes are theoretically reviewed to connect the new theory with the literature on organizational power and external stakeholder management in megaprojects. This theoretical and empirical grounding of the data helped understand strategies employed to manage external stakeholders in megaprojects and also contribute to the literature.

The final phase of grounded theory is to generate a theoretical model. This phase is defined as the sorting phase of data analysis (Goetz & Lecompte 1984) as it aims to derive a theory that best fits the open codes, axial codes and selective codes. In this stage all these codes are pulled together into a longitudinal course of events. Such a theory can explain a phenomenon as observed from practice. In the grounded theory method, data collected is converted to theory through the above

process. However, the processes are not linear and are iterative and often moves together and is refined through multiple rounds of data collection and coding.

4.5.2. Qualitative Content Analysis

To enable the study of discourses in Twitter, I adopted a qualitative research methodology using content analysis to focus on the contextual meaning of the text (McTavish & Pirro, 1990) rather than merely ranking message variables based on the frequency with which they occurred. The tweets were open coded into categories as shown in Table 4.6. The purpose of the content analysis is not mere counting of words used but an examination of the meaning of these words, thereby classifying a large amount of text into an efficient number of categories that represent similar meanings (Weber, 1990).

Table 4.6: Number of Tweets in each category

Category	Number of tweets analysed	Percentage in each category
Promoting the organization	96	15%
Giving progress updates	392	61%
Appealing to the community	98	16%
Targeting sections of the population	19	3%
Not clear	35	5%
Total	640	100%

I used conventional qualitative content analysis wherein the coding categories are derived from the text data (Hsieh & Shannon, 2005). A qualitative content analysis is recommended by Kracauer (1952) as the meanings and insights can be derived more holistically from the text. Qualitative content analysis can be defined as ‘a research method for subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns’ (Hsieh & Shannon, 2005).

The data from Twitter in the form of 640 tweets were crisp and generally contain only one topic. This was apt for qualitative content analysis as each tweet could be coded into a particular category. The tweet and their corresponding category are recorded in Appendix-C.

Again, I used manual coding of the social media data as automatic methods can create a barrier to understanding (Kozinets et al., 2014). Revisions were made to the coded categories such that the categories remain mutually exclusive and collectively exhaustive as suggested by Golden-Biddle and Locke (1997). For example, I coded all tweets aimed at making the community aware of the progress of the project as ‘giving progress updates.’ This category included tweets with photos, project news, metrics and service information. The date of posting, tweets and their coded category are recorded in Appendix-C for reference. Even though ‘targeting sections of the community’ had only 19 out of 640 tweets, since I followed qualitative content analysis, I found it as a relevant category for this study on hegemonizing strategies.

I did not consider 35 out of the 640 tweets for coding as the message in these tweets were not clear. These included tweets with reference to a dead website link without a title, such as links to Facebook posts and newspaper articles that had expired at the time of coding: in these cases, I was not able to make sense of the content as there was no title. I also segregated and removed repeated tweets with the same wording recurring daily. In some instances, there were as many as three extra tweets with the same wording on the same day. I suspect this to be an error due to network issues and coded it in the ‘not clear’ category. I, however, considered the tweets if they had different wordings but the same content or if the same worded tweet occurred on different days as it could be a reminder for an earlier post.

4.6 REFLEXIVITY OF THE RESEARCHER

Multiple scholars claim that researchers should clarify their beliefs and positions in the form of reflexivity during the process of interpretative research (Parse et al., 1985; Yanow & Schwartz-Shea, 2006). This is explicit as Koch & Harrington (1998) record that researchers bring a positioning of literature, a positioning of oneself, and moral socio-political contexts to the research product. This section aims to record the positioning of the author in the form of his familiarity with the topic of this research and the area of investigation – infrastructure megaprojects.

The researcher has previously worked in two infrastructure megaprojects in India and he has seen how important the management of external stakeholders is for the successful delivery of these projects. This gave the researcher a personal motivation to study this area. However, it should be noted that the researcher did not have experience working in the metro rail megaproject selected for this study nor in its geographic location. The researcher was totally new to the Australian field study. However, because of the exposure of the researcher to the field of study – infrastructure megaprojects, he was familiar with the colloquial terms frequently used by practitioners while managing these projects. The researcher also has a bachelor's and master's degree in the management of construction projects and was equipped to understand the nuances of these projects. Having prior experience about the field of study is an important part of an interpretative study as it gives sufficient knowledge about the field such that the researcher knows when to push an issue forward or when to back off (Yanow & Schwartz-Shea, 2006).

The field study was executed by the researcher and another researcher who was working on another topic - how institutions such as megaprojects are shaped and how practices emerge in them through an institutional theory perspective. The second researcher was enrolled in the same Indian university as a Ph.D. candidate and had previous experience in the management of infrastructure megaprojects in the past.

During the process of this research and field study, a reflexive journal was maintained by the researcher. This included daily notes covering topics such as the exploration of ideas and concepts, insights on linking theory and practice, etc. Maintaining such a reflexive journal is suggested (Koch & Harrington, 1998) for an interpretative research as it documents 'what is going on' throughout the research process. While writing this thesis, the author has gone through the reflexive journal and has sought to explain the choices made in the study (Oiler, 1982). Such an approach is highlighted by Koch & Harrington (1998) as the best way to overcome researcher's bias, i.e., to have the research product well signposted such that the readers will be able to travel easily through the worlds of the participants and researchers and decide for themselves whether the text is believable or plausible. Yanow & Schwartz-Shea (2006) record that researcher's reflexivity bias can be reduced by other ways such as member checks, descriptions of research methods, and attention to the researcher's role in the generation of evidence. These are discussed in detailed below as steps taken to ensure qualitative rigor in this study.

4.7 QUALITATIVE RIGOR

The need for qualitative research with grounded theory methodology is emphasized for theory building. However, compared to other research methods, these methods contribute to theory building through a coherent and exhaustive narrative or story. These studies fall in the interpretivist research paradigm where multiple realities exist in contrast to single reality positivist research paradigm. However, because of the presence of multiple realities, qualitative research is often criticized for its unstructured process of data collection, the interpretive nature of data analysis and the subjective nature of the data itself, which are treated as threats to the research's validity and reliability (Morse, 2015). There is a need for qualitative researchers to provide evidence for their data and analysis thereby ensuring the readers that the findings are more credible than subjective judgments (Yin, 1984). Qualitative rigor is an important goal as outsiders examine and evaluate the true worth of qualitative research.

One of the ways to achieve qualitative rigor in case study research is to follow the 'talk the walk' strategy advocated by Gibbert and Ruigrok (2010). The authors ask researchers to talk about the 'concrete research actions taken, carefully relaying them to the reader so that he or she may appreciate the logic and purpose of these actions in the context of the specific case study'. Similarly, Angen (2000) notes that thick and rich descriptions, persistent observations and practices of prolonged engagement can demonstrate trustworthiness in the data and validate the findings. However, the demand for more systematic proofs from critiques has led scholars working in qualitative research to focus on four tests commonly used in positivist research: construct validity, internal validity, external validity and reliability (Yin, 2013). Scholars have used these as a framework to assess rigor for case studies in the field of strategic management (Gibbert et al., 2008) and infrastructure megaprojects (Kolar, 2016). However, some argue that since social phenomenon in interpretivist research is based on different set of ontological and epistemological assumptions than positivist research, these notions of rigour do not apply in the same manner (Bhattacharjee, 2012). Therefore, an alternative set of criteria to judge the rigour of interpretative research was proposed: confirmability, credibility, transferability, and dependability (Lincoln & Guba, 1985). These are described below.

4.6.1 Construct validity (Confirmability)

Construct validity involves ensuring that the research is actually measuring the phenomenon it purports to be measuring (Hammersley, 1990). In interpretative research, confirmability refers to the extent to which findings reported can be independently confirmed by others. For achieving construct validity, this research uses triangulation of data, use of quotes to substantiate the claim and tabular displays of evidence.

Triangulation ensured that different realities of an instance were captured in order to arrive at a true and complete picture of the instance. It helps to reduce bias and improve the convergence of the data. Triangulation of the interview data was achieved through interviews with multiple participants and understanding an instance from multiple perspectives. Through the snowballing approach the researcher used personal and colleagues' networks to connect with participants working in the metro rail organization, many of who re-told their versions of stories that the researcher had already heard. The insights of these different actors in multiple networks within the project team helped ensure triangulation of the findings. Multiple data sources were also used for triangulation such as feasibility reports of the project, the websites of the project organization, news articles regarding the subject, etc. The contextual data in the findings were also anchored in the existing literature on Indian megaprojects for triangulation and validation.

Tabular display of evidence is recommended in the works of Miles & Huberman (1994) to present the qualitative data without destroying the meaning of the data through intense coding. They note that a display is an organized and compressed assembly of information that permits drawing of conclusions. By adopting tabular display, the researcher highlights each instance and how it is categorized into constructs. Eisenhardt (1989) emphasizes that such representations of evidence are particularly helpful in building confidence in the constructs generated.

4.6.2 Internal validity (Credibility)

Internal validity is defined as the 'degree to which inferences made in a study are accurate and well-founded' (Polit & Beck, 2008). It asks whether the findings from the research represents the actual phenomenon (Morse, 2015). In interpretative research, credibility refers to the extent to

which readers find the inferences from the research credible. For this, this data was collected by interviewing people from different levels and from multiple organizations.

The interviews conducted were with actors at all levels of the metro organizations ranging from technician to General Manager. This is following the recommendation of Leonard-Barton (1990) who claim that no single group in the field can be considered representative of the entire set of populations. I also conducted interviews with multiple organizations of the project team such as consultants and different contractors. This approach would provide diversity in the data collected and would help remove informant bias in the data collected (Mahalingam & Delhi, 2012). By collecting data from the different levels of these multiple organizations and comparing the comments made by various people on a given issue, I was able to strengthen the internal consistency of the findings and validity of the constructs (Yin, 2003). In the process I triangulated the views of various informants and picked only those views that were consistent across all the informant categories. Such triangulation enhanced the internal validity of the instances in the metro rail megaproject case study (Yin, 2003).

4.6.3 External validity (transferability)

External validity is the validity of the findings to other cases, i.e., generalizability. In interpretative research, transferability refers to the extent to which the findings can be generalized to other settings (Morrow, 2005). Generalizability is 'extending research results, conclusions, or other accounts that are based on a study of particular individuals, settings, times, or institutions, to other individuals, settings, times, or institutions than those directly studied' (Polit and Beck, 2010). Yin (1984) contrasts between statistical generalizability in quantitative research and analytical generalizability in qualitative research. He notes that while statistical generalizability looks for a sample from a population and thus ensures generalizability of findings throughout the population, analytical generalizability ensures a case to case transfer. In analytical generalizability, generalization is limited only to cases that are identified as qualitatively similar (Rohlfing, 2012). Such generalization is possible in qualitative research through re-contextualization (Morse, 1991) or decontextualization, enfolding the literature and audit trail.

Decontextualization allows the theory to be generalized and tested in other populations and environments that have common features with the chosen study environment (Morse, 1991). This

is achieved by refining and advancing the inferences derived from the typical case study. Through decontextualization, the open codes and axial codes generated from the grounded theory are extended to a study area broader than the one studied. Such abstraction of emerging concepts and theory occurs naturally as the codes evolve when grounded theory study progresses. As more data is collected and coded, the resulting categories would be broad and can explain all the observations of the field. For example, in this study, while coding the social media exchanges, the first set of codes to emerge were 'progress photos'. As the study progressed with more data being analysed regarding work progress such as progress news, progress metrics, etc., a broader code of 'giving progress updates' was allotted to the category.

Another way to achieve generalizability is to anchor the resulting theory in existing literature. Eisenhardt (1989) recommends in 'building theories from case study research' to anchor new theory in literature by a process called 'enfolding the literature.' She notes that such a practice increases generalizability of the findings from a case studied by the researcher to existing theories from other contexts available in the literature. For example, in this study, the strategies for managing external stakeholders that are identified from the case study are anchored on similar strategies recorded in the Indian context from project manager biographies or other publications of external stakeholder management from other projects. This anchoring in theory would also make it possible to discern and write about the theoretical and practical contributions to the literature.

An audit trail (Cooney, 2011) can also increase the external validity of the study. Such an audit trail should provide enough details for other researchers to enable them to repeat the research in a similar setting. For this the researcher needs to provide clear descriptions of research methodology and interpretation of research findings (Brown et al., 2002). This is facilitated in this research by giving details regarding the research methodology, choices, and interpretation as detailed in this chapter.

4.6.4 Reliability (dependability)

Reliability is the ability to obtain the same results if the study were to be repeated (Morse, 2015). It is 'broadly described as the dependability, consistency and/or repeatability of a project's data collection, interpretation and/or analysis' (Miller, 2008). To achieve this, another researcher

should be able to find similar data and arrive at the same inferences arrived from this research. For reliability, I tried to ensure transparency and replicability of the data and analysis. This was achieved by not asking leading questions, use of data collection protocols, analysis replicability through display of codes and member checking.

Even though a semi-structured interview was followed, the researcher sought insights on some specific areas and asked questions relating to them as shown in Appendix-A. The questions were open ended as the aim of the study was to explore the strategies used to manage external stakeholders and so the researcher tried not to lead the interviewee. Informants' bias, wherein the interviewees report on events in which they were not present, is also avoided by not asking pointed or leading questions (Barley, 1990; Eisenhardt, 1989). Follow up questions on the instances they were part of were asked to gain more insights and depth to the data collected. The news media article data and social media data considered for the study are summarized in Appendix-B and Appendix-C respectively. The qualitative content analysis codes for the 640 tweets considered for the study are consolidated in Appendix-C along with the data so that another researcher would also be able to arrive at similar findings. Another strategy adopted to improve the reliability of the data collected was member checking (Morse, 2015). Parts of the case study from the different stages of data collection were compiled and given to the metro rail officials as a report. The officials did not raise any objection to the instances recorded in the report.

To improve the trustworthiness of the data and transparency of the analysis, representative quotations relating to instances are provided. However, the researcher sought to de-identify the project in the data collected due to confidentiality agreements with the project. The methods used in this thesis to achieve qualitative rigor through each dimension is summarized in Table 4.7

Table 4.7: Methods use to achieve qualitative rigour

Dimension	Methods used
Construct validity (Confirmability)	<ol style="list-style-type: none"> 1. Triangulation of data 2. Use of quotes to substantiate the claim 3. Tabular display of evidence (Miles & Huberman, 1994; Eisenhardt, 1989)
Internal validity (Credibility)	<ol style="list-style-type: none"> 1. Interview data from people in multiple levels in different organizations (Leonard-Barton, 1990; Yin, 1984)
External validity (transferability)	<ol style="list-style-type: none"> 1. Decontextualization and abstraction of emerging concepts and theory (Morse, 2015) 2. Use of audit trail (Cooney, 2011) 3. Use of theory to generalize (Yin, 1984); Enfolding the literature (Eisenhardt, 1989)
Reliability (dependability)	<ol style="list-style-type: none"> 1. Don't ask pointed questions during interview (Barley, 1990; Eisenhardt, 1989) 2. For data replicability, the interview protocol used, news articles studied, and social media posts studied are recorded in Appendix-A, B, and C respectively 3. For analysis replicability, qualitative content analysis codes are recorded in Appendix-C and representative quotations relating to instances are provided 4. Parts of the case study from the different stages of data collection were compiled and given to metro rail project officials as part of member checking to improve reliability (Morse, 2015)

4.8 CONCLUDING REMARKS

In this chapter I have discussed the methodological choices that are undertaken for an in-depth study of strategies in external stakeholder management. A qualitative study was found apt as the research objective was to explore the persuading, framing and hegemonizing strategies employed by the project team. Within the qualitative spectrum of methodologies, a case study considers the context of the research setting thereby enabling the researcher to understand how these strategies behave in their social setting and to generate theories from their practice. Of these, a single case study offers depth in data collection and analysis and thereby provides excellent opportunities to enhance contextual understanding. Hence, a single case study of a metro rail megaproject in India was considered for understanding how these persuading, framing and hegemonizing strategies play out in practice.

Data from multiple sources were collected. 30 Semi-structured interviews with the project team guided the enquiry on persuading strategies. 166 news articles and their 446 user comments along with the 30 semi-structured interviews with the project team guided the enquiry on framing strategies. A combination of 640 tweets, 435 Facebook user comments and the 30 semi-structured interviews with the project team guided the enquiry on hegemonizing strategies. Finally, all these data were used together to find the relation between strategies.

The grounded theory method was used to analyse the data collected as it helps to systematically generate theory from data. A systematic process of open coding, axial coding, selective coding and constant comparison can help the researcher arrive at a theoretical framework that can explain the external stakeholder management strategies that are in use in the metro rail megaproject. Qualitative content analysis was used to explore the tweets as the message is crisp and generally contains only one topic.

The steps that were taken to ensure qualitative rigour are also outlined. A combination of triangulation of interview data and the use of quotes to substantiate a claim were used to ensure construct validity. Examining competing views along with interviews from multiple levels of people from different organizations were used to ensure internal validity. The use of theory to generalize the findings, decontextualization and audit trials were employed to ensure external

validity. To ensure reliability, the researcher took caution to not ask pointed questions during the interview, used data protocols to enable data collection replicability and provided sample quotations to enable data analysis replicability.

In the subsequent sections, the findings from the in-depth study are presented in the form of a narrative with illustrative quotations to enhance the trustworthiness of the research methodology. The aim is to tell a ‘story’ of external stakeholder management in the case of the metro rail project in India. For this, I discuss the findings and only show relevant quotes that substantiate the research findings and portray dramatic moments to make the story interesting (Golden-Biddle & Locke, 1997).

CHAPTER 5

PERSUADING STRATEGIES¹

5.1 INTRODUCTION

This chapter seeks to answer the two research questions laid out in chapter 3 from the literature review of power theories such as influence tactics framework (Yukl & Tracey, 1992) and bases of power framework (French & Raven, 1959), as well as the literature on persuading strategies used to manage external stakeholders. Even while strategies exist for managing the stakeholders, there is a lack of understanding on how these strategies are practiced. Addressing this gap from an organizational power perspective can help projects understand the types and strategies and their enablers in the form of resources. For this, the research questions posed are, (RQ1) what bundles of tactics characterize the emergent strategies used in managing external stakeholders? (RQ2) How do these strategies relate to available power resources? The research methodology used for addressing the two research questions are summarized in Figure 5.1.

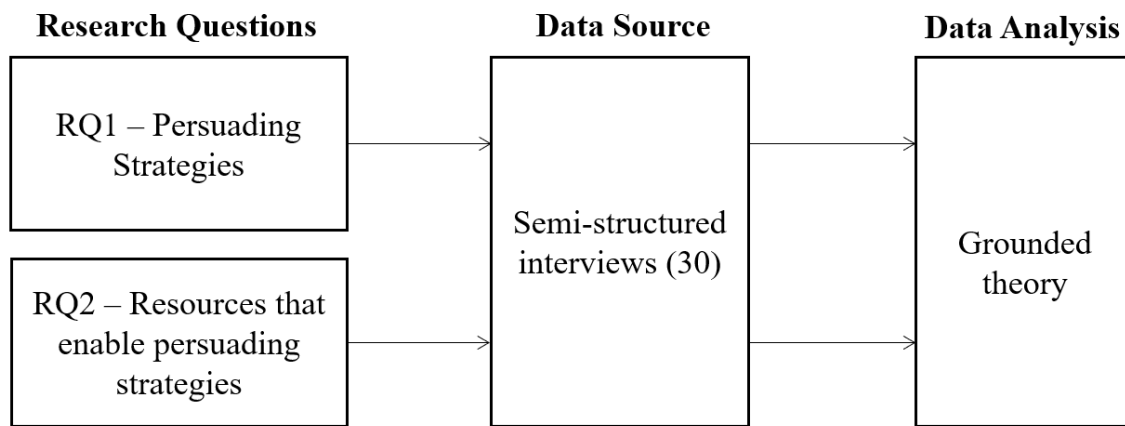


Figure 5.1: Research Methodology for persuading strategies

The data for this part of the thesis was collected from 30 semi-structured interviews with participants in the metro rail megaproject in India. The interviews were conducted across multiple

¹ This chapter is a modified version of the journal article co-authored with Dr. Ashwin Mahalingam and Prof. Stewart Clegg which is published in the Project Management Journal. This citation is as follows

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levels of seniority and with different organizations that were involved in the execution of the metro rail project.

After this, I probed into details of how issues that arose in each category were managed, which enabled me to capture the strategies and resources that the project team used to manage the interests of each of these external stakeholders. Grounded theory method was followed to analyse the data. These enabling strategies and resources were derived from data, iterated as the data ‘talked back’ (Flyvbjerg, 2006), summarized in tabular form (Eisenhardt, 1989) and were anchored in the ‘influence tactics’ theoretical framework and the ‘bases of power’ theoretical framework respectively.

5.2 FINDINGS AND DISCUSSION

The findings from the metro rail project showed that megaprojects experience different sets of interests and demands, depending on the external stakeholders involved. To manage these interests, the project team resorted to different emergent strategies. The analysis of the project team’s strategies and the resources that enable them from an organizational power perspective would help us understand how the project team combatted different types of stakeholder challenges in a project setting.

5.2.1 Strategies in practice for managing external stakeholders

The project team used an emergent set of five strategies– persuasion, deputation, give and take, extra work for stakeholders, and flexibility, each composed of distinct clusters of influence tactics. Each of these strategies anchored in the influence tactics framework (Yukl & Tracey, 1992) is discussed below.

1. *Persuasion*

During the land acquisition process, when the private landowners were reluctant to relinquish their land the project team would visit them and convince them to give up their land. The project team would stress that the project is for a public good and inspire the landowners for action. This persuasion strategy was based on ‘inspiration appeal’ influence

tactics from the works of Yukl & Tracey (1992). The project team would visit these landowners frequently and stress their land's importance in the successful completion of the project. Thus, they combined the inspirational appeal influence tactics with 'pressure' influence tactics (Yukl & Tracey, 1992). The project team would argue that the compensation proposed for acquiring the land is an adequate compensation for their loss. By arguing and convincing these landowners, the project team used 'rational persuasion' (Yukl & Tracey, 1992). All this was carried out through frequent meetings with the affected stakeholders and so the 'consultation' (Yukl & Tracey, 1992) influence tactic was also used. Hence, in the process of convincing the private landowners to relinquish control of their land the project team used a combination of inspirational appeal, pressure, rational persuasion and consultation influence tactics.

While for acquiring land from private landowners the project team provided compensation in return for land, with the government landowners such a strategy was not feasible. First, there are no guidelines to the process of acquiring land from government bodies in comparison to private land which had a proper land acquisition process and a guideline land value that should be provided to the landowner when land was acquired for the construction of an infrastructure project. The government bodies that the project had to get the land from included the Indian Army, Railways and the Airport Authority. Since there is no mandate for these government bodies to give up their land they simply refused to relinquish control, an approach that in the past has caused many projects simply to avoid planning to use land that belonged to government bodies.

In this case, one of the aims of the metro rail megaproject was to increase interconnectivity for an existing transportation system. The project sought to connect the airport and rail network and thus it required hubs close to their facilities. When the metro rail approached the airport and the rail network for land for their station, they stressed the goal of the project towards interconnectivity between multiple infrastructure systems. The project team highlighted that with interconnection between the services, all these infrastructure agencies would be able to serve the public in a better way and would also get a spike in users. Thus, after repeated rounds of talks, the railway and airport authority agreed to give some land for the construction of the elevated metro rail station to the project. The terms of exchange

varied. However, the project team was able to acquire land from these government bodies who would otherwise have not relinquished control of their land. The project team while stressing the interconnectivity rationale, used the 'rational persuasion' (Yukl & Tracey, 1992) influence tactics to persuade the Airport Authority and the Railways to give their land.

Government lands are sometimes occupied by illegal landholders who, by definition, lack the authority to be there: they are squatters, often occupying and using the land for generations; in other cases, people might be tricked into buying government lands offered by touts using fake sale deeds. The government records showed these lands as unoccupied. These lands were allotted to the metro rail organization to enable the construction of the project. It was the responsibility of the project to evict these illegal landowners. Most infrastructure projects in the country take matters to court and look for in court settlements. With the litigation process being considerably slow in India, the project team took matters in their own hand to enable the construction of the metro rail.

Illegal landholders occupying government lands would, in most cases, be politically supported by local politicians or social movements. Many projects that had tried to remove them in the past had failed. In the metro rail project case, there were a section of squatters who occupied land close to the airport runway. The project required this illegally occupied land for connectivity to the airport and the government allocated this land for the metro rail construction. Since the metro rail project was a project of considerable political interest, the Deputy Chief Minister, a very influential political person in the area, came and spoke to the squatters, asking them to move elsewhere. These squatters who were only supported by the local political leaders were unable to resist when the head of the political party would ask them to do so. Elected representatives hold a significant position in Indian society. Ashokan (2015) mentions similar instances where the central railway minister who was in support for the Konkan railway was able to persuade the state's chief minister and administrations in its favour. This strategy was possible because the Deputy Chief Minister was in support of the project. The informal 'coalition' (Yukl & Tracey, 1992) influence tactic with the government ensured that the Deputy Chief Minister came and spoke to the squatters, asking them to move elsewhere.

Landholders with illegal titles were a different category to the squatters. These were people that had been cheated into purchasing government lands that they now occupied by ‘con artists’ making false claim to the land title. The con artists would have fake documents and had trapped these landowners to buying the government land. These actors had paid the market value for the land but lacked legitimate legal title as the land ultimately belonged to the government. Until they received notice from the metro rail project organization stating that the land they occupied was government land and now was allotted to the project for construction, these landholders were unaware that they were illegal occupants. These cases were quite complex in terms of project negotiations. In previous instances in the country with these illegal landowners, the decision to acquire their lands were challenged in the courts. The courts would take significant time to give a verdict in these cases and construction activities in that area would be ‘stayed’ till a legal solution is awarded. This process has delayed some infrastructure projects significantly in the country. In the case of the metro rail project the project team went to these illegal landholders and convinced them that while the metro rail megaproject was entitled to use the full land for construction purposes the project required only a portion of the land in question: the remainder could still be occupied. The project team, made up of employees recruited on a contractual basis, warned the residents that if they went to court, they might end up losing all the land. Employees that were contracted, compared to government team members bound by the rules of bureaucracy, had more freedom to act and not be held accountable for doing so. As an official who was recruited on a contractual basis for five years remarked:

“The full land which they [illegal land holders who were cheated] occupy is legally given to us [metro rail project organization] by the government ... if we take the land by force, they may go to court ... so we talked to them and warned them [persuaded] that they would lose the full land if they go to court ... If they agree now, we will only take what is required for our construction and spare the rest”

Through this strategy of creating fear and threatening legal process, the metro rail project was able to save valuable time in dealing with these stakeholders to acquire the required land. Similarly, Ashokan (2015) noted how solving politically motivated environmental protests in Goa during the construction of the Konkan railway involved the central railway

ministry sending a memo to the state government to pressure the government backed protesters, warning them that the state government would be liable to pay for delays caused. The strategy of creating fear and threatening legal process can be categorized as 'legitimatising' (Yukl & Tracey, 1992) influence tactics.

In some cases, landholders objected that the metro rail project team was tunnelling under their private land and this would cause damages to their buildings. They would ask the metro rail organization to stop these activities as the tunnelling was below their legally owned property. In such cases the project team asserted that, similar to the situation with mineral resources, landholders did not have legal rights to what lies 20 metres below their land. In this strategy, the megaproject team used a legal argument thereby using 'rational persuasion' (Yukl & Tracey, 1992) and 'legitimatising' (Yukl & Tracey, 1992) to convince the landowners that the tunnelling under their property for construction of the metro rail project was legitimate. In another instance, the landholders raised concerns of the viaducts of the metro rail blocking the view of their property and possibly depreciate its value. The project team showed these landholders different options through graphical prints and 3D CAD drawings of the metro rail piers. Through this, the landholder was able to select an option which would cause minimum obstruction to the view of their property.

For construction, elevated stretches are cost effective and hence many stretches were planned as elevated. However, these elevated stretches alter the landscape of the city turning them into concrete jungles and reducing the visual appeal of the area. Hence the metro rail organization decided to have underground stretches near the historical monuments and heritage buildings to safeguard the visual appeal of the area. To justify their action and the increased spending on going underground in these stretches, the metro rail used digitally modified images to show how elevated sections of the metro rail would alter the streetscape near the heritage building. This helped the metro rail get a buy in for this decision from the financiers and the tax payers who ultimately pay for this public project.

For construction along the highways, the project team proposed diversions and received approval from the highway department and traffic police department. To achieve these

approvals, the metro rail project organization submitted traffic diversion plans to their offices and even showed live simulations on how the new diversion would affect the traffic. These government offices gave permission only after ascertaining that the traffic disruptions would be minimal. They looked at the traffic volume and allowed construction only during the night hours when the traffic volume was low. Movement of equipment, such as transit mixers, cranes, trailers and boom placers, were also restricted to night time when traffic was much less dense. Thus, by using these simulations the metro rail team was able to arrive at a mutual solution with the highway department and the traffic police to create a diversion plan which would cause minimum disturbance. This relied on the 'rational persuasion' (Yukl & Tracey, 1992) influence tactic as the megaproject team tried to rationally convince these stakeholders for a quick and favourable action.

The metro rail had several elevated stretches in the city. These elevated stretches had electric wires which are used to power the metro rail through their elevated viaducts. In the case of stretches near the airport, the airport authority expressed concerns about the electronic interference from these electric supply lines. They claimed that these high powered 25 Kilovolt electric supply overhead lines (OHL) on the viaducts might cause disturbances to the electronics of the aircraft systems landing and taking off in the airport. The metro rail project organization approached a premier educational institution to carry out a study on whether these electric lines cause electronic disturbances to the aircraft system. The experts from this institution carried out a detailed electronic interference study in different wind and climate conditions arising from the 25 Kilovolt power line on top of the metro line viaduct. The study concluded that no such electronic interference would occur and there would be no harm from the electrical supply lines to the navigation and electronic systems of the aircraft. Here also the metro rail project team used 'rational persuasion' (Yukl & Tracey, 1992) to convince the airport authority that there would not be any electronic interference by carrying out a systematic study with the help of a premier educational institute. Thus, through rational arguments these kinds of issues were managed by the project team. The 'persuasion' strategy was widely deployed with all stakeholder groups as seen in Table 5.1.

2. *Deputation*

The metro rail construction happened in a city which already had significant infrastructure systems in place. These infrastructure systems are mainly government owned and operated. During the process of construction and operation the metro rail would disturb some of these systems and hence necessary utility diversions or adjustments for the infrastructure has to be done. To enable such activities, interactions with these government agency external stakeholders was required.

Coordination with the utility owners was required to ascertain the position of utilities, to shift these and to repair/restore utilities damaged during construction. The metro rail project organization and the contractor organization mandated to construct the project approached these utility owners, seeking their cooperation. Arranging appointments with the government staff of these agencies proved troublesome due to multiple bureaucratic procedures - oftentimes the contractor representative would spend hours waiting and never be able to make the planned appointment.

To counter delays the metro rail project organization hired employees on deputation from these utility owners, such as the electricity, water and sewerage boards and from the government telecommunication board for a period of four to five years to facilitate construction. These recruits, being from the same utility organization, had good relations with their colleagues, thereby speeding up the utility shifting process. The metro rail megaproject had adequate political support to request the state government bureaucracy to deputize staff from other government agencies to enable better coordination. One of the top officials in the Human Resource Department in the metro rail project organization commented:

“We [metro rail project organization] are given authority by the Chief Secretary [of the state government] to get anyone deputed on board from other agencies [government] for long-term coordination”

These deputed employees represent the metro rail project and sit at the project site as their main job is site related work. On the day to day work of the deputed employees, the Joint General Manager of construction works mentioned:

“Whenever electric issues are intersecting our work, these fellows [deputed employees from electricity board] will go and deposit the amount to their office, coordinate shifting, etc., because without knowing, we cannot touch their work”

The project team had to handle roadway traffic during construction as the metro rail viaducts were planned along the median strip of the highway. The highway network is under the control of the Highways Department while the Traffic Police Department is responsible for maintaining an uninterrupted traffic flow. To enable coordination, the project organization received a high-level police officer and a senior official from the highways department on a deputed basis to enable relatively seamless coordination. These staff occupy high ranking positions in their respective organizations and this hence would help the metro rail take decisions quickly with the government agencies.

On the coordination with the railways, a metro rail employee who earlier worked in the railways remarked,

“Before I was DEN (Divisional engineer), my batch mate was there (in the railways) ... so interaction everything went nicely ... otherwise doing over railway area is tough ... Whenever I take matters to him, it will be signed at any cost”

To facilitate coordination with the airport authorities, the project organization hired a manager who had construction work experience in two international airports in India. The manager knew many of the present employees of the airport and had a good relationship with the director of the airport. The metro rail organization asked him to head the construction and coordination along the airport stretch, even though he had no special metro rail experience. Since this manager had good relationships with the airport authority officials, this improved the coordination for the metro rail project with the airport. Thus, multiple decisions relating to the metro rail project were taken quickly through the relational network of this manager.

Coordination is a critical issue area for enabling discussions and addressing the concerns of the external stakeholders in megaprojects. As seen from the above instances, the project team coordinated with external stakeholders by using employees deputed from the government agencies, such as the electricity, highways, railways, telecommunication and police departments, following the co-optation strategy outlined by Selznick (1949) in the case of the Tennessee Valley Authority (TVA). These deputed employees, temporarily on the other side of the fence, were able to convince their own colleagues to coordinate effectively. In situations where deputation was not possible such as in the case of the airport, the project organization appointed managers who had worked in the government agency before and had a good relationship with them. Tapping into these existing circuits of power in the form of previous relations of membership proved to be a viable strategy. These employees on deputation acted as boundary spanners (Mahalingam & Levitt, 2005) and helped coordination by gaining access to these agencies' offices, complying with their bureaucratic procedures, getting insights into their concerns and interests and persuading these stakeholders through multiple rounds of negotiations until resolution of the issue was achieved. Such capacity building with local public sector organizations is highlighted as a precursor to negotiating with them and arriving at a solution to address their needs (Henisz, 2016).

The strategy of coordination with deputation builds on the tactic of 'personal appeal' (Yukl & Tracey, 1992). Since, the deputation strategy worked with government agencies, the influence tactic of 'personal appeal', lying behind the specific strategy 'deputation', is one that can be used successfully with government employees. The 'consultation' (Yukl & Tracey, 1992) influence tactic was used with these government agencies as they were invited in planning the specifics of how the megaproject can be executed.

3. *Give and take*

The existing land acquisition act in India has provisions for private lands being acquired for 'public purposes', such as infrastructure development, by compensating the owner with a government guideline land value. Such valuation is often significantly lower than the market value of the property. Therefore, when a request for land acquisition is made, the

owners typically will not give up the land voluntarily but go to the courts and submit reasons as to why the land should not be compulsorily purchased. The reasons vary: typically, they might include proposals that alternative land is available for construction or that the land in question is the only resource that the family owns. Many infrastructure projects in India are critically delayed and even stalled due to the long litigation processes accompanying the attempts to acquire land (Singh, 2012; Iyer & Sagheer, 2009). The megaproject in this research adopted some specific strategies to mitigate issues in acquiring land from private owners. The project organization decided to compensate the private owners with market rates to reduce litigation and complete the project on schedule. As a General Manager of the metro rail project organization informed us:

“One ground of land in this region actually cost INR 2 Crores [USD 320,000] while the guideline value of the same was INR 60 Lakhs [USD 94,000]. We were able to acquire land as we paid market prices.”

By agreeing to pay market rates for the land the project team was able to convince the landowners to give their land for the purpose of the project. By giving them market rates, the project team agreed for a compensation above the guideline value and therefore an ‘exchange’ (Yukl & Tracey, 1992) influence tactic was employed.

Particular problems were encountered with land that housed religious and cultural buildings, such as temples and statues, because of their deeply symbolic value. In these cases, the project team would agree to construct a similar building in an alternative area using traditional temple contractors to satisfy the stakeholders. Such a humanistic approach to land acquisition in order to reduce time was noted in other megaprojects in India, such as the Konkan railway (Ashokan, 2015), where the project team provided existing market rates as compensation for land acquisition and even shifted a cemetery because of its constitution as a space of symbolic familial sentiment.

The airport agreed to giving their land for construction of the metro rail station only if the structural construction within the airport premises could be handled by the airport themselves. They used this opportunity to design the station in a way that was aesthetically

similar to the design of the airport, using many steel members, even constructing an extra level of parking for airport employees. The metro rail project team had freedom to use funds for purposes such as speeding up the construction of the metro rail. On this issue, one senior manager from the project organization remarked,

“They [airport] also want something from us ... This [parking for airport employees] is an added facility for them ... these kinds of projects work that way only ... give and take ...”

Railways, however, had a different set of demands. Railways had for a long time planned to extend an existing route. The land for the new railway station had been acquired but construction had not commenced due to last mile connectivity issues with the station, as a result of land acquisition challenges. The metro rail project planned to build an elevated metro rail station on the same land as the new railway station and thus achieve interconnectivity between the two transportation networks. The railways asked the project organization also to construct their new railway station in exchange for the land.

With these stakeholders, the project team adopted a give and take strategy. Negotiating through diverse circuits of power, while acquiring lands from the airport authority, the project team permitted the construction of additional parking spaces for airport employees from the metro rail project funds; in the case of railways, the project team constructed the station for the railway and the metro rail together in exchange for their rights to the land. With the give and take strategy, the project team entered into an ‘exchange’ (Yukl & Tracey, 1992) following ‘consultation’ with the stakeholders to compensate them for the cost implications and this was particularly seen in land acquisition from the private and government legal landholders. With government stakeholders, ‘exchange’ is used in combination with ‘personal appeal’ enabled by project team members on deputation.

4. *Extra work for stakeholders*

For stakeholders who experienced service disruption issues during metro rail construction, the project team carried out extra work to speed up the process of shifting services. Innovating circuits of power that by-passed those that were already bureaucratically

seconded, but which followed the rules of the bureaucracy while not making demands on their resources was a strategy that proved viable.

The metro rail project construction was in an existing city with multiple existing networks of infrastructure services. These services had to be shifted to enable the construction of the project. This shifting would involve suspension of the services for a period of time. In cases where electricity disruption was inevitable, the electricity board asked the metro rail project organization to arrange alternative supply with their specialised list of contractors (due to safety and supervisory reasons). The metro rail complied with the agency recommendation rather than get their contractors approved with the electricity board.

In some instances, with the drinking water and sewerage board, the project team, following instructions from the water authorities, had to shift these heavy utilities to a new location temporarily and then replace them back in the old location after construction works were complete. Through the metro rail project organization undertaking to do these works many bureaucratic procedures were avoided and potential time lost due to delayed action by the utility agency was saved but at the cost of increased project expenditure. In one case, the construction of a station foundation could not occur as planned because of the presence of water lines that proved impossible to move and thus the metro rail project organization had to change the design of the foundation they were building, based on the available land. An official who was involved in this design change commented,

“We [design team] will be designing piles beautifully, but only once the excavation starts we will be able to know the real challenges underneath ... the challenges faced mainly were because of utilities and not due to ground conditions ... we sometimes had to adjust [be flexible] for the utilities and use eccentric foundation designs to accommodate the utilities”

The government telecommunication utility was very particular about the disruption of their services, including telephonic and Internet connections. Unlike the electricity and water sectors this sector had undergone liberalization and hence there were many private players who own and operate the network competing with the governmental agency. The

government telecommunication agency regarded any disruption of this service severely, imposing heavy fines on the project, as it would result in a loss of business to competitors. On some occasions the metro rail project organization had to shift these telecommunication utilities at their own cost and build quite a few ‘state of the art’ inspection chambers at the request of the government agencies, as informants reported:

“We [metro rail project organization] were asked [by the telecommunication government agency] to install new and modern cabling system with inspection chambers in place of the conventional cabling systems that we wanted to shift ... We did it for them free of cost [extra work for stakeholders] even though we were not obliged to do so”

The deputed employees also helped the project in indecisive situations with the government agency stakeholders as they played a role in fruitful discussions, often leading to solutions with mutual benefits. The private telecom utilities responded quite differently compared to the government counterparts. When the metro rail organization informed them about their lines in the construction zone and requested that they shift them, these private agencies responded quickly and either shifted the utility or made alternative arrangements at their own cost. They were proactive, as shown in the way they regarded the risk of service disruption as more pressing than a lack of revenue.

Next, the airport authority said that moving trains would cause visual disturbance for pilots nearing the landing zone. To address their concern, Fibre Reinforced Plastic (FRP) sheets with red and white stripes designed to restrict any visual disturbance to the pilots when they neared the landing zone were used to cover all the metro rail track sections that were located under the air funnel region. An official who was involved in this coordination remarked,

“They [Airport authority] have codal provisions for their flight zone that there should not be any visual disturbances during flight landing and taking off ... we [metro rail project team] had a lot of meetings with airport authority and finally

we together decided to use shielding ... they wanted it in red and white check colour ... this was not there in our initial design and was an extra work”

Ecological considerations came into play when the construction of the metro rail started. A total of 385 trees had to be cut down for construction of the metro rail project. The community around the project raised concerns about this cutting down of trees questioning the environment sustainability of the project. To pacify the project community, the project team resolved to plan around 59,000 trees and saplings throughout the area where the project had an impact. On some occasions, rather than cutting down trees, the project team opted to shift them to a new location. Here, the metro rail employed an ‘exchange’ (Yukl & Tracey, 1992) influence tactic by compensating the community for their loss and even doing some extra work to pacify the community.

Other than trees, park areas throughout the city were also reduced. The metro rail required land in heavily occupied areas of the city for construction activities such as stocking inventory, working space or for gaining access to construction for the underground stations. Park areas were considered ideal locations for these as they are areas which didn’t have buildings and hence can easily be used during the construction and restored afterwards. However, the project community expressed concerns at this reduction of park areas in these locations. The project team, in response, agreed to develop and maintain parks under the metro rail viaducts and on station land. Unused lands owned by the highway department that were near the metro rail stations were converted to parks and subsequently were planned to be maintained by the project organization. The project team also agreed to restore and renovate the parks affected due to construction after the construction was completed. Similarly, during the construction works of the Konkan Railway (Ashokan, 2015) the project team gifted wells, pipes, culverts and roads to the community affected due to construction. From the same Konkan railway project, Sankaran (2018) notes the project replacing fruit trees that were lost due to the construction of the project. In the metro rail project case in this study, the project team gifted new park areas and new trees to pacify the project community who are heavily impacted due to the construction of the project.

Megaprojects in construction are noisy, dirty and energy-draining. In some instances, the project community near the tunnelling locations complained of experiencing vibrations in their homes due to tunnelling. The metro rail agreed to monitor the vibrations and fixed sensors on their building to check settlement or damage. The metro rail organization also inspected the buildings and rated the health of the building. Special care was taken to evict some sections when the health of the building is lower than requirements and there would be potential damage to the building because of tunnelling. If damages were present after tunnelling, the metro rail organization repaired the building.

In terms of energy, the metro rail project operates on electricity, represented as being an environmentally friendly and clean alternative to diesel. However, the project is housed in a city which suffers from electricity outages which the metro rail, it was feared, would exacerbate. So, when the metro rail signed an agreement for drawing electricity from the state electricity board, the community protested as the project would draw electricity from the already deficient source. To address the concerns of the community at large – in particular those residents who lived close to the metro - about the project drawing electricity from the common pool and thus increasing disruptions due to power outages, the project team agreed to install solar panels on all metro stations and in other locations accessible to the project. The team stated that they would export the surplus energy produced to the grid to address the needs of the community at large.

In another instance of construction near a street which was very frequently used, the metro rail organization opted to use sheet piles at extra cost thereby using lesser area for construction, instead of closing the street as was the general practice. An engineer from the organization remarked,

‘At that location we had to dig very close to the road ... normally, we excavate easily by closing the road ... but we used sheet piles here, so the road won’t be closed and business won’t be affected’

The project took special care not to affect the business of the shops in this instance. In another instance, the project had to dig trenches to shift utilities to a new location in front

of some shops. The project made sure to provide access ramps to these shops and also expedite the shifting process so as to cause minimum disturbance to these shop owners.

Thus, the project organization secured cooperation for stakeholders in lands (excluding land acquisition) and existing services who were affected by activating a norm of reciprocity (see Gouldner 1960, for the classic statement). For the existing services, the metro rail project organization had to move cables and also build facilities as per the demands of the agency. For the community, the project team agreed to plant more trees and installed solar panels to compensate for the energy the metro system would be drawing from the grid. This strategy was enabled because the metro rail project was willing to compromise to comply with the demands of the external stakeholders so as to complete the project on time and with stakeholder support. These strategies aimed to compensate the affected community and reduce the inconvenience caused due to the metro rail construction. Here the project team employed 'exchange' (Yukl & Tracey, 1992) influence tactics. They also consulted the external stakeholders and sought to understand their concerns and grievances and accommodated it in the construction as extra work. So, the megaproject team used 'consultation' (Yukl & Tracey, 1992) influence tactics in combination with the exchange influence tactics. Another requisite for this strategy with the government agency was the presence of deputized employees who were willing to negotiate between both parties and arrive at a mutual solution. Here, the project team employed the 'personal appeal' (Yukl & Tracey, 1992) influence tactics. Thus, the extra work for stakeholder strategy was a combination of 'exchange,' 'consultation,' and 'personal appeal'. While the 'give and take' strategy was accompanied by a contract that made the exchange formal, in contrast the strategy of 'extra work for stakeholders' was premised on more of a quid pro quo, enforced through more subtle means.

5. *Flexibility*

Not all government bodies were willing to relinquish control of their land with the give and take strategy. There were exceptions. Large chunks of land near the airport were held by the Indian army. These lands were vital for connecting the city to the airport through the metro rail. However, the talks with the Indian Army officials for the land did not work out

as planned. The Indian Army did not agree for a monetary compensation for the land as in the case of the private landowners or for additional construction favours through ‘give and take’ as with the airport and the railway agencies. They sought an equivalent value of land elsewhere in the state. A small area of land in the city would amount, in equivalent value terms, to a vast area outside the city limits due to the higher land prices in the city. The metro rail project organization was unable to acquire the large area requested for this purpose. Consequently, the project had to scrap the plan for a depot as well as an elevated station exit and had to change the viaduct route, all of which had been planned earlier on Indian Army land. The new viaduct route had to have sharper turns that meant the adoption of a construction methodology that was far more expensive than planned. These design and methodology changes were enabled by the project, accommodating experts’ experiences gained from other metros in India as well as in other countries across the world. As an official in-charge of trackwork construction remarked:

“People are hired from Singapore metro, Delhi metro, etc., and they are given good positions too... even juniors, we [metro rail project organization] give promotion and have accommodated here in higher positions”

In another instance, some members of the project community who occupy land near the project, raised concerns that the elevated stretches blocked the entrances and views of their properties thereby reducing the land value. The metro rail dealt very humanly with this situation. They called the affected parties and showed them 3D drawings of the elevated stretches and heard suggestions from the community members regarding the best design which would cause a minimum disturbance. The project team carried out multiple iterations, altering their designs to change the pier distances, till a mutually favourable solution was arrived. One of the managers of the metro rail organization remarked,

“They said ... if you built this way, we can’t get out of our house ... or our view is blocked ... we addressed them”

The airport posed a special challenge for the metro rail project due to the height restrictions that were required during construction to ensure a flight’s safe vertical clearance, which

restricted the use of tall cranes. The project team had to change the construction methodologies for a few stations because of restrictions on the use of tall cranes for lifting structural members. They used an approach of multiple launchings to reach the required height with a short crane. In spite of this, there were time restrictions on working at these heights so as to cause only minimum disturbance to air traffic. Unlike highway traffic, airport traffic was at its peak during the night hours as most international flights operated during this time. Even after repeated rounds of negotiations, the airport authority only agreed to allow six hours of work per week for construction of these stations.

The project team had to change a planned 500-metre elevated section into an underground stretch. This was because the airports authority highlighted the presence of an auxiliary runway near the planned stretch. The authority said that the section was too close to the runway to satisfy the vertical clearance requirements. The only way to construct with this height restrictions near the runway was to change it into an underground stretch complying with the request of the airport authority.

In another case with the airport, there were height restrictions for two stations that were situated within the air funnel region. The airport authority mentioned that these stations are taller and not according to the airport limits. The project team changed the design from a curved roof to flat roof to accommodate the height restrictions.

The city has a suburban rail network that transports around 1.76 million people per day and is the lifeline of the city. The metro rail intended to connect to one of the main stations in this network. To do so, the metro rail project organization planned a 105-metre concrete bridge above an operational suburban rail. When the project team approached the railway department for permissions to construct the bridge the railway authorities advised that concrete bridges were not permitted above the rails as a precautionary measure, due to the possibility of heavy damage being sustained by the service below in case of collapse. The project team, amongst whom were engineers with expertise in designing bridges, proposed as an alternative the use of a steel bridge, which would create less damage in case of collapse and have lesser deflection compared to the concrete bridge. The expertise of these special talents helped the project propose innovative designs to persuade the railway

department to accept the proposed solution. Thus, after multiple considerations of a suitable design for a long steel bridge, the railway authorities gave approval for a two-span open web steel bridge. While the planned cost for the bridge was INR 80 million, it was completed at INR 210 million. Adding onto this, the construction permission for this bridge was restricted for safety reasons to only three hours at night after the daily operation and maintenance schedule of the suburban rail network had been completed.

In most cases, the designs suggested in the Detailed Project Report (DPR), the construction methods suggested in the work plan and the work timings suggested in the project schedule would not have completely considered the concerns and interests of the external stakeholders. As the project team became aware of the many stakeholders who experienced disruption because of the project into whose circuits of power they became embroiled, they learned to accommodate resistance. Expression of these grievances changed the ways the design, methodology and schedule of the project evolved. The project team changed the design when land was not made available by the Indian Army. The construction methodology was changed by using small cranes to satisfy the airport authority's height restriction standards. To reduce disturbance to existing infrastructure services such as highways, railways and airports, the construction activities were re-scheduled to take place only during lean traffic hours. Thus, this strategy of being flexible with regards to design and design intents was effective in accommodating stakeholder interests in the project and securing their support, as seen in Table 5.1. The strategy is based on a combination of multiple influence tactics. The project team consulted the external stakeholders and were willing to have a dialogue with them to understand their grievances on how the megaproject could be executed so as to minimize their inconvenience. Here, the metro rail project team used the 'consultation' (Yukl & Tracey, 1992) influence tactics. The metro rail also convinced the external stakeholders that the new design or new construction methodology could address their concerns. Thus, the project team used the 'rational persuasion' (Yukl & Tracey, 1992) influence tactics. In the process of changing the project to accommodate stakeholder interests to achieve continued stakeholder cooperation in the project and deflect resistance, the project used 'exchange' (Yukl & Tracey, 1992) influence tactics.

I observed the use of all the influence tactics from the Yukl & Tracey framework (1992) in the megaproject with the exception of ingratiation, involving flattery, which was not observed in the inter-organizational project setup although it may have been deployed in more face-to-face situations to which I did not have access.

The project team resorted to different strategies to deal with the external stakeholders in lands and existing services. From the discussion above, 30 different strategic practices pertaining to specific stakeholder management instances that spanned across stakeholder types and the categories under which they were coded are consolidated in Table 5.1 for quick reference.

Table 5.1: Summary of Persuading strategies practiced in the metro rail project case

SI No	Practice	Strategy Category
1	Market land rates paid for acquiring private land	Give and take
2	Repeated visits to private land holders and inspired them to give up the land for public good	Persuasion
3	Constructed a new temple in a new land with traditional temple contractors	Give and take
4	Interconnectivity rationale for convincing other infrastructure services to give land	Persuasion
5	Extra level of parking facility for airport employees in exchange for land rights	Give and take
6	Construct new station for railways in exchange for land rights	Give and take
7	New design around the Indian Army land with sharper turns using a new methodology	Flexibility
8	Get the Deputy Chief Minister to talk with illegal land holders and convince them to leave the land	Persuasion
9	Warned to acquire everything when illegal landholder without legal rights refused to give land required for construction	Persuasion
10	No legal right 20m below owner's land stating excavation of minerals as an example	Persuasion

SI No	Practice	Strategy Category
11	Show different options through graphical prints and 3D CAD drawings of the metro rail piers near their affected property to enable selection of one that cause minimum disturbance to landholder.	Persuasion
12	Digitally modified images to show how elevated sections of the metro rail would alter the streetscape near the heritage building	Persuasion
13	Designs altered to change the pier distance and address the land holders' grievances	Flexibility
14	59,000 trees and saplings planted and agreed to restore parks	Extra work for stakeholders
15	Installed solar panels in metro stations and other accessible locations	Extra work for stakeholders
16	Agreed to frequently monitor noise and vibrations levels and take adequate steps to keep them within permissible limits	Extra work for stakeholders
17	Recruit people on deputation to get work done from their colleagues in government services	Deputation
18	Built state of the art inspection chambers while shifting state-owned communication networks	Extra work for stakeholders
19	Shift the water line using own funds	Extra work for stakeholders
20	Pay funds to electricity board to shift the cables	Extra work for stakeholders
21	Construct footing within available space when water lines could not be shifted	Flexibility
22	Construction only during night hours where vehicular traffic is less and when suburban rail is not operational	Flexibility
23	Used a complicated methodology near airport areas when big cranes could not be used	Flexibility

SI No	Practice	Strategy Category
24	Recruit talent who has relational experience with Airport authority to enable coordination	Deputation
25	Steel bridge design instead of concrete bridge over railway	Flexibility
26	A 500m section was changed to underground near the airport runway	Flexibility
27	The tracks near air traffic funnel area was covered with FRP sheets to reduce visual hindrance to the pilots	Extra work for stakeholders
28	Changed two stations from curved to flat top for satisfying the airport zone height limits	Flexibility
29	Get educational institutes to certify that there is no electronic interference from 25 Kilovolt OHL lines near airport	Persuasion
30	Use sheet piles to limit the construction area and not close the street from public use	Extra work for stakeholders

5.2.2 Resource-based power that enables Strategies

Those strategies that were emergent were made possible only because of the existence of accessible resource bases rooted in underlying power structures. The resources used, such as recruiting on a contractual basis, recruitment on the basis of secondment, fund discretion, and recruiting expert talents, and their role in enabling specific strategies of the project team are discussed below.

1. *Recruiting on a contractual basis*

The project team were able to convince certain stakeholders using rational persuasion because the project organization hired employees on a contractual basis. In India, government officials are often concerned about being investigated by anti-corruption agencies for paying extra compensation to landowners and tend to be very conservative in their calculations (Mahalingam & Vyas, 2011). However, since these project team employees were recruited on a contractual basis, they had more freedom to act. The project team paid market compensation to legal landowners and informed the landholders with

illegal titles that the full land would be taken from them if they refused to give up land for construction, but if they cooperated then some partial element of the land would be made available. A government team member would not be able to give such assurances as their decision could be questioned or challenged in the future as not being in accord with the rules of rational legality.

The employees recruited under contract had ‘legitimate’ power (French & Raven, 1959) to make offers and not be held accountable for doing so in terms of an existing bureaucratic precedent. The warning that non-compliance can lead to the full land being taken from them shows the use of ‘coercive’ power by these employees. Supporting this, Mahalingam & Levitt (2005) note that where freelance expatriates are recruited on a contractual basis as part of the megaproject team they are able to make decisions that are not bound by the ‘shadow of the future.’ The contract-based employees had only one mandate: to complete the work as quickly as possible. Hence, their orientation to the megaproject was highly instrumental.

2. *Recruitment on the basis of secondment*

The ‘deputation’ strategy was possible only because the project organization was able to accommodate people who were seconded from external stakeholder organizations who then acted on the basis of the ‘referent’ power (French & Raven, 1959) the organization enjoys.

The megaproject had adequate political support and hence they could ask the state government to depute staff from government agencies; these staff could use personal circuits of power in the project’s interests. As seen in the case of illegal land holders, the metro rail megaproject also specifically drew on existing power relations in terms of elected representatives, a significant referent power in Indian society. The strategy of ‘personal appeal’ worked exceptionally well in the case of deputed staff interfacing specifically with government agencies among the multiple categories of stakeholders, a significant contribution to understanding when to use what strategies.

3. *Fund discretion*

Convincing stakeholders when there were cost implications was possible only because the metro rail project organization had fund discretion. The ability to raise and use funds at their own discretion gave the organization a base with which to ‘reward’ (French & Raven, 1959) other players who support their cause.

The discretion to use funds to build a new station for the railway department led the project organization to apply for and receive land permits to construct their own metro rail station using the ‘give and take’ strategy. The discretion to use the metro rail funds to pay for shifting communication cables and building inspection chambers resulted in faster utility shifting as part of performing the ‘extra work for stakeholders’ strategy. The fund discretion also enabled the project team to adopt the costly ‘flexibility’ strategy. Rewards encourage ‘exchange’ tactics. Supporting this, Freeman (1984) underlines that investing an organization’s resources and time to address issues and concerns of stakeholders, such as external stakeholders in this study, is a justifiable managerial activity.

4. *Recruiting expert talents*

The flexibility strategy that the project team used depended on the organization being able to recruit special talents, ‘experts’ (French & Raven, 1959) whose expertise helped provide innovative design ideas and enabled the ‘rational persuasion’ of stakeholders to accept these often-creative solutions.

The organization recruited from other metro rail projects in India and worldwide, something that is not possible with other public projects whose specific recruitment policies do not allow such global recruitment. As an example of the utilization of this resource in combination with others discussed here, the metro rail project organization went through multiple rounds of negotiations to change the concrete bridge to a steel bridge over a suburban rail network, which was only possible with the combination of special talents, fund discretion and deputation.

From the study of the strategies used to manage the external stakeholders and from the resources that enable these strategies the following propositions are posed.

The metro rail organization used the persuasion strategy to convince the external stakeholders on a number of issues. As seen in the instance with the illegal landowners, the metro rail project team legitimized their claim on the land and asked for a section of the land instead of the full land. They coerced the illegal landowners to give off the land instead of going to court where they would lose their full land as it was government owned land. This strategy was possible because the project team were made up of employees who were recruited on contract. Persuasion was possible also because of the deputed employees from the utility agency who would ‘personally appeal’ to their colleagues who are on the other side of the table. Thus, I posit that,

Proposition 1 (P1): *The persuasion strategy was possible because the project was able to recruit on contract and recruit on deputation*

The deputation strategy was employed by the project team to manage the government agencies. Through this strategy, the megaproject improved coordination and negotiated with these governmental agencies. The deputation strategy was possible because the metro rail had government backing which enabled the project to recruit employees on deputation. The metro rail organization employed a manager who had significant experience in the airport section. He knew many of the airport authority employees and even had good relations with the director of the airport. This was possible because the megaproject was able to recruit employees such as him through recruitment on contract. Thus, I posit that,

Proposition 2 (P2): *The deputation strategy was possible because the project was able to recruit on deputation through its government backing*

The give and take strategy involved giving favours in exchange for rights which would enable the construction of the metro rail project. This was seen particularly with land acquisition. With the private land owners, the metro rail project gave money in exchange for land rights. With the government land owners, the project offered to construct some buildings in exchange for land rights such as extra parking facilities for the airport and an integrated station for the railways. To enable such a give and take strategy, the metro rail had fund discretion to spend funds in order to negotiate with the external stakeholders and accelerate the progress of the project. Adding on to this fund discretion, to enable these give and take strategies, the metro rail had employees who

were deputed staff from other agencies. They were instrumental in convincing their counterparts to arrive at a mutually agreeable solution. Thus, I posit that,

Proposition 3 (P3): *The give and take strategy was possible because the project was able to recruit on deputation and because the project had fund discretion*

The megaproject team offered favours to external stakeholders often as compensation in return for their cooperation (Giezen, 2012). These included a set of measures taken to reduce inconvenience to these external stakeholders and gather their support for the implementation of the project. For the airport, the metro rail agreed to cover the elevated tracks with red and white strips to prevent the pilots from the distraction of the moving trains during landing and take-off. In the case of utility agencies such as the electricity department, the metro rail agreed to use their specialized contractors so that work would not be affected. With the temples which had to be shifted, the metro rail opted to use traditional temple contractors for constructing these temples. All these strategies came at an extra cost. They were also enabled through negotiations which were possible only through the employees who are on deputation from their parent organization and who now work with the metro rail organization. These deputed employees knew exactly what kind of work had to be done extra so that the external stakeholder would be happy to support the project. The use of extra work for stakeholder strategy enabled the project to complete on time with minimum disturbance to the external stakeholders. Hence, I posit that,

Proposition 4 (P4): *The extra work for stakeholder strategy was possible because the project was able to recruit on deputation and because the project had fund discretion*

With external stakeholders who were unwilling to give off their land for the project, the metro rail organization opted to take the project off their land through design flexibility. This strategy was used also to reduce inconvenience to these stakeholders as seen with the airport where the construction methodology of few stations had to be changed to comply to the height requirements of buildings near the airport. Again, with the airport, the metro rail had to convert an elevated stretch to underground as it was near an auxiliary runway of the project. In the case of the railways, the metro rail had to convert a concrete bridge to a steel bridge through multiple negotiations with the railway authorities. In the process, the employees of the metro rail were able to come up with

multiple designs and solutions that would address the external stakeholder concerns. For all these strategies, the metro rail needed significant fund discretion to change specifics of the project to match with the concerns of the stakeholders. These external stakeholder concerns kept coming even during the construction phase of the project and hence the fund discretion needed to be there after finalizing the project costs during the shaping stages of the project. Flexibility was also enabled by talented employees in the metro rail megaproject who were able to propose these innovative solutions. Hence, the flexibility strategies used to manage the external stakeholder was possible through a combination of deputed employees, fund discretion and the presence of talented employees in the metro rail megaproject team. Hence, I posit that,

Proposition 5 (P5): *The flexibility strategy was possible because the project was able to recruit on deputation, because the project had fund discretion and because the project was able to recruit talents*

The persuading strategies, the resources that enable them and the five propositions that connect the resources to the strategies are represented in Figure 5.2.

In summary, these four resources available to the project team formed the bases of power that allowed them to enact strategies to manage external stakeholders. Depicted in Figure 5.2, these resources can be consolidated into recruitment discretion (to recruit on a contract basis and recruit special talents), government backing (to recruit on deputation) and fund discretion. These resources available to the project team based on the covert structures of meaning enabled the overt strategic action seen in managing external stakeholders in line with the circuits of power theory (Clegg, 1989). The strategies and resources were only available to the project team during the duration of the construction project, unlike in general management, where they exist for an indefinite period of time.

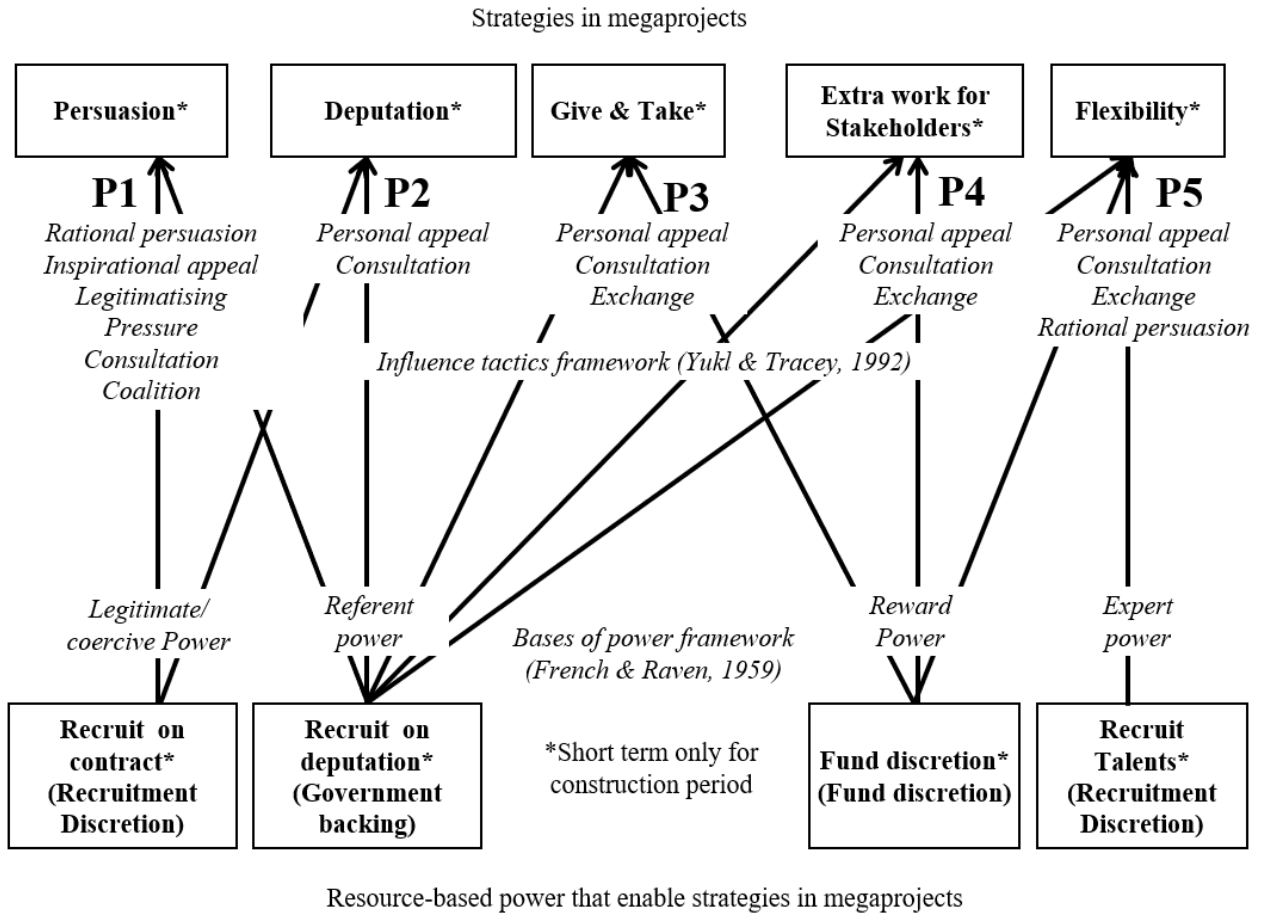


Figure 5.2: Persuading Strategies and Resource-based Power from the case

5.3 CONCLUDING REMARKS

This study contributes to the understanding of overt strategies for external stakeholder management in complex settings as exemplified by megaprojects. While extant research has documented ways in which stakeholder views can be managed (Aaltonen & Sivonen, 2009; Kim & Mauborgne, 2003; Chinyio & Akintoye, 2008; Yang et al. 2014), the key contribution in this research is to provide insights on how these strategies work by considering the resource that enable them.

As shown in Figure 5.2, by studying the strategies used to manage external stakeholders and by investigating the resource bases available to the project organization, I demonstrate how emergent strategies coalesce around influence tactics that use bases of power embedded in specific

resources that project organizations use to manage external stakeholders. I therefore posit that changes in the resource base can trigger power circuits that significantly affect strategic action and in turn, project outcomes. Thus, understanding of how and why project organizations use specific strategies to engage with stakeholders requires a critical appreciation of power relations and resources.

The aim of this research was not to demonstrate methods that might eliminate all stakeholder issues in infrastructure megaprojects – I think that this is impossible – nor was the intention to comprehensively document all the issues that a megaproject might face and all the resources and strategies available to the project team to manage them. Instead, the study theoretically documents and categorizes strategies used in relation to diverse external stakeholders in a metro rail megaproject. External stakeholders considered in this study can be classified as stakeholders in lands and in existing services. To manage these external stakeholders, the project team resorted to five strategies: 1) persuasion, 2) deputation, 3) give and take, 4) extra work for stakeholders and 5) flexibility, each of which in turn were composed of multiple influence tactics. The resources available to the project team for enabling these strategies are recruitment discretion, government backing and fund discretion.

The study provides empirical validation of the link between strategies and power resources empowering the project team in dealing with the external stakeholders. Fund discretion enabled monetary support for ‘give and take’, ‘extra work for stakeholders’ and ‘flexibility’ strategies. Recruitment discretion enabled recruiting talents from other metro rail projects that had previously dealt with similar issues for ‘persuasion’ and ‘flexibility’. Government backing enabled the ‘deputation’ strategy. Articulating the level of analysis in organizational terms and addressing the circuits of power entailed significantly advanced analysis that previously had looked at phenomena such as the direction of usage (Kipnis et al., 1980; Yukl & Tracey, 1992), sources of power (Yukl, et al., 1996), the content of games in play (Yukl et al., 1999), culture (Fu & Yukl, 2000) and leader’s quality (Cable & Judge, 2003). I have distinguished between strategies deployed in relation to government and private organizations as personal appeal worked exceptionally well with government agencies.

The work has some limitations. Since a retrospective case study was used as the research methodology, only instances of overt resource-based power were evident. This limitation will be addressed in the subsequent chapters of framing strategies (Chapter 6), hegemonizing strategies (Chapter 7), and relation between strategies (Chapter 8) as the use of covert power and the role of the institutional environment in enabling the persuading strategies used will be explored. Also, in the study, I have observed that external stakeholder management strategies emerge based on the resources available with the project team as opposed to the other way around - resources emerging based on the stakeholder characteristics and strategies employed. This may be peculiar to megaprojects because the cast of external stakeholders are relatively unknown at the start of the project (Mok et al. 2015). However, the directionality of the strategy-resource link can be tested on other projects.

In this chapter, I have discussed the persuading strategies observed from the metro rail megaproject. However, these visible strategies are dyadic interactions between the project team and the stakeholders and they do not consider the significance of the complex institutional background, set up by the invisible strategies. In the next chapter, I discuss the invisible strategy of framing which set up the context for the visible persuading strategies discussed here.

CHAPTER 6

FRAMING STRATEGIES²

6.1 INTRODUCTION

In this chapter I seek to answer two research questions laid out in chapter 3 on the literature review of framing theory (Goffman, 1974) and the literature on the use of framing strategies to manage external stakeholders. While literature talks about framing in the beginning of a megaproject, the day to day framing process in the construction and operation phases of the megaproject is not explored. Specifically, the research questions are, (RQ3) What framing strategies are used by megaproject to manage external stakeholders during the construction and operation phases and (RQ4) What are the effects of these framing strategies? The research methodology choices for the two research questions are summarized in Figure 6.1.

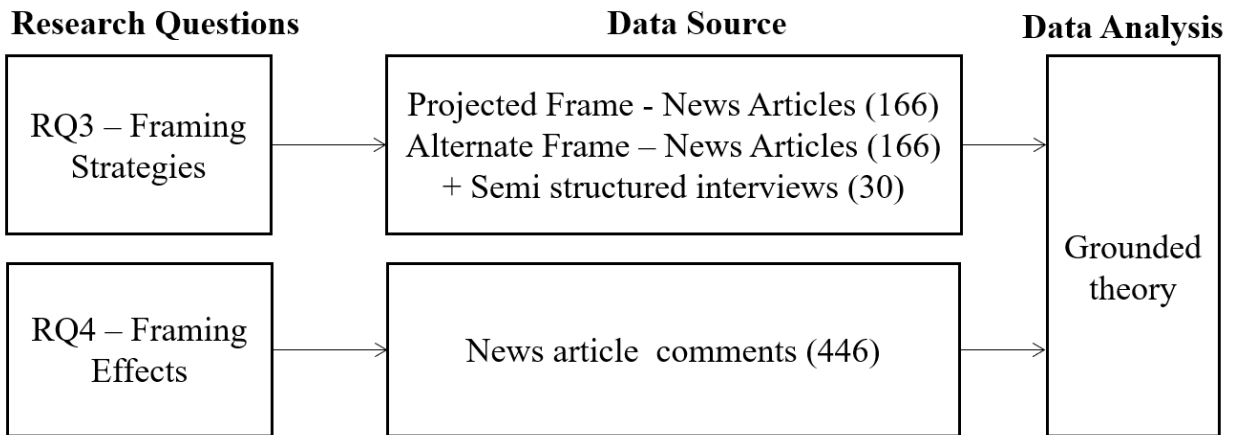


Figure 6.1: Research Methodology for Framing Strategies

For exploring the framing strategies employed in the metro rail megaproject in India, 166 news articles compiled from 1st January 2017 to 31st December 2017 are studied. The social frames from these articles are compared with the natural frames compiled from other news articles and the

² This chapter is a modified version of the journal article co-authored with Dr. Ashwin Mahalingam and Prof. Stewart Clegg which is under review with the Journal of Management in Engineering.

Ninan, J., Mahalingam, A., Clegg, S. R. Social and Political Resilience in Infrastructure Projects: A Study of Framing in News Media Articles. *Journal of Management in Engineering*. (Invited for special issue - under review).

semi-structured interviews with the project team. Goffman (1974) defines social frames as frames that incorporate the will, aim, and controlling effort of agency, the project team in this instance. In contrast, the natural frames are undirected, unoriented, unanimated, and unguided without any intentional interference from the agency. So, while the natural frame presents the facts surrounding an event, the social frame presents the metro rail project's interpretation of the event which influences the perception of the community. This comparison between the natural and social frames would help understand how the project frames instances and sells it to the community. Rather than focusing on the content of the news, the focus is on how the news is presented to the community. The effects on the community of the project team using the framing strategies is observed from the comments by the project community on these news articles. A total of 446 comments on these 166 news articles were studied to understand the perception of the community. I also used the data from the 30 semi-structured interviews conducted with the metro rail project team to understand the contextual information which would help me decipher the natural frame.

For analysis, I used the frame analysis theory (Goffman, 1974) to contrast the social frame with the natural frame. I discuss and present both the frames in a tabular form following the suggestion of Eisenhardt (1989) to enable theory building. This research relies on grounded theory (Strauss & Corbin, 1990) for theory building and uses it to arrive at the constructs and the relations between them by interpreting the data collected from news articles, community's comments and interviews. For this, I relied on manual coding as automatic methods can create a barrier to understanding (Kozinets et al., 2014). Following an iterative process and following the rules of grounded theory, I analysed the data parallelly during the data collection stage. Revisions were made to the coded categories such that the categories remain mutually exclusive and exhaustive. I then isolated observations and quotes that illustrated the framing strategies and their effects.

In the remaining sections of this chapter, the framing strategies employed to manage the external stakeholders in the case of the metro rail megaproject in India is explored by anchoring in the frame analysis theory (Goffman, 1974). Following this, the effect of these framing strategies on the project community is highlighted. The chapter concludes with the theoretical contributions, practical contributions, limitations and future directions from this study.

6.2 FINDINGS AND DISCUSSION

The grounded theory analysis on the news media communications of the megaproject enabled us to create constructs that were emergent from the data such as framing strategies and framing effects. I proceed to discuss each of them in separate sections.

6.2.1 Framing Strategies

Four framing strategies were observed in the megaproject that emerged from the data. These strategies are goal framing strategy, pride framing strategy, community-centric framing strategy, and blame framing strategy. Each of the strategies is discussed below.

1. *Goal framing strategy*

These are strategies which aim to stress, as part of the social frame (Goffman, 1974), the goals on which the project is based on. Multiple reasons for constructing the metro rail project were stressed in the news articles by the project proponents which included a unique selling point and multiple other selling points. The unique selling point for the project was interconnectivity between the services. The metro rail project aimed to integrate existing public transportation systems in the city at multiple modes throughout the proposed network. The Chief Minister of the state during the inauguration of one of the metro rail lines quoted,

“Cities that have created integrated, multi-modal infrastructure have effectively tackled pollution and congestion” (Quoted from a news article of 14th May 2017)

Quotes from the project team in other news articles also stressed the interconnectivity frame through the initiatives that the metro rail project had taken to achieve it. Thus, the articles on the metro rail’s initiatives on common ticketing service for all public transport in the city, bus stops being moved closer to metro stations, etc., all stressed the interconnectivity frame of the project. The Managing Director of the metro rail project was quoted as saying,

“We [metro rail organization] are focussing a lot on implementing the common ticketing system soon. Using this, passengers can use the same card in trains, buses and even ATMs” (Quoted from a news article of 25th November 2017)

The boom in Metro rail projects started in India with the Delhi metro rail and multiple metro rail projects sprouted in many cities in India. While the rationale for the construction of Delhi metro rail was improving the share of public transport and thereby taking private vehicles off the road and reducing traffic congestion, the project considered for this case study was housed in a city which had the largest share of public transport users within India. The city also had multiple urban rail networks in the form of a sub-urban railway network and a Mass Rapid Transit System (MRTS) network. As a result, the metro rail organization opted to improve interconnectivity between existing public transportation systems. The natural frame of multiple existing rail networks in the city is supported by a quote of a retired IAS officer (civil servant) published in one of the news articles as below,

*“*** [the city] does not need a metro [rail] like this. Unlike other cities- we have mass transit. We just needed to optimise existing transport” (Quoted from a news article of 9th April 2017)*

While the project team directed the news articles by stressing the importance of the project in achieving interconnectivity of services through the social frame, the natural frame without any outside interference from the project team would be that the city did not require a new project for this interconnectivity, rather it required only an optimization of the existing transport network. Since the city is already well connected through existing public transport, in many locations both the metro rail and the existing public transport run in parallel.

Apart from this unique selling point, there were multiple other selling points. A new phase of the project was proposed as a network which would enable industrial workers to move to the city centre on a daily basis. The metro rail spokesperson was quoted in the news articles as,

“This extension will provide improved access to public transport for a dense population comprising predominantly industrial workers to move towards the Central business district of the city for work” (Quoted from a news article of 20th July 2017)

The part of the first phase of the project that is currently in operation was criticised for its high-ticket prices. Since the city already has a good network of public transportation, people continue to use the less expensive existing services. It can be seen here that the project team used the selling point as the metro rail project was proposed for industrial workers to move to the city centre on a daily basis. This social frame was stressed in the quotes of the metro rail proponents in the news articles. In contrast, the natural frame, without the intervention of the agency shows the unaffordability of the expensive metro rail tickets in comparison to existing public transport in the city. Hence, the new phase of the metro rail would not benefit populations such as low-income industrial workers who move to the city centre for daily work, in the short run. Supporting the natural frame, a petition by the traffic and transportation forum of the city reported in one of the news articles,

*“The Traffic and Transportation Forum, *** [name of city], has written a letter to the *** [metro rail organization] requesting it to reduce the ticket fares... the forum pointed out that reduction in fares will enable people to leave their private vehicles behind and travel more sustainably” (Quoted from a news article of 31st March 2017)*

The whole project also aimed to make the city a bicycle centre, as part of the non-motorized policy of the state government and as part of the city corporation’s aim to introduce a bicycle sharing system. To achieve this, there were multiple initiatives from the metro rail to rent bicycles for the promotion of cycling among the commuters as seen in the quotes below,

“We will expand this [bicycles free of cost] further to other stations too as the demand improves. We want to encourage commuters to take to cycling and hence, this initiative” (Quoted from a news article of 4th July 2017)

“We [metro rail organization] have more bicycles available for our officials to use when they go on inspection. We are slowly trying to promote eco-friendly ways of travelling” (Quoted from a news article of 25th January 2017)

While the higher ticket rates of the already operational network repelled commuters from using the metro rail, the people willing to bear the extra cost for the travel were unable to reach the stations due to a lack of last mile connectivity. A representative of the city corporation who was part of the city’s bicycle sharing system commented on the metro rail’s initiative as below,

*“*** [name of city] Metro [rail] is offering the cycle hiring system for last mile connectivity of its users. But the issue is the commuter has to take the cycle to his office and find a parking place. He also has to bring the cycle back to the station”* (Quoted from a news article of 29th May 2017)

The metro rail project opted for multiple initiatives for last mile connectivity which included Uber/Ola kiosks, dedicated buses, and cycle renting options at the stations. Thus, the aim of the project to make the city a cycle centre evolved from an organizational interest to improve the last mile connectivity thereby increasing the number of metro rail commuters. For the bicycle system adopted in the project, the social frame propagated by the promoters depicted the project as aiming to promote eco-friendly ways of travelling. In contrast, the bicycle system was in place to improve the last mile connectivity to the stations along with kiosks for taxi services and dedicated bus services which constitutes the natural frame without the intervention of the project team. Thus, the project team opted to propagate the bicycle sharing system and frame the project as promoting eco-friendly ways of travelling while ignoring information on motorized transport which were also used to improve last mile connectivity.

Through this goal framing strategy, it is seen that the metro rail megaproject was framed in different perspectives focusing on the goal of the organization. This is similar to Chong & Druckman's (2007) findings that framing works by making certain parameters accessible, applicable or strong in people's evaluation as seen in the case of propagating the goal of the project in this case. I have summarized the social frame and natural frame for the goal framing instances in Table 6.1.

Table 6.1: Goal Framing Instances

Sl. No	Social Frame	Natural Frame
1	Interconnectivity with existing public transportation services projected as the main reason for the project	All public networks should ideally be connected to other transportation services. Rather than a new project for interconnectivity, the existing networks could have been optimised.
2	New phase of project was proposed for industrial workers to move to the city centre on a daily basis	The metro rail tickets are priced higher in comparison to other public transportation in the city and the low-income industrial workers would not benefit from the new phase.
3	The project aimed to make the city a bicycle centre and promote eco-friendly ways of travelling	The number of users travelling by the metro rail is affected by last mile connectivity. To improve this, cycles were proposed along with Uber kiosks and metro rail special buses.

2. *Pride framing strategy*

The metro rail project highlighted features of the project which would make the community feel proud of having the project in the city. Through these news articles, the metro rail organization sought to highlight that they had achieved something unique and noteworthy such as being the first organization to enact a particular intervention, stressing their environmental commitment, comparing themselves to some role models, etc.

The metro rail has the largest on-site solar project in India. The move to use solar power in the metro rail project was in line with the central government's vision of moving towards renewable sources of energy by the year 2022. A quote by the metro rail official spokesperson reports,

*“Once fully operational, the total capacity of rooftops and ground mounted power systems in *** [metro rail organization's] facilities will be six MW [megawatt], which will make it one of the largest on-site solar projects in India”.* (Quoted from a news article of 23rd June 2017)

The city in which the project is housed is an energy deficient city. As noted earlier, when the metro rail organization signed an agreement for drawing electricity from the state electricity board there were protests from the community as they feared power disruptions in the city. In response to these, the metro organization agreed to install solar panels on all metro rail stations which resulted in it having the largest on-site solar project in India. Thus, the natural frame depicts how the metro rail project had to rely on solar power for its operation, while the social frame with the intervention of the project team propagated the project as achieving something unique through pride framing without highlighting the constraint which lead to it.

The metro station near the central railway station was projected as being the largest underground station in India at a depth of 28m below the ground level as reported below,

“With 3 decks, the 390m long 33m wide and 28m deep central metro station will be one of the largest underground transport structures in the country” (Quoted from a news article of 2nd October 2017)

However, this depth was necessary as the central railway station currently integrates all the transportation systems in the city including the local suburban train network and the mass rapid transit system. Here again, the social frame propagated by the project team promoted the project as achieving the tag of largest underground station in India, without highlighting the natural frame of the presence of multiple modes of public transport at the same station resulting in the unnatural depth.

The metro rail organization boasted about the size of its depot emphasizing the use of cutting-edge technology to manage the metro trains at a smaller size in comparison to the railway trains. They propagated the social frame that the size of the proposed depot is planned to be one-tenth the size of that of the central railway train depot as given below,

*“The depot, set to come up near the *** [name of the place] railway station, will be one-tenth the size of depots built by the railways, but will have cutting edge technology for regular upkeep of trains”.* (Quoted from a news article of 10th September 2017)

The central railway trains are generally 24 coach trains and would have a length of 600m. In contrast to the social frame which includes the intervention of the project team, the 4 coach trains used by the metro rail organization for this project would only be 88 m. Rationally in the natural frame, the size of the metro rail depot should only be one-tenth the size of the central railway trains.

Through this pride framing strategy, the megaproject propagated itself through a social frame as iconic either through being the first to do something, largest in India, or being innovative. Sergeeva (2017) highlights how the labels of projects such as innovative, largest, etc., are socially constructed and how packaging projects with these labels have become important strategies. As seen with the pride framing strategy, these initiatives were a result of some contextual natural frame which the project team chose to hide while presenting and propagating their social frame. The social frame and the natural frame for the pride framing instances are summarized in Table 6.2.

Table 6.2: Pride Framing Instances

Sl. No	Social Frame	Natural Frame
1	The metro rail has the largest on-site solar project in India	Since the metro rail project was planned in a city with electricity shortages, there were community concerns on the amount of electricity it would draw for its operation. In response, the metro rail agreed to have solar panels installed to cater to some of the energy needs.
2	The metro station near the central railway station would be the largest underground station in India	The central railway station is where the existing public transports systems such as the suburban train and the mass rapid transit systems intersect with the railways. Since all these infrastructures already meet there, the metro station with two metro lines had to be deeper
3	The size of the metro rail depot is only one tenth the size of those built by central railway train depots through innovative solutions	The average length of the central railway's train is 600 m while that of the metro rail train is 88 m. Hence, the size of the station should be around one tenth the size.

3. *Community-centric framing strategy*

The metro rail project justified all the decisions they have taken as taken ‘in the best interest of the community’. The strategies that the project team use to achieve this social frame constitutes the community-centric framing strategies. The social frame propagated that all decisions were taken for passenger safety, for passenger comfort, to reduce community disturbance during construction, etc.

The metro rail project emphasized the safety of the commuters in its decisions. The decision to install platform screen doors in the metro stations was propagated as taken to prevent suicides and people falling on tracks. On this issue, a news article quoted,

*“In a bid to prevent such attempts [suicide], the *** [Metro rail project] have decided to install Platform Screen Doors (PSD) in underground stations”* (Quoted from a news article of 18th April 2017)

However, the media representatives questioned the lack of platform screen doors in the elevated stretch and recorded,

“When asked why this facility has not been installed in the two elevated stretches, currently in operation ... they said it would be cost intensive and hence, there were no plans to install them in the stations that are over the ground” (Quoted from a news article of 18th April 2017)

The project team responded about the cost-intensive nature of installing PSD’s in the elevated stretch. When questioned further, the project team remarked that since the underground stretches are air-conditioned, the screen doors would help prevent the cooled air from escaping to the tunnel and thus result in power saving as quoted below,

“All the underground stations are air-conditioned, so the electricity consumption will go through the roof without this PSD. If not for this, the cool air will escape and run along the entire tunnel for several km and consumption will be exorbitantly high. As such, the electricity consumption of the underground stretch may be triple that of the elevated one” (Quoted from a news article of 18th April 2017)

The natural frame for providing the PSD’s in the underground stretches was to prevent the cool air from escaping through the tunnel and thereby reduce the exorbitant electricity consumption. Instead of economically rationalizing the decisions based on the cost savings to the project resulting from the move, the metro rail project opted to intervene and propagated the social frame of reducing suicide attempts, in the process creating a

perception of the metro rail as concerned with the safety of the commuters. Thus, through this social frame, they rationalized the decision of PSD's from a community-centric frame.

The metro rail link between the central railway station and the airport was projected as a link which would benefit many with the reduced cost and reduced travel time.

“A ride from the Central to the airport may cost ₹70 [INR] ... we give 20% discounts to travel card holders ... The linking of the city's most important railway station and the airport is likely to be of benefit to thousands of commuters.”
(Quoted from a news article of 27th December 2017)

However, similar to other stretches in the city, this link is also serviced by existing suburban rail networks that takes similar time and cost less than 15% of the metro rail commute cost. In this case, since the natural frame could be easily picked up by the commuters who are aware of the alternatives, these commuters expressed their dissatisfaction in the comment section as quoted,

*“When people can take a train from *** [name of station] just 5 minutes-walk from Central Station and the train reaches airport in Half-an-hour and the ticket being just 10rs [INR] why would people wish to go from Central to Airport in a metro [rail] which takes longer and costs higher”* (Quoted from the comments of a news article of 27th December 2017)

In some other cases, the time savings in using metro rail transport over uber rides and cost implications of such a switch was emphasized for the connection between a place in the city and the airport as given below,

*“The services [from a place in the city] will allow people to get to the airport, which costs approximately [INR] 362 by Ola Mini and [INR] 263 by Uber. Though the distance by road is lesser than the metro line, people will be able to beat the traffic at *** [name of location] and reach southern destinations in the city quicker by metro trains”* (Quoted from a news article of 11th May 2017)

As per the natural frame, the cost of the existing public transport is less than 15% of the proposed metro rail charges. Rather than comparing with existing public transport on the same route, the metro rail project opted to propagate the social frame of comparisons with ride-hailing services such as Uber.

Table 6.3: Community-centric Framing Instances

Sl. No	Social Frame	Natural Frame
1	Platform screen doors in metro stations implemented to prevent commuters from falling or jumping on the track and hence for the safety of commuters.	Platform screen doors are only available in the underground sections of the network. This is to have efficient air conditioning of the underground sections thereby reducing electricity consumptions
2	Metro rail services from a place in the city to the airport is compared with Uber rides and found to be cost effective and time saving as it skips road traffic.	Both locations are already connected through suburban trains that skip road traffic. Adding on to this, the cost of this trip would be less than 15% the cost of the metro rail services on the same route.
3	The link between the central railway station and airport would benefit many as commute time is less	There is already a link between the central railway station and airport through the existing suburban train network that takes lesser time. Travelling through this existing link would be only 15% of the proposed cost of the metro rail services.

Through the community-centric frame, some of the negative events, as part of the natural frame, were framed as positive by the metro rail official spokesperson using the social frame. Carragee & Roefs (2004) note how public relations professionals by using particular frames in an issue are able to extend their influence beyond single stories and connect their clients' readings of the issue to a wider cultural phenomenon. This ability of public relations professional is also called as 'framing expertise' (Dan & Ihlen, 2011). The social

frame and the natural frame for the community-centric framing instances are summarized in Table 6.3.

4. *Blame framing strategy*

The metro rail didn't accept any of the accusations that it faced during the construction and operation of the project. The metro rail official spokesperson was always available for comments during criticisms and they provided an explanation for each critical instance through which the blame was shifted away from the metro rail organization.

During the construction of the metro rail project, an accident occurred which claimed the life of a worker. Instead of the natural frame, that showed the poor safety practice of the construction activities, the metro rail organization, using the social frame, emphasized that the worker had worn all the safety gear and all precautions were taken. They claimed that the accident occurred in spite of these. The official spokesperson quoted as below,

“The workers did wear their safety gear and other safety precautions were in place. We [metro rail organization] are in the process of finding out how it happened”
(Quoted from a news article of 3rd July 2017)

The natural frame of the poor safety practice of the construction activities is supported as this is not the first time that such fatal accidents have occurred during the construction of the metro rail project. In the past instances also, the officials claimed that the workers wore their safety gears and all safety precautions were taken. However, the project was unable to have a proper safety plan to prevent accidents in the future. Comparable to the statement about investigation to find out what really happened in the accident, Hood et al. (2007) note how similar inquiries are used by proponents in the media to put tricky issues into a 'political long grass'.

During the construction of the underground stretches, the tunnelling activity resulted in the cave-in of a road. Here also, instead of the natural frame that shows the poor safety practices of the project, the metro rail organization, using the social frame, blamed the soil condition for the cave-in as quoted below,

“The cause behind the caving in is a loose soil pocket along the tunnelling alignment where the boring machine is under operation” (Quoted from a news article of 9th April 2017)

Supporting the natural frame of the poor safety practices of the project, this cave-in was not an isolated instance and there were similar cave-ins earlier in June 2015 and December 2015 and later in May 2017 and November 2017 as a result of the tunnelling in the underground stretches. In all these instances, the metro rail used the blame framing strategy to create a social frame and blamed different reasons for the failure to hide the natural frame of the poor safety practices of the project.

The reason for the slow progress of tunnelling activities was often cited as challenging soil conditions as quoted by an official of the metro project below.

“The soil conditions were challenging in a lot of places, which delayed the tunnelling work” (Quoted from a news article of 3rd January 2017)

Even though the challenges due to soil conditions were acknowledged and revised estimates were given, the metro rail project missed the revised date too. In spite of this, the metro rail propagated the social frame of challenging soil conditions as reason for slow progress. In contrast, the natural frame for the slow construction progress was the contractors leaving their job and fleeing. This led to significant delays as the metro rail organization had to call for new tenders and award the remaining work to a new contractor. This natural frame was not an isolated incident because as many as three contractors have left the project. During our interviews with the project team, the general manager of construction quoted,

“The problem [reason for delay] is most of the contractor ran away ... they do 30% of the work and go away telling financial reasons”

When the contractor left the job midway, a new tender had to be floated and bids had to be evaluated to select another contractor for the remaining works which resulted in significant delays. However, whenever asked about the reason for the delay by the media and the

public, the officials propagated the social frame of challenging soil conditions and hid the inefficiency of the metro rail organization to retain the contractors. Thus, using the blame framing strategy, the metro rail project opted to blame the challenging soil conditions for the slow progress of tunnelling activities.

When the metro project was under scrutiny for poor patronage, the metro rail organization, using the social frame blamed this on the lack of links to major locations where footfalls were expected, as quoted below,

*“Except for the line connecting *** [central bus station] and airport, the rest of the operational line connects mostly residential areas. Hubs where we expect a majority of footfall like *** [primary railway station] and *** [secondary railway station] is yet to be opened and that is the reason for the low patronage”* (Quoted from a news article of 27th December 2017)

Even after patronage improved with the opening of these stretches, the footfall is not near the planned estimates. A news report reporting the poor patronage even after connecting the railway stations quotes,

*“Extension of metro services up to *** Central [primary railway station] from Airport may have nearly doubled the footfall, but *** [name of metro rail project] has got no way near its original traffic projections”* (Quoted from a news article of 5th September 2018)

This blaming frame is similar to a denial frame that seeks to downplay the consequences of the event to create a perception that it has occurred independently from the influence of the office holders (Boin et al., 2009). This is not surprising in megaprojects as Steen (2018) notes in his study based on 65 news articles from 5 years on the reasons for cost overrun of Australia’s oil and gas megaprojects were publicly attributed to external factors in the media. He codes the reason for cost increases and problems publicized in news agencies such as Financial Times, Wall Street Journal, Australian Financial review, etc. The external factors such as natural events, regulations, high Australian dollar value, skilled labour scarcity and high labour costs were attributed to poor performance while internal factors

such as project management, collaboration, scope changes, productivity were seldom mentioned. The social frame and the natural frame for the blame framing instances are summarized in Table 6.4.

Table 6.4: Blame framing instances

Sl. No	Social Frame	Natural Frame
1	Worker’s accident during construction in spite of taking all precautions at the site	Similar instances have occurred repeatedly, and project is inefficient in safety management
2	Road cave-in caused due to unpredicted loose soil or rain	Multiple cave-ins were reported earlier also, and project was inefficient in predicting and managing them
3	Delay in progress – soil conditions were challenging	This reason was quoted earlier too, and revised completion dates were also not met
4	Delay in progress - contractor running away caused delay	Multiple contractors from the project ran away implies that the metro rail organization is not doing anything to retain them
5	Poor patronage because important places are not connected	Even though patronage improved with further connections, it was nowhere near the planned patronage

6.2.2 Framing Effects

The framing strategies had an impact on the project community. The framing effects of the use of the strategies were recorded from the comments on the news articles. These comments were made by members of the project community and were not restricted to the news article but also to how they perceived the megaproject to be based on earlier news articles. A grounded theory method was used to analyse the comments to arrive at the effects such as a solution frame, trend-setter frame, important frame and own up frame. Each of these effects are discussed below.

1. *The ‘Solution’ frame*

The framing of the goal of the metro rail from multiple perspectives made the community think that the metro rail is the solution to all their problems. On some of the articles, users commented,

“With population growth and vehicle park roads are shrinking. Metro offers solution” (Quoted from the comments of a news article of 24th February 2017)

“This will reduce traffic pollution and congestion and will be cost effective transportation solution” (Quoted from the comments of a news article of 24th September 2017)

Another community member commented in support of the connectivity offered by the metro rail project commented,

“Hope the Centre will give its clearance for the Next Phase of Metro Rail projects which is essential for the better connectivity among the city and its suburbs which is fast expanding” (Quoted from the comments of a news article of 15th July 2017)

Using the goal framing strategy, it is seen that the megaproject framed the project’s benefits as arising from multiple perspectives such as interconnectivity among services, for the daily commute of workers, to reduce traffic, cost effectiveness, etc. Even though this observation is in contrast with Giezen’s (2013) recommendation to keep framing narrow to reduce complexity and uncertainty and thereby keep the project manageable, I found this strategy effective to create a dominant discourse with the external stakeholders that the megaproject is the solution to all these issues. Mastos et al. (2015) also highlights the role of framing and dominant interpretation in shaping construction projects. Therefore, I posit that,

Proposition 6 (P6): *The ‘solution’ frame on the part of the project community results from the goal framing strategy employed by the megaproject team.*

2. *The ‘trend-setter’ frame*

The community echoed through their comments that the metro rail was a trend-setter. For instance, the following comment was received in response to the metro rail stations getting a green rating for initiatives such as solar power.

“Kudos. That should become trend-setter for other metro rails as well as for IR [Indian Railways] itself” (Quoted from the comments of a news article of 13th February 2017)

Other praises were showered on the metro rail organization for its state-of-the-art design as given below,

*“The only city in which metro [rail] station looks modern and swankier compared to Airport - *** [name of the city]”* (Quoted from the comments of a news article of 18th July 2017)

Iyengar & Simon (1993) record that individuals habitually refer to the events as portrayed in the news while diagnosing social and political issues. Similarly, here I see the project community showering praises on the metro rail in response to the pride framing strategy and hence I posit that,

Proposition 7 (P7): *The ‘trend-setter’ frame on the part of the project community results from the pride framing strategy employed by the megaproject team*

3. The ‘Important’ frame

The community largely agreed with the metro rail when it focused on some features of the project as beneficial for the community. When safety was stressed by the metro rail in the news article, the comments also stressed the same and offered suggestions, such as

“Make sure CCTV is in place. Security is important” (Quoted from the comments of a news article of 2nd May 2017)

In a similar case when contactless smart cards were introduced with the social frame of ‘ease for commuters’ emphasizing that commuters could walk into any station and take a

train without making the effort of swiping their smart cards or waiting in queues at the ticket counter, the community responded,

“This is most important decision, welcome” (Quoted from the comments of a news article of 31st July 2017)

When the metro rail emphasized that the project aimed to save commuting time, the community agreed with the propagated social frame and stressed that it should be implemented quickly as quoted below,

*“The sooner this stretch is declared open, it will be better for the general public facilitating quicker commuting between west and south *** [name of the city]”*
(Quoted from the comments of a news article of 17th January 2017)

Hence, when the metro rail project used a community-centric frame in the news articles by emphasizing some of the characteristics that are important such as safety, ease for commuters, saving time for commuters, etc., the community reciprocated the importance of them. Thus, as observed by Verduijn et al. (2012) framing can be strategically used to create a sense of collectiveness and urgency. Such framing of projects as community-centric also helps achieve legitimacy on the part of the external stakeholders. Therefore, I posit that,

Proposition 8 (P8): *The ‘important’ frame on the part of the project community results from the community-centric framing strategy employed by the megaproject team*

4. The ‘own-up’ frame

The metro rail did face some opposition as seen from the comments on the news articles. When the metro rail emphasized that they had taken all precautionary measures and the worker’s death during the accident was in spite of these, the community expressed dissatisfaction as quoted below,

“Instead of taking all precautionary safety measures Metro Rail failed in their functions ... why not suspend the Site Engineer and Supervisor for their lethargic attitude ...” (Quoted from the comments of a news article of 3rd July 2017)

When the metro rail organization tried to blame the soil conditions for the road cave-in, one of the members from the community quoted in the comments section,

“This is definitely a technical and management mistake. Those connected with the management and supervision execution - from top to bottom - must be held responsible” (Quoted from the comments of a news article of 9th April 2017)

Even though blame framing was an efficient strategy in the framing literature, the evidence from this research suggests otherwise. When the metro rail organization tried to blame others from the mishap, the stakeholder community was quick to bring back the blame on the metro rail organization. Unlike the literature which deals with the use of power to control the media, I did not observe the same with the megaproject under consideration. The metro rail maintained a distance from the media but answered all their queries as the public relations officer during the interview quoted,

“There is no favouritism when it comes to the press, everyone is equal. We [metro rail organization] try to maintain a distance as much as possible. Whatever questions they have, we will answer it”

This behaviour from the metro rail megaproject is in contrast to the literature which advocates making friends with reporters and making them strong allies who are thereby sympathetic to the project’s issues (Rohlinger, 2002). Even in other megaprojects such as the Konkan rail project in India, Sankaran (2018) highlights the media support enjoyed by the project achieved through the project team building good rapport with the media. However, in this megaproject’s case, the media did not show any bias and reported both the positive and negative news regarding the project. The lack of control in the case of the metro rail resulted in only the one quote by the metro rail official using the blame framing strategy, while the news, in general, reported the facts. Also, Rhee & Fiss (2014) highlight that the effectiveness of framing is dependent on prior performance. Since, road cave-ins

and accidents were quite frequent in the metro rail megaproject, the blame framing was not effective. Hence, I posit that,

Proposition 9 (P9): *The ‘own-up’ frame on the part of the project community results due to the blame framing strategy employed by the megaproject team without sufficient legitimacy.*

I have summarized the four framing strategies, framing effects and their relations observed from the case of the metro rail project in Figure 6.2.

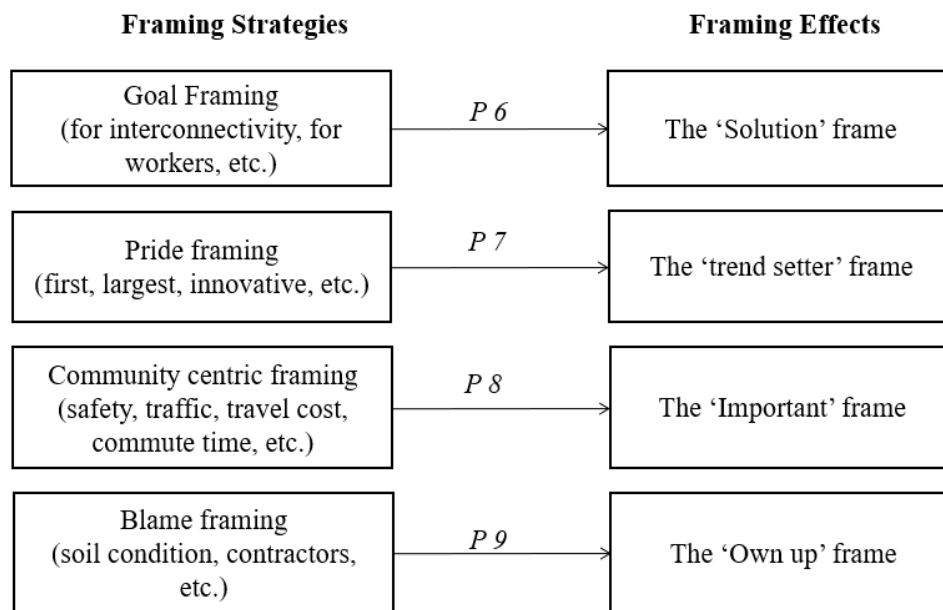


Figure 6.2: Framing strategies, effects and their relation observed in the megaproject

The framing effects observed resulted in the megaproject creating power over stakeholders and maintaining their existing power. With stressing on these frames which match with the needs of the community, new power is created as seen with goal framing, pride framing and community-centric framing strategies. These strategies ensured support for the project through favourable inferences about issues surrounding the project and thereby created power. Through stressing these frames routinely through the news articles, the megaproject legitimizes these frames and maintains the created power. Supporting this, Benford & Snow (2000) highlight that the degree to which the frames are articulated and shared determines the credibility and salience of the initiative.

6.3 CONCLUDING REMARKS

Megaprojects receive more media attention than conventional projects because of their characteristics such as being colossal, costly, captivating and controversial. Thus, I argue that similar to research on political elections, health studies, disaster management and sports, news articles can be used to study megaprojects. Through this research, I explored how the megaproject handled this media attention effectively to manage the external stakeholders through framing strategies.

From a study on the news articles of a metro rail megaproject in India, I observed the use of goal framing strategy, pride framing strategy, community-centric framing strategy and blame framing strategy. Using the frame analysis theoretical framework, this research examined how the megaproject through these strategies projected a particular social frame and hid the natural frame. Since the natural frame is hidden some of the issues that may be critical to the feasibility of the megaproject may not even be raised showing the second dimension of power in practice. Thus, the second dimension of power in practice helped reduce conflicts and resistance to the project during the construction and operation phase of the megaproject. I observed the effects of the use of framing strategies from the comments to these news articles such as the ‘solution’ frame, the ‘trend-setter’ frame, the ‘important’ frame and the ‘own-up’ frame. The relationship between the strategies and the effects are highlighted through four propositions.

Theoretically, while the process of power enabling framing is researched (Carragee & Roefs, 2004), this research contributes to the discussion on how framing creates power. This research also highlights that when these strategies are used continuously, they result in maintaining the created power. It found that stressing the goal of the project from multiple perspectives created a discourse on how the project is the solution to all those problem areas; stressing the achievements of the project through the pride framing strategies created a discourse on how the project is a trend-setter project and stressing that all actions that were taken from a community-centric perspective created a discourse on how these actions are important. I also observed that the megaproject under consideration did not exercise power on the media and this resulted in the news articles reporting the facts during accidents in contrast to Rohlinger’s (2002) findings. The blaming strategy adopted by the metro rail project backfired with the community asking the megaproject to own- up.

To megaproject practice, this research contributes to the discussion on community engagement practices outside the widely researched transparent (Kim & Mauborgne, 2003) and consultative (Chinyio & Akintoye, 2008) strategies discussed as part of the persuading strategies in the previous chapter. Framing strategies by creating a frame in support of the project, can help manage the risks of community protests and the cascading risk of obsolescence bargaining and expropriation frequently seen with infrastructure projects. Through these subtle textual framing strategies, the megaproject constantly legitimatizes (Vaara & Tienar, 2008) itself during the construction and operation phase of the project and thereby maintains its power. I would also like to highlight that even though there were discussions on the natural frames in the comments section of some of these news articles, their lack of credibility, persistence and repetitiveness (Chong & Druckman, 2007) ensured that they were no match for the metro rail's projected social frame.

This study has some limitations. While I focused on framing in news media for this study on the metro rail megaproject, I restricted this research to the print media and left out other media such as television news and radio news. Also, the print media considered did not involve the news and summaries in periodicals as well as news articles in the regional language. Even though I considered the dominant framing effects from the comments of the news articles, there were some dissenting voices where people contested the propagated social frames such as in the instance of community protesting of the presence of existing network between the railway station and the airport as discussed earlier. This notion of a multiple and intersecting frame and their effect on the community can be investigated in the future studies. It would be interesting to study how opposition players of these projects use the natural frame or their particular social frames and destabilize the power relations and thereby the megaproject. Also, since I focused on news articles during the construction and operation of the metro rail project, I am unable to understand how these frames were created initially and what role it played in the selection of the project. As megaproject news is being covered intensively, future studies can explore how the project community's perception of the project evolves over time through a longitudinal study of the news articles.

In this chapter, I have discussed the framing strategies observed in the metro rail megaproject case. These strategies created a frame through which the perception of the external stakeholders changed. In the next chapter, I discuss the hegemonizing strategies.

CHAPTER 7

HEGEMONIZING STRATEGIES^{3,4}

7.1 INTRODUCTION

This chapter seeks to answer the two research questions laid out in Chapter 3 on the literature review of governmentality theory (Foucault, 2007) and the literature on the use of hegemonizing strategies to manage external stakeholders. Specifically, the research questions are, (RQ5) How is hegemonizing through branding used to manage the megaproject community and the project team? and (RQ6) What are the effects of hegemonizing through branding on the project community and the project team? The research methodology used for addressing the two research questions is summarized in Figure 7.1.

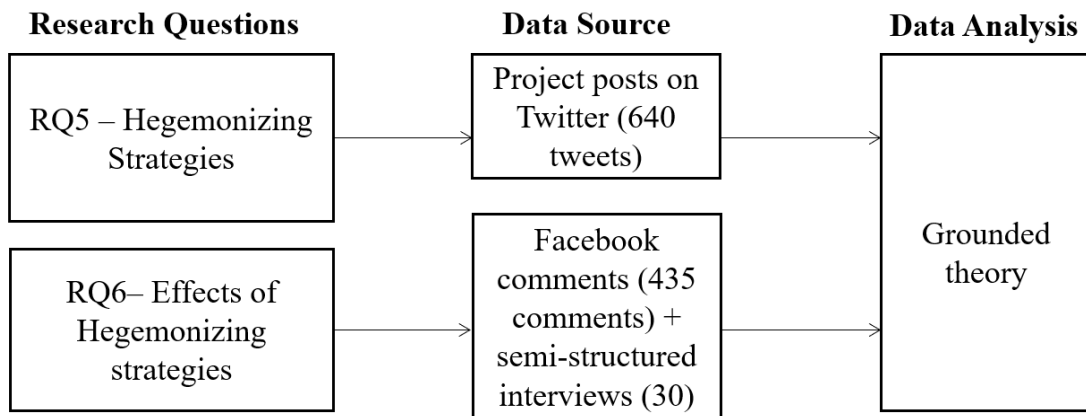


Figure 7.1: Research Methodology for hegemonizing strategies

As shown in Figure 7.1, I used twitter data for understanding the hegemonizing strategies used to manage the stakeholders. To understand the hegemonizing effect on the external stakeholders, I used Facebook data as Facebook enabled more user participation (He et al. 2013). Since social

³ This chapter is a modified version of the journal article co-authored with Prof. Stewart Clegg and Dr. Ashwin Mahalingam which is published in the International Journal of Project Management. The citation is as follows.
Ninan, J., Clegg, S. R., Mahalingam, A. (2019). Branding and Governmentality for Infrastructure Megaprojects: The role of Social Media. *International Journal of Project Management*, 37(1), 59-72.

⁴ This chapter is a modified version of the journal article co-authored with Dr. Ashwin Mahalingam and Prof. Stewart Clegg which is under review in the Infrastructure Asset Management Journal.
Ninan, J., Mahalingam, A., Clegg, S. R. Asset Management through Strategic Discourses and its effect on Project Team Rationalities. *Infrastructure Asset Management*. (Invited for special issue - under review).

media posts did not allow for understanding of the effects of branding on the project team, I studied the 30 semi-structured interviews conducted with open-ended questions with the project team, through which I sought to understand the effect of the hegemonizing strategies on the project team. The interview durations ranged from 20 minutes to 3 hours and were conducted over a span of 3 months in 2016-2017 as part of the exploratory study and a span of 2 months in 2018 as part of the in-depth study. Rather than asking direct questions in the in-depth interviews about the hegemonizing effect on the project team, I asked informants about the challenges the project encountered from external stakeholders and analyzed their answers for evidence of attempts of hegemonizing.

While I adopted conventional content analysis coupled with grounded theory for analysing the data collected for RQ5, I used open coding and grounded theory to derive categories from data for RQ6. During the process of coding, I went through each of the Facebook comments and interview transcripts and looked for instances of the project community and the project team supporting the project. Doing this enabled me to create broad categories relating to the effects of hegemonizing strategies such as ‘support for construction activities’ for the project community and ‘attract talents’ for the project team (these constructs are discussed in detail in this chapter). Hence, through a systematic process of categorizing incidents I was able to create a list of effects of the use of hegemonizing strategies.

I then followed this with multiple cycles of coding, cross-checking and theoretical review (Strauss & Corbin, 1990) to connect the incidents recorded to the three distinct themes of governmentality (Foucault, 2007) – practices, knowledge and transformation. This allowed me to better understand the effects of hegemonizing strategies through branding on the community and the project team and their relationship with the hegemonizing strategies. The process of comparison of concepts and findings from the study with the literature helps make meaningful contributions to knowledge (Stablein, 1996). I thus followed Eisenhardt’s (1989) guideline on ‘building theories from case study research’ wherein she suggests anchoring new theory in literature by a process called ‘enfolding of the literature’ which then increases internal validity and generalizability. This anchoring in theory would also make it possible to discern and write about the theoretical and practical contributions to the literature.

In the remaining sections of this chapter, the hegemonizing strategies employed to manage the external stakeholders in the case of the metro rail megaproject in India is explored by anchoring my data in the theory of governmentality (Foucault, 2007). Following this, the effect of these hegemonizing strategies on the project community is highlighted. The chapter concludes with the theoretical contributions, practical contributions, limitations and future directions from this study.

7.2 FINDINGS AND DISCUSSION

The grounded theory analysis and content analysis of the social media communications of the metro rail organization to the community enabled me to understand hegemonizing strategies through a variety of branding instruments that are discussed below.

7.2.1 Hegemonizing instruments for the community

This section covers the analysis of the official Twitter page of the metro rail organization. I observed the use of four branding instruments from the tweets – promoting the organization, giving progress updates, appealing to the community, and targeting sections of the population. Each of them is now discussed:

1. *Promoting the organization*

The messages which promote the metro rail organization included promotional events, awareness programs and use of promotional words. The promotional events involved making the community experience the metro rail through use of prototype models of metro rail coaches and lift prototypes, videos of walk-ins of stations and animations of the inside of trains to create an appreciation of the project's services. An indicative tweet is provided below:

*Lifts and Escalators. The Prototype of the lifts which are to be used in *** [name of metro rail organization] project was installed at *** [location name] (Tweet by official page on 15 November 2012)*

These prototypes are an example of the strategic use of visual cues, a means to win indecisive customers and evoke experiences (Kauppinen-Räsänen, 2014). The outcome

expectations of the project affect the perception of the organization and hence its brand image (Heslop & Nadeau, 2010). Awareness programs were conducted in shopping malls and metro stations to project the benefits of having a metro rail for the community. Tweets surrounding these were aimed at making the general public aware of the benefits of using the metro rail service such as the one highlighted below.

*“6 Possible ways how *** [metro rail] is going to change our lives” – Courtesy 104.8 FM (Tweet by official page on 29 July 2015)*

Long et al. (2008) mentions how awareness campaigns are aimed at developing and promoting a brand that would create a strong emotional connection. Documentaries on television channels and radio also made the public aware of the discounts and benefits offered by the metro rail service. Details of such programs were shared through tweets such as those below.

*Public Awareness program at *** [name of park] park. *** [metro rail organization] in coordination with the Corporation of *** [name of city] conducted awareness program (Tweet by official page on 25 August 2012)*

This creating awareness of the metro rail megaprojects has parallels with the work of Ng & Loosemore (2007) who call for educating the community about the benefits of using the infrastructure. They contrast educating the community with the case of the Sydney airport rail link wherein the authorities stopped other services thereby coercing people to use the rail link instead of educating people on the benefits of using the rail service during the construction period. Through education of the community, the researchers suggest that the megaproject team changes the behaviour of the community, their perception of the megaproject and their preferences regarding alternative infrastructure choices.

The use of promotional words was seen in tweets which mentioned the salient features of the project in order to try and encourage people to engage with the project. The promotional words focused on updates of awards and appreciations conferred on the metro rail organization, such as

*UITP [International Association of Public Transport] congratulates *** [metro rail organization] for inaugurating the first line of *** [name of city] Metro Rail Services to public (Tweet by official page on 6 August 2015)*

These posts also included accounts of the awards conferred on the contractors for their exceptional performance in this project. One such tweet is shown below.

*The British Safety council award *** [name of metro rail organization] contractor-*** [name of contractor]. An international safety award and merit certificate was ... (Tweet by official page on 2nd May 2014)*

Similar to this observation on the use of social media to promote the project, Sankaran (2018) note how youngsters in the Konkan railway project in India were sent on motorcycles to spread the news of the positive outcomes from the project to the community. Such use of promotions in megaprojects resembles the ‘aesthetics of strategy’ from the work of Kornberger & Clegg (2011), wherein the techno-rational discourse of the planner is substituted with the seductive, media-focused language of the strategist. Through these events, programs and promotional words, the metro rail organization branded their organization.

2. Giving progress updates

Updates on the metro rail construction were given in the form of service information, progress reports, progress photos and progress metrics. The tweets of service information were aimed at giving first-hand information about service disruptions and traffic diversions due to the metro construction, such as the one below.

*Metro rail work switches sides at *** [Name of location]. Traffic Will Be Routed After Black-Topping earlier worksite (Tweet by official page on 25 December 2012)*

The progress photos included photographs of work in progress as well as those of completed metro rail stations and viaducts. The news included construction updates such

as construction work in progress and also non-construction updates such as reports of new metro coaches which reached the depot and updates of the trial runs conducted. Reporting is one of the strategic instruments used to foster stakeholders' trust in order to survive and prosper (Verma & Singh, 2016). Here, the megaproject chose to report progress.

The progress metrics include quantitative measures of the work completed per day or over a time period. The progress news, photos and metrics included the location of the activity so that the community and metro rail users could connect to the construction progress such as seen in the tweets below,

**** [station name] Metro station work progress. Roof, base and concourse slab is fully completed in the main station box. (Tweet by official page on 27 March 2015)*

*Track work progress as on 18-12-13. Plinth completed for a length of 17,719m on viaduct between *** [station A] and *** [station B]. (Tweet by official page on 18 December 2013)*

Giving progress updates for branding seems to be unique to the construction industry as they attempt to connect the community, when contrasted with efforts such as promoting customer's participation that are prevalent in other industries for a similar purpose as noted in the literature (Casaló et al., 2008). I can categorize 'giving progress updates' as analogous to 'aided awareness' defined by Abrams et al. (2010) as communicating what the brand is and does. Given the large social value that infrastructure projects purport to deliver however, providing updates that positively orient stakeholders towards the completion of the project could enhance hegemony.

3. *Appealing to the community*

Appeals to the community were made through projecting the metro's social commitment and by appealing to both national and regional sentiments. These multilevel appeals meant that all of the community were reached out to in one way or another. Social commitment was shown by the project organization's role in improving existing services and church buildings in the region, safeguarding trees by restoring damaged ones, conducting rescue

operations for the community in events of fire or building collapse, conducting medical camps, conducting food carnivals, etc., as demonstrated by the following tweets.

**** [metro rail organization] repaired and beautified the *** Church at *** [name of place] and was handed over to the church authorities (Tweet by official page on 18 June 2014)*

*Honourable Chief Minister felicitated *** [metro rail organization] officers for *** [area] rescue operations. (Tweet by official page on 10 July 2014)*

Other literature, which stresses that Corporate Social Responsibility (CSR) is a political process producing ethical subjectivities in the organization (Spence & Vallentin, 2015) and community, resonates with these findings. Some of these social commitment initiatives included activities taken up on behalf of the project affected community, such as educational benefits for children, distributing mosquito nets, etc. The tweet below provides one example.

**** [Name of metro rail organization] Education Support Program Conducted. Under the income restoration program for the project affected... (Tweet by official page on 19 August 2013)*

The extra construction works carried out for external stakeholders in the form of renovating drains were also included as part of the metro rail organization's social commitment. These projected the efforts of the metro rail organization in showing its responsibility to the environment, wildlife, eradication of diseases as well as helping the community in which the project was housed. The appeal to national sentiments included conducting flag hoisting on national days such as Independence Day and Republic Day, celebrating days of national significance such as Vigilance Day by carrying out awareness training and other events. The metro rail organization celebrated such days and conducted events around their theme as the following tweet shows:

Skit on Truth Alone Triumphs Performed: To mark the occasion of Vigilance awareness week ... (Tweet by official page on 1 November 2014)

Rose et al. (2016) notes that such trust-enhancing facets of a brand are used to generate stronger commitments. Within megaprojects, Henisz (2016) calls for respecting local cultural norms, such as in this case with celebrating national and regional occasions, to build socio-political legitimacy for the project and trust in the eyes of the external stakeholders. The organization also projected their support for national goals such as the use of indigenous made-in-India equipment in the construction and operation of the megaproject as evinced in the following tweet.

*Visit to *** [city name] As part of indigenization of the Metro coach manufacturing, *** [name of coach manufacturer] who is the manufacturer of ...*
(Tweet by official page on 26 November 2012)

Similar to this, in a study on processed food, it was noted that customers preferred local produce over produce that was foreign sourced (Hu et al., 2011). The appeal to regional sentiments included celebrating regional festivals and publicizing the visit of regional leaders and celebrities to the construction site. Take the following tweet for instance:

**** [Name of metro rail organization] celebrates *** [name of regional festival] festival at *** [name of metro rail station] Metro Station on 7th & 8th Jan 2017*
(Tweet by official page on 6 January 2017)

Such efforts also projected the city and the metro rail as something the whole nation looked up to, highlighting visits from other metro rails within the country to learn from this city's metro rail project and reaffirming the project's and by association the community's leadership in developing urban infrastructure in the city. An example of a related tweet is seen below.

[name of other city] Metro [rail] comes calling - A team from #### [name of other city] along with the Managing Director visits (Tweet by official page on 17 August 2015)

Nguyen et al. (2015) highlights familiarity, emphasized in the megaproject as appeal to community sentiments, as an important antecedent to brand likeability. Similarly,

Gopaldas (2014) reports how brands carefully select, calibrate and broadcast sentiments to entertain consumers and transform the marketplace. These cultural branding initiatives on the part of the metro rail organization sought to make their brand iconic (Holt, 2004).

4. *Targeting sections of the Community*

Dahl (1961) suggests that almost the entire population has at some time been subject to some degree of socialization through schooling; not surprisingly, the metro rail organization also reached out to schools and colleges. The metro rail organization targeted specific sections of the general population such as school children, college students, women and disabled people. Selecting such target sections that are acceptable to all sections of the community is important as it should instil positive sentiments within a greater majority (Fan, 2006). The organization offered free rides and conducted drawing competitions and quiz programs for the school children. The quiz programs were conducted on the children's awareness of the metro rail and the painting competition was organized around the theme 'go green metro' to project the metro rail as environmentally friendly. The tweet below provides an example of how a community event was advertised through social media.

Painting competition at 4pm Today!!! Topic - Go Green Metro -Timing 4pm to 6 pm - Don't forget to bring your colours. (Tweet by official page on 4 June 2016)

All these events were centred on the metro rail's features and advantages in order to try and plant them in the minds of young school children. Other tweet categories included women, college students and disabled people. Special programs were conducted for women and college students as the tweet below suggests.

**** [name of region] Week celebration – Flash Mob dance on women empowerment & rainwater harvesting - at *** [station name] Metro ... (Tweet by official page on 23 August 2013)*

The metro rail organization also communicated messages implying that their services were friendly to the physically challenged. Zenker (2015) reports that it is crucial for

organizations to understand the values, needs, preferences and behavioural choices of specific target groups in the community for target group branding. These steps aimed to instil the use of metro rail as a lifestyle choice, acceptance of which implied learning specific disciplines and rituals (Foucault, 1977). For Foucault, identity is shaped by institutions such as schools, self-help groups, work environments and social workers (Foucault, 1991): in view of this data I might add megaprojects to this list of institutions that strive to shape identity. Within megaproject research, Henisz (2016) records that managers should show empathy by understanding and appreciating the local traditions and beliefs of the project community, such as in this case by targeting sections of community according to common sentiments in the form of disabled people, school children and women.

7.2.2 Effects of hegemonizing strategies on the project team and community

The branding instruments employed in megaprojects mimic the three different themes of governmentality - practices, knowledge and transformation (Foucault, 2007). The knowledge of the megaproject's positive impact as a taken-for-granted practice on the regional and national landscape can be seen from the use of 'appeal to the community' and 'promote the organization' instruments. The recourse to and interventions in specific target areas such as schools, women and the disabled sought to implicate these targets in specific technologies of the self. In making these interventions the project deployed a power-knowledge nexus centred on the needs and interests of specific target groups; more generally, it drew on discourses of sustainability for broad promulgation. The cumulative effect of the use of hegemonizing strategies observed in the case of the megaproject resulted in taken for granted practices, development of a series of targets for information and the development of technologies of self-governance.

The use of hegemonizing strategies had an impact on the project community and the project team, as shown in Figure 7.2. The perceptions of the community about the metro rail megaproject were obtained from the comments on Facebook, while those of the project team were obtained through semi-structured interviews.

Hegemonizing Strategies (branding instruments)

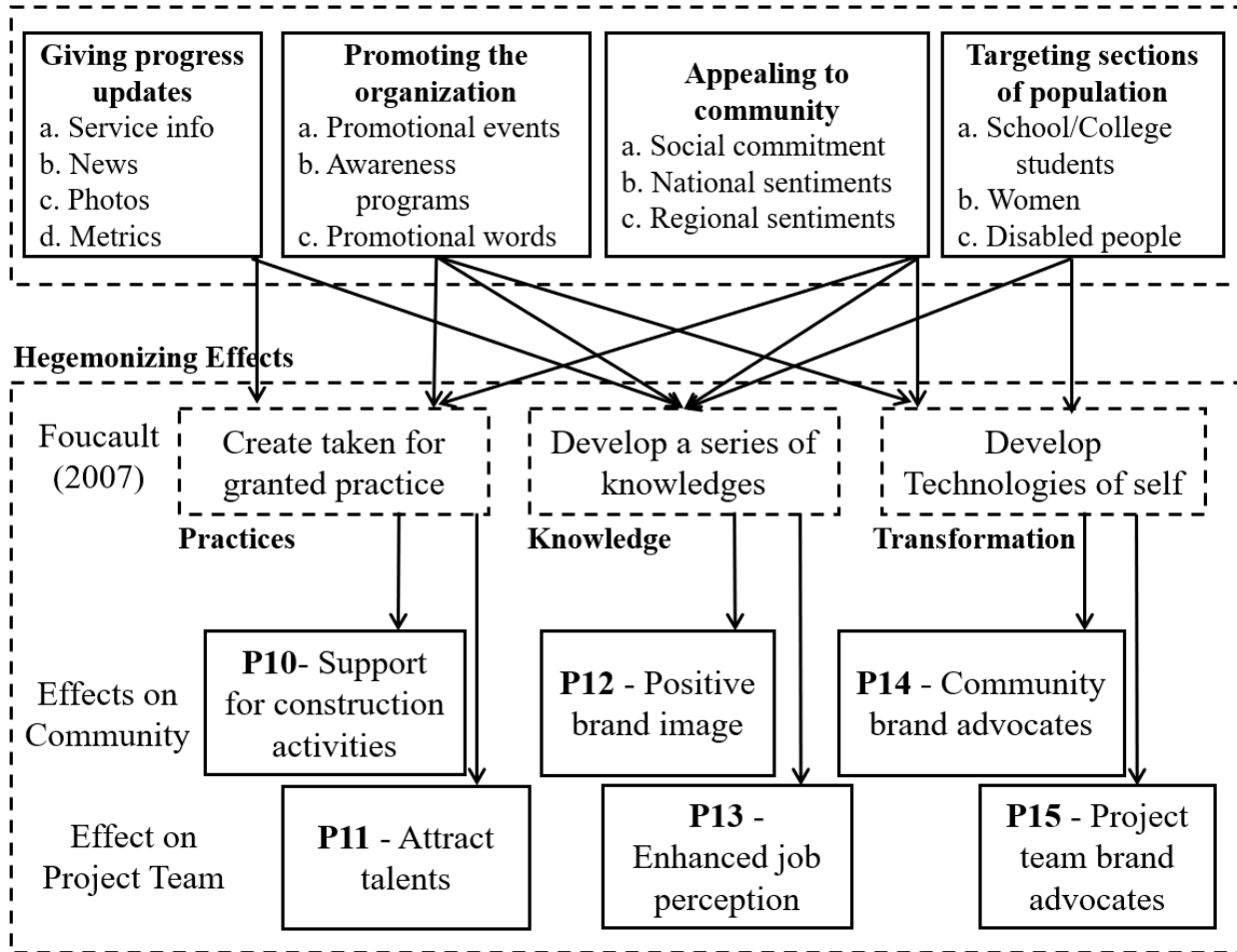


Figure 7.2: Hegemonizing strategies and effects from the case

The three sets of hegemonizing effects on the community and the project team that I observed in accordance with Foucault (2007) – practices, knowledge and transformation - are now discussed below.

1. *Practices*

The hegemonizing strategies created practice effects on the community that supported construction activities as the metro rail organization enjoyed special preference and support from the community during construction. A metro rail organization employee commented during an interview that,

“When we create traffic diversions for work ... There is no agitation from public ... They [project community] have accepted us.”

Dawes (2009) explored the role of branding in creating customer insensitivity to prices. Similar insensitivity is seen here in megaprojects with the project community not being affected by traffic diversions (and consequent indirect costs) due to the megaproject construction because of hegemonizing strategies employed through branding. The community members empathize with the construction hurdles of the megaproject as one of the posts from the project community shows.

*“In so many hurdles, *** [Name of metro rail organization] workers completing projects ... May God bless them to live long with safety and happiness.”*

This message resonates with the similarly worded social media post that “metro staff toil as city sleeps” that the metro rail organization posted as part of the ‘promoting the organization’ strategy. The community echoed dominant, complementary, persuasive and legitimating discourses posted by the project organization in social media that empirically shows the effect of governmentality (Doherty, 2007).

The ‘giving progress updates’ strategy propagated along with the construction locations resulted in the project community knowing the progress and resonating with it. Emphasizing especially appealing characteristics such as the progress can attract customers as seen in the case of place branding discussed by Zenker (2009).

Involving key community gatekeepers such as regional leaders as well as bringing celebrities to visit construction sites is vital to generating community support (Kesterton & de Mello, 2010). None of these will have any effect if there is not an adequate reach of the media, in this case social media, in projecting the qualities of the project deemed desirable in informing selected stakeholder publics. I therefore posit that,

Proposition 10 (P10): *Community support for construction activities result from the reach of the media promoting the organization, giving progress updates and appealing to the community.*

While community support is mentioned as one of the critical success factors for delivering successful infrastructure megaprojects (Osei-Kyei & Chan, 2015; Rohman et al., 2017), this proposition discusses ways in which it can be achieved. Kroeger & Weber (2014) note that positive community support is a good testament of public sector creating social capital.

The practice effect of governmental branding resulted in the organization being able to recruit talented employees as they attracted employees from international metros and other esteemed jobs in India to work for the metro rail organization. The organization has employees with previous experience in Riyadh metro, Singapore metro, etc., as was evident from the semi-structured interviews with the project team. As a result of recruiting these talents, the metro rail organization was able to implement state of the art technologies and offer innovative design solutions. An engineer working in the organization said,

“I resigned a government job to be here ... This is a big project happening in my city ... I want to be part of it.”

Job attraction is mentioned as one of the effects of branding on employees by Dineen & Allen (2016). Sivertzen et al. (2013) notes that branding through social media positively relates to organization reputation, which motivates employees to apply for a job in the organization. The role of branding in enabling the recruitment of talented workforce has been noted previously in Tumasjan et al. (2016). With megaproject employees coming from international projects and government services the talent-attracting effect of hegemonizing strategies through branding is evident. Therefore, similar to the observation on knowledge within the project community, I posit that

Proposition 11 (P11): *Job attraction from the project team results from the reach of the media promoting the organization, giving progress updates and appealing to the community.*

Within the construction project industry, project participants are attracted to or repulsed with the project organization depending on the aligning of their values, norms and attitudes with those of the organization (Love et al., 1998). Here, in the megaproject studied, it is

seen how the megaproject projected characteristics and aligned with the values of the project team by appealing to their sentiments.

2. *Knowledge*

The hegemonizing strategies augmented the project community and project team's existing knowledge of the project and this changed the project's brand image and job perception for these entities respectively. The announcements of free rides to sections of the population, such as school children and the disabled, as part of the 'targeting sections of the population' instrument, were perceived as "*good initiatives*" in the comments section on Facebook. On a post about recycling water used for washing coaches of the metro rail, one user commented,

"You mean to say the 140 litres is recycled to get RO water? If yes, it is good."

Another project community member responded, "*I feel proud. Thanks to *** (metro rail organization).*" To the metro rail organization promoting its initiative of organizing bicycles for last mile connectivity, one member responded, "*Good and healthy initiative.*" Marketing programs such as 'promoting the organization' in this study achieved a certain level of awareness and become linked to a set of associations and preferences in consumers' minds (Keller, 1998; Alreck & Settle, 1999). When the metro rail organization reported progress such as tunnel breakthroughs, there were compliments from the project community. One of the project community members responded,

"Hats off to all those who are involved!"

Awareness, such as 'giving progress updates', enhances the community's level of familiarity and their brand attitudes in this case (Abrams et al., 2010). The metro rail project was considered by many members of the community to be a marker of the identity of the city in which the project is housed, as is evident from the Facebook comment below.

*“Suggestion - *** [name of metro rail organization] celebrate *** [regional festival] festival in grand manner and become one of the identity to the great *** [Name of city] ...”*

The community members tied the metro rail organization’s celebration of the regional festival to the organization becoming an icon of the identity of the city, complementing similar discourses of ‘appealing to the community’ found in the social media interactions of the organization. Research from the construction industry also resonates with these findings, where investments in CSR activities result in an improved corporate image for organizations (Huang & Lien, 2012). I therefore posit that

Proposition 12 (P12): *A positive brand image in the community results from the reach of the media promoting the organization, giving progress updates, appealing to the community and targeting sections of the population.*

This proposition is supported by Li et al. (2005) and Osei-Kyei & Chan (2015), who highlight the importance of transparency to external stakeholders throughout the delivery of the project leading to its successful delivery.

Similar to the project community, this research also observed the knowledge effects on the project team in terms of job perception. Interns who got an opportunity to work at the metro organization tweeted and created Facebook posts highlighting this as an achievement.

*“Last day as intern at *** [metro rail organization]. Had a good time”*

Working in the organization was associated with being part of an icon with a strongly symbolic role in terms of community perceptions. The employees of the organization felt proud of working in the metro rail project. One of the Facebook comments, from someone probably associated with the metro rail organization quotes,

“Proud to be part of this project from 2009 to 2015.”

The Human Resource manager with the metro rail organization remarked,

“People are proud of working with us [metro rail organization] ... It’s a national service.”

In megaprojects, the effect of perceiving one’s job as a form of service to the nation is often quite visible. Adding on to this, the metro rail employees also felt proud in the achievements the project has done. One of the employees of the project team involved in evicting illegal landholders remarked,

“The airport couldn’t do it [evict illegitimate land holders] for 15 years, but we were able to do it in a short span”

Therefore, I posit that,

Proposition 13 (P13): *Enhanced job perception on the part of the project team result from the reach of the media promoting the organization, giving progress updates, appealing to community and targeting sections of the population.*

Supporting this proposition on enhanced job perception, Van-Marrewijk (2007) notes that employees of the megaproject that he studied felt that they were constructing something unique. Through this proposition this research highlights the role of promoting the organization by stressing its uniqueness, along with other hegemonizing strategies as central to enhanced job perception.

3. ***Transformation***

The hegemonizing strategies resulted in ‘technologies of self’ and transformed the identity of the community and the project team. The transformation in identity of the community made some community members strong brand advocates of the metro rail project. They took efforts to defend the actions of the organization in front of other community members and even posted clarifications and replies on behalf of the organization. A Facebook post on recruitment of new staff to the Public Relations team of the metro rail organization, attracting some criticism, such as *“this won’t bring you more crowd for metro. Reduce the ticket rate”*, led one of the members of the community to clarify,

“This is to have more interaction with the commuters and public to wipe out the inconveniences and to improve the efficiency of the service.”

The role of customers in influencing the purchase decisions of others in peer to peer interactions is mentioned as advocacy in the buyer-seller relationship study by Sashi (2012). Such interpersonal interaction in virtual communities such as Facebook enhances member loyalty and builds brand loyalty (Shen et al., 2010). Studies in governmentality using the concept of ‘translation’ from actor-network-theory (ANT) have examined how network builders use discourses strategically to recruit network members to mould their identities and make them future network builders (Callon, 1986; Merlingen, 2011). Transformation of identity occurred because the metro rail projected to and targeted particular sections of the population that it sought specifically to enrol and translate into loyal supporters of the metro rail project. These hegemonizing strategies employed by the megaproject team can be compared to corporate diplomacy from the work of Henisz (2017) wherein he talks of its ability to win the hearts and minds of the external stakeholders such as the project community. I therefore posit that,

Proposition 14 (P14): *A transformation of project community into brand advocates result from the social reach of the media promoting the organization, appealing to the community and targeting sections of the population.*

Flyvbjerg (2014) supports this proposition related to the project community advocating for the megaproject when he refers to the pleasure a community gains from looking at and using something that is iconically beautiful. He terms this the ‘aesthetic’ sublime and sees it as one of the important drivers of the scale and frequency of megaprojects. The metro rail project may not strike the average western reader as a sublime but in an over-crowded, gridlocked, polluted and hot city in India it certainly has aesthetic appeal as well as functional utility. While Flyvbjerg (2014) refers to just the instrument of promoting the organization in his ‘aesthetic’ sublime, this research adds hegemonizing strategies such as appealing to the community and targeting sections of population to the list of instruments that can support this construct.

The project team also turned into brand advocates. They defended the decisions taken by the project. On comparing the progress of this city's metro rail project with another in India, the construction manager emphasized that this city has a better strategy to construct and overall this project will deliver more quickly than the other. The manager remarked,

*“First we [metro rail organization] took works in the inside of the city ... so now work will be faster ... ***[another city] can't connect central bus station ... here airport and central bus station link is already there”*

Also, the project team was very motivated and used to take things into their hands so that the project would not be delayed. The human resource manager of the project remarked,

“People are individually motivated and take responsibilities on their own”

This individual motivation of the project team was seen during the land acquisition process and in the interaction with other infrastructure services as discussed in Chapter 5. The project team would acquire land from the private land owners who would not give control of their land, by repeatedly visiting the homes of these stakeholders. With the illegal landowners, the project team sought to coerce them to give off part of their land rather than risk facing the matter in court and losing their full land. In the case of other infrastructure services such as the airport and the railways, the project team stressed the 'interconnectivity' of the services and persuaded the agencies to give off their land. The project team were also able to come up with innovative solutions as part of the 'flexibility' strategy to address the external stakeholder's concern and enable the successful completion of the project. Thus, the project team were inherently motivated to complete the project and took these responsibilities into their hand rather than wait for a proper legal framework to solve the problem.

The project team also took for granted the inconvenience caused to the public because of the project. One of the officials of the metro rail project remarked during an interview,

“We have never had such a large-scale project, so people have to adjust”

Team members were very passionate about their work in the metro rail organization and justified actions that advanced the project at the expense of affected parties by positioning the inconvenience caused to some stakeholders as a small price to pay for a project of prime importance. Megaprojects are often criticized for the practice of ‘strategic misrepresentation’ (Flyvbjerg, 2008) as they attempt to over-estimate the benefits and underestimate the costs in an effort to make the project look good on paper in order for the project to be selected when in competition with other projects. This has led to the ‘survival of the unfittest’ (Flyvbjerg, 2009) where megaprojects that are most generous with their projected benefits are the final ones selected. The particular role of hegemonizing strategies in shaping the normative universe of the project team and making them brand advocates needs to be investigated further in future research, given its criticality. Therefore, similar to the observation on transformation with project community, I posit that,

Proposition 15 (P15): *A transformation of the project team into brand advocates results from the social reach of media promoting the organization, appealing to the community and targeting sections of the population.*

Supporting this proposition, Van-Marrewijk (2007) notes the ‘fighting spirit’ in the case of the Environ megaproject as the employees committed themselves to the project and to a belief in the innovative concept promoted by the organization. The proposition adds to this discussion on the strategies that megaprojects use to achieve transformation.

As seen with the propositions generated from the case study, the strategies used to manage the external stakeholders in the social media trickled down to the project team as shown in Figure 7.3. Changes of practice, knowledge and transformation were observed with the project team also. They were attracted to the project and had an enhanced job perception while working in the project. They also turned into project team brand advocates. In the study of the Environ megaproject, Van-Marrewijk (2007) records that the employees of the megaproject felt a strong sense of uniqueness as they were constructing something that was never done before and something that was not easy to realise. This was because the project team is also part of the community and are impacted through these strategies. Hence, I posit that,

Proposition 16 (P16): *The strategies used to manage the external stakeholders in the social media trickle-down to the project team.*

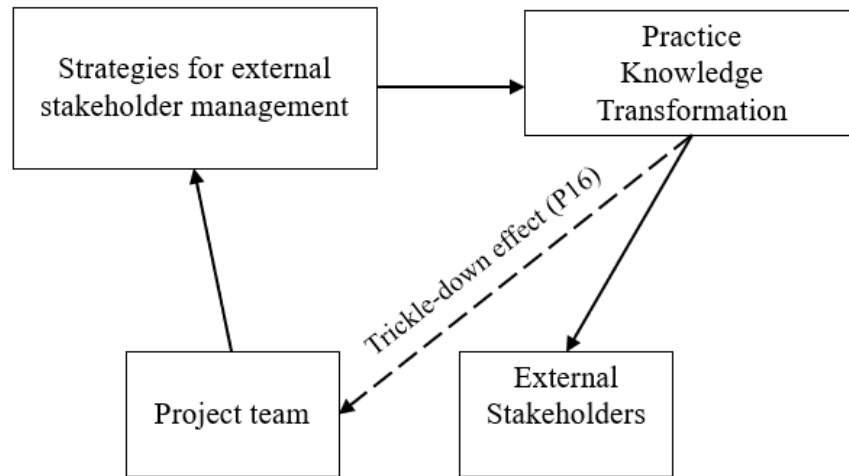


Figure 7.3: Trickle-down effect of strategies on the project team

The definition of external stakeholder adopted in this thesis was stakeholders external to the project including stakeholders in land acquisition, stakeholders in services, project community, etc. This definition meant that the project community was part of the external stakeholders of the project. However, the discussion above highlights that a similar effect to the use of strategies aimed at project community can be seen with the project team also. This implies that the project team which is part of the internal stakeholders is also a part of the project community. This broadening of definition of project community makes sense as all the stakeholders of the project (including project team and other external stakeholders) are part of the project community and are impacted by the strategic discourse propagated through news articles and social media posts. Adding onto this, the project team is recruited from the project community and continue to live among the project community during the duration of the project. Therefore, project team is part of the social fabric of the project and are not immune to it. They are thus, both the actor and the subject to these strategies. These strategies have increased the job attraction of working in the project, created a job perception as a national service and even made the project team into brand advocates.

7.3 CONCLUDING REMARKS

Even though the construction industry occupies more than 10 % of the world's GDP, the use of social media data and its relevance for the study of construction projects is under-explored. Through this research, I explored the intersection of two under-researched areas in the construction sector - branding and social media - as message and media for the hegemonizing strategies used in managing the project community. This research explored the role of social media in creating dominant, complimentary, persuasive and legitimate discourses.

The research objectives were to understand how and in what ways hegemonizing strategies worked in a megaproject in relation to the external stakeholders and the internal project team. From the social media communications of the metro rail organization it can be seen that the megaproject used governmental strategies such as promoting the organization, giving progress updates, appealing to the community and targeting sections of the community. The effects of these hegemonizing strategies on the community through the creation of a positive brand image was the support for construction activities and the creation of community brand advocates.

Not only was the project community affected but so also was the project team recruited from the broader community. Project team effects included enhanced job perceptions, an ability to attract talent and produce project team brand advocates. As a result of the hegemonizing effects on the project community, team members saw the megaproject as socially committed, safe, clean, prestigious and iconic for the city.

The research highlights seven propositions that contribute to investigation of the management of external stakeholders in megaprojects through hegemonizing strategies. The existing body of knowledge on stakeholder management focuses on strategies fuelled by overt incentives, such as for instance adaptation and compromise (Yang et al., 2014). This research contributes to discussion of community engagement practices in megaprojects that use subtle branding to foster hegemony. Research into hegemonizing through branding in the construction industry extends previous literature on governmentality empirically: the construction industry has rarely been addressed in these terms (Clegg et al. 2002 being an obvious exception) and researching the role of social media in producing hegemony is novel.

When contrasted to branding in other sectors, the construction megaproject studied stressed, in particular, progress updates on the project that comprised 61% of all tweets. Progress updates include locations of activity so that the public can connect with construction progress, enabling them to feel connected to the materiality of the project. Appealing to the community through CSR activities in megaprojects is done mainly through the material renovation of nearby community buildings and parks. While progress in reaching project objectives on time and on budget is clearly of major interest to project managers, the assumption seems to be that it will also be the major factor of interest to project stakeholders, an assumption that could be tested by researching community perceptions. Notably, the share of tweets promoting the organization was only 15% in contrast with 40% observed in other industries, such as pizza making (He et al., 2013). While existing literature mentions customer insensitivity to prices as an effect of branding, in megaprojects insensitivity to traffic diversions and other inconveniences caused due to the construction activities resonates similarly.

This study has some limitations. As Kaplan & Haenlein (2010) note social media is largely used by younger age groups, restricting the effects of hegemonizing strategies. Also, while I cannot argue that the hegemonizing strategies exercised through social media are the only reason for the lack of protests in the project considered, these strategies did aid in some part in covertly influencing the community. Future research could provide further confirmation of these findings.

Similarly, many avenues for future research present themselves: analysis of social media communications by project teams could be extended by analysing how community discourses evolve over a period of time as well as inquire into the impact of events on the project. The role of hegemonizing strategies in shaping the normative universe of the project team, turning them into brand advocates, needs to be investigated in depth. In this research, I have not focused at all on resistance to the hegemonizing strategies through social media and such resistance needs to be investigated in future. Future studies can also explore the relative importance of the hegemonizing strategies and their effects through a quantitative content analysis.

While this chapter explores how hegemonizing strategies work in the case of the metro rail megaproject, the role of these strategies along with others in managing external stakeholders needs

to be ascertained. In the next chapter, the relation between persuading, framing and hegemonizing strategies will be discussed.

CHAPTER 8
RELATION BETWEEN STRATEGIES^{5,6}

8.1 INTRODUCTION

This chapter presents the findings relating to the integration of the different strategies presented in the earlier chapters. It answers questions relating to how multiple strategies from different dimensions of power interact and thereby how one strategy relates to another. Specifically, I seek to answer two research questions, (RQ7) How are multiple strategies used together to manage external stakeholders? and (RQ8) What are the technologies of power in the management of external stakeholders? The research methodology used for addressing these two research questions is summarized in Figure 8.1.

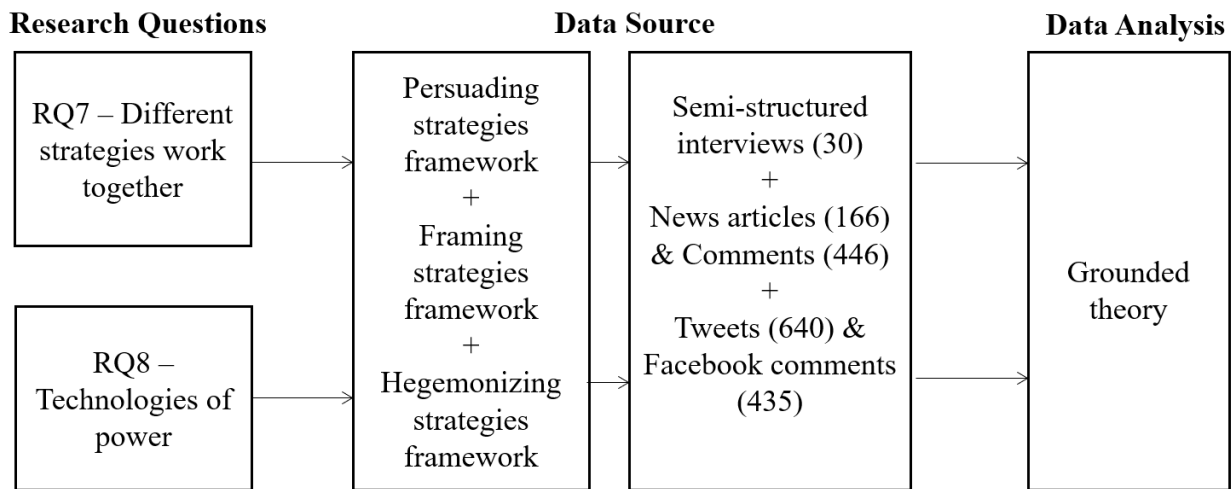


Figure 8.1: Research methodology for relation between strategies

⁵ This chapter is a modified version of the journal article co-authored with Dr. Ashwin Mahalingam and Prof. Stewart Clegg which is under review in the Engineering Project Organization Journal.

Ninan, J., Mahalingam, A., Clegg, S. R. Power and Strategies in the External Stakeholder Management of Megaprojects – A Circuitry Framework. *Engineering Project Organization Journal*. (under review).

⁶ This chapter is a modified version of the journal article co-authored with Dr. Ashwin Mahalingam, Prof. Stewart Clegg and Prof. Shankar Sankaran which is under review in the Construction Management Economics Journal.

Ninan, J., Mahalingam, A., Clegg, S. R. Sankaran, S., ICT Enabled Strategies for External Stakeholder Management in Megaprojects: Sociomateriality from a Power Perspective. *Construction Management Economics*. (under review).

The multiple data sources such as interview data, news article data and social media data are used together to answer these questions. I used grounded theory to derive the relation between the persuading, framing and hegemonizing strategies.

As shown in Figure 8.1, the persuading, framing and hegemonizing strategies frameworks from Chapter 4, 5 and 6 acts as a data source for understanding the relation between the strategies. The frameworks of these strategies are consolidated in Figure 8.2.

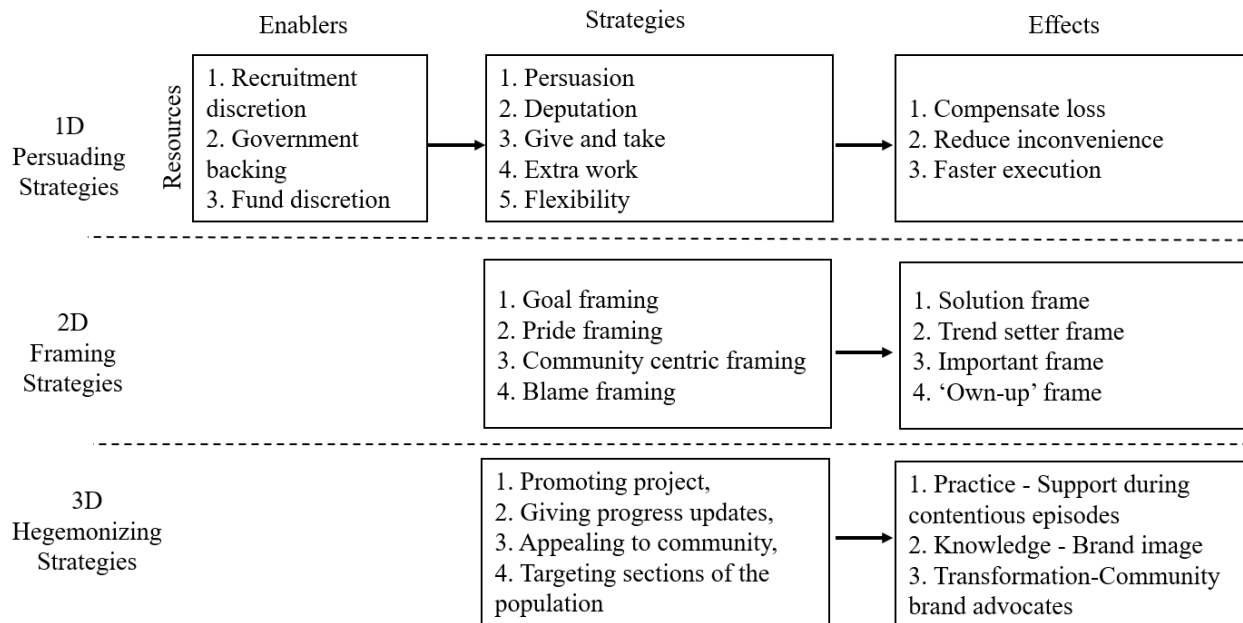


Figure 8.2: Frameworks of persuading, framing and hegemonizing strategies

The persuading strategies of persuasion, deputation, give and take, extra work and flexibility were possible because of the resources that enabled them viz. recruitment discretion, government backing and fund discretion. The use of these persuading strategies resulted in compensating the loss of stakeholders, reducing their inconvenience and also enabled faster execution of the project. The framing strategies of goal framing, pride framing and community centric framing resulted in the creation of framing effects by which the external stakeholders saw the project as a solution, a trend-setter and as important. The hegemonizing strategies of promoting the project, giving progress updates, appealing to community and targeting sections of the population resulted in hegemonizing effects of support for the project during contentious episodes, creating a positive

image of the project and also turning the community into community brand advocates. The next section discusses the findings regarding the relation between these strategies.

8.2 FINDINGS AND DISCUSSION

The grounded theory analysis of data from interviews, news media articles and social media communications of the metro rail organization enabled us to understand the integration of power in different dimensions. I discuss this below.

8.2.1 Relation between strategies

The metro rail megaproject had to acquire land from multiple stakeholders such as airports, the existing sub-urban rail organization, religious groups and from the general public. With the airport authority, the project team stressed the ‘goal framing’ of interconnectivity between services. By stressing this frame, they argued that both the airport authority and the metro rail would eventually gain from interconnecting their services. This acted as a precursor for the ‘give and take’ strategy which finally led to the metro rail constructing an extra parking facility for the airport employees in exchange for permission to construct the metro rail station in the airport land. A similar instance was observed with the sub-urban rail networks too as the metro rail project again stressed the interconnectivity between the existing sub-urban rail network and the under-construction metro rail network. This again enabled the ‘give and take’ strategy which resulted in the metro rail organization building an extension station for the sub-urban network in exchange for permission to build its own station in the land owned by the sub-urban railways.

For acquiring land from the religious groups, the metro rail organization propagated that the project is for the people by relying on the ‘community-centric’ frame. The project underlined its commitment to the community through stressing that all its decisions were taken for the benefit of community such as for reducing travel time, saving cost, providing a safe means of transport, etc. Due to this, when the project team pitched the ‘community-centric’ frame and provided adequate compensation, the religious groups agreed to give the land to the project. The public relations officer of the metro rail remarked,

“Religious buildings are always a big problem for all projects. We [metro rail organization] tried to make them understand that this was for the people, so ultimately, the trustees understood how things are working out. We compensated them well ... and they were happy with it”

Similarly, for acquiring land from the general public, the project organization persuaded them to take the market rate compensation and give the land for a public good stressing that the metro rail is ultimately for the community and public good. This is similar to the works of Chong & Wolinsky-Nahmias (2005) who highlight that associating a program with universally supported goals such as ‘clean drinking water’ can help acquire land.

The ‘public good’ frame also helped employees of external stakeholder governmental agencies such as utility companies, railways, etc., feel attached to the project and thereby foster better cooperation. These stakeholders considered the project as a ‘public good’ and supported the earlier completion of the project. From the above instances, I posit that,

Proposition 17 (P17): *The perception of the megaproject enabled by the framing strategies along with the resources available with the project team directly impacts the megaproject team’s overt strategic action.*

This proposition contributes to the earlier discussions on resources available that dictate strategic action. Through this proposition, this research highlights the role of the positive frame in effective overt management of stakeholders seen as part of the persuading strategies.

Since the metro rail megaproject had a significant number of elevated stretches, they had to create road diversions during construction, leading to disturbances to the road users. Such situations are ideal grounds for public protests and user dissentients. To please the project community who are disrupted by these diversions, the project would need to create more efficient and non-disturbing diversions. The project team through its branding and hegemonizing effects were able to reach out to the public and alter their preferences and make them happy with the current diversions without protests. The human resource manager reflected on the community sentiments as follows,

“When we [metro rail organization] create traffic diversions for work ... There is no agitation from public ... They [project community] have accepted us.”

Adding on to this, an effective traffic diversion would require the support of the highway department and traffic police department. This was accomplished through the strategy of coordination by deputation. Here in the case of the metro rail megaproject as seen in proposition (P16), these deputed project team members were also part of the project community and were affected by the strategies employed to manage the external stakeholders. This is because all the project participants were also members of the community, were exposed to the media outlets such as news articles, social media posts, etc. and were therefore influenced by hegemonizing strategies.

Thus, seeing the role of these preferences of the project community in the persuading strategies, I posit that,

Proposition 18 (P18): *The preferences of the megaproject community enabled by the hegemonizing strategies along with the resources available with the project team affect the overt strategic action.*

This proposition is supported by Henisz (2016), wherein he highlights that to gather support, megaproject teams should look out for points of similarity, such as affinity of sports, culture, etc., and build initial dialogues around them. In the metro rail megaproject case, the project team used social media to propagate the similarities that the project shares with the external stakeholders by celebrating national and regional festivals. They also shared common sentiments as the project invested in weaker sections of the population and gave free rides to school children. These strategies helped connect the megaproject with the community and this led to a favourable dialogue and even support from the community to the construction activities of the megaproject.

Together both perception of the megaproject and preferences of the stakeholders shape the visible persuading strategies. Supporting this, Mok et al. (2015) highlight that stakeholder perception and behaviours are important considerations of external stakeholder management in megaprojects. They note that the stakeholders are affected by the values and assumptions that are deeply embedded in the cognitive minds of the stakeholders.

In the metro rail project case, solar panels were installed in response to the project community raising objection to tapping into the energy source in an electricity deficient city. The project agreed to install the solar panel as an ‘extra work for the stakeholder,’ - the project community in this instance. The project organization was able to frame the use of solar panels in the metro rail project as the largest such facility in India. In doing so, they were able to tap into the ‘pride framing’ strategy. Thus, the pride framing strategy was a result of the persuading strategy of ‘extra work for stakeholder.’ Thus, I posit that,

Proposition 19 (P19): *The use of persuading strategies is highlighted and marketed through framing strategies to create a positive perception of the project.*

However, Entman (2004) notes that contested matters are difficult to frame and the frames that are incongruent with dominant schemas are blocked from spreading by a common culture. This can be seen in the work on the Westconnex project by Mangioni (2018) wherein he highlights how the land was acquired for the project and how the impacted property owners were unable to relocate themselves due to lack of support from the project. This led to a negative perception of the project and as the acquisition progressed, the community being aware of the improper relocation did not agree to acquisition by agreement. He notes that the phenomenon of people not voluntarily giving off their land is evidenced by the significant increase in the number of properties the project acquired by compulsion after the events. Thus, the particulars of dissatisfied stakeholders are difficult to frame and even if they are framed are blocked from spreading as Entman (2004) notes. A positive public perception of the project is possible only if the stakeholders are dealt with in a satisfactory manner through the persuading strategies and if these strategies are made known to the public through framing strategies.

To acquire land from the church authorities, the project team agreed to renovate parts of the church as part of a ‘give and take’ strategy. The church gave a small portion of their land for the piers of the metro rail network, in exchange for which the metro rail organization renovated the church. The metro rail organization took credit of this work and framed it as a Corporate Social Responsibility (CSR) activity. A tweet in the official page of the metro rail organization read,

*“*** [metro rail organization] repaired and beautified the *** Church at *** [name of place] and was handed over to the church authorities” (Tweet by official page on 18 June 2014)*

In another instance, when an arch sewer was diverted by the metro rail organization to enable the construction of the metro rail stations, the project team tweeted,

*Diversion and Interconnection of Arch Sewer at *** [name of station] Station. An Arch sewer constructed in 1940's... (Tweet by official page on 25 October 2012)*

Thus the ‘extra work’ which was undertaken to manage the utilities as part of the persuading strategies, was framed by not disclosing the full information and the purpose of the diversion. This was propagated in the social media page of the project organization as part of the ‘appealing to the community’ strategy of the hegemonizing strategies and thus was effective in creating a positive brand image of the project. In another instance, sections of the community opposed the metro rail organization cutting trees to make way for the elevated metro rail viaducts and the metro rail project organization was accused of reducing the green cover of the city. The project team opted to transplant a few trees to newer locations rather than cutting it down to address the concerns of the community. This was tweeted as the project’s environmental responsibility.

*Successful Transplantation of Trees by *** [name of metro rail organization] - Tree Transplanting involves relocating or moving a tree safely from ... (Tweet by official page on 17 April 2012)*

When the highway department and the traffic police department allowed construction of the metro rail only during the night hours so as to cause minimum disturbance to the flow of traffic, the project team framed it as ‘workers toil as city sleeps’ in the social media. Such promoting of the organization created a brand image of hardworking work culture in the metro rail organization.

So, the adaptations made for the community as part of the persuading strategies were framed and highlighted in the social media as part of the hegemonizing strategies which created a change in the preferences of the project community. Kanji & Agrawal (2016) note that every organization follows a different strategy to implement CSR activities. Here, it is seen that the megaproject

framed and promoted the work done as part of the persuading strategy as CSR activity to also create hegemonizing effects that would help the project in the long-term. This appealing to the community through CSR activities resulted in getting support for construction activities, a positive brand image and creating community brand advocates. Similar to this, in the study of the Arab-Israeli conflict and the gulf war, Liebes (1997) highlights that news frames, such as the community-centric frame in this research, contribute to hegemony. Thus, I posit that,

Proposition 20 (P20): *The effective use of persuading strategies through framing strategies result in hegemonizing strategies.*

The megaproject was able to get a positive public sentiment by using framing strategies such as goal framing, pride framing and community-centric framing and using hegemonizing strategies such as promoting the organization, giving progress updates, appealing to community and targeting sections of the population. These strategies created a positive frame and a positive brand image of the project. The political environment in the state that hosts the project is dominated by two parties. During the feasibility stage of the project the party that was in power was supporting this metro rail project while the opposition party was supporting the construction of a monorail on the same route. The metro rail project was selected, and construction commenced. As time progressed, the opposition party came in power. The positive perception of the project by the community led the opposition party, who currently is in power, also to support the project and even push for the next phase of the metro rail project which they were initially opposing. This positive public sentiment led the politicians who are interested in vote banks to support the project in the next phase. Other than the state government, the central government also supported the project as quoted by the central minister of India for urban development,

*“The Central government will do whatever possible for the expansion of the *** metro rail project”* (Quoted from a news article of 14th May 2017)

The positive sentiments from the project community resulted in the funding agency supporting the next phase of the metro rail project. A news media article reported,

*“Asked whether he was satisfied with the progress of implementation of the first phase of the Metro Rail project, Mr. *** [name of representative from the funding foreign country]*

termed the project “very important” and replied, “I hope to see early completion of the project ... On that basis, we are ready to look into the project [phase 2 of the metro rail project] in a very serious manner” (Quoted from a news article of 15th July 2017)

The positive image of the project led many people to work for the project leaving their earlier jobs as the quote below by an employee in the metro rail organization emphasizes,

“I resigned a government job to be here ... This is a big project happening in my city ... I want to be part of it.”

Thus, the successful management of external stakeholders and support from the project community ensured that the resources that the project team possessed in the form of fund discretion from the funders, government backing from the politicians and recruitment discretion from were all maintained to further enable persuading strategies. Also, since the project enjoyed legitimacy due to the framing strategies, similar to Derakhshan et al.’s (2019) claim that the community’s experiences with the project organization can influence its legitimacy, the resource usage of the project was not questioned. Supporting this, Hooge & Dalmasso (2015) note that success of rationale of stakeholders on resource decisions depend on the perceived legitimacy. Hence, I posit that,

Proposition 21 (P21): *The perception of the megaproject and the preferences of the project community result in re-fixing the existing resources of the megaproject.*

The instances, the strategy used and the relation between strategies that were coded from the metro rail megaproject as summarized below in Table 8.1 for quick reference.

Table 8.1: Summary of relation between strategies observed in the metro rail megaproject case

Sl. No	Instance	Strategy	Relation b/w strategies
1	Land acquisition from Airports	Promote interconnectivity rationale and then build extra parking facility for airports in exchange for	Framing leads to persuading

Sl. No	Instance	Strategy	Relation b/w strategies
		permission to construction airport metro station	
2	Land acquisition from sub-urban rail network	Promote interconnectivity rationale and build station for sub-urban rail network in exchange for land rights	Framing leads to persuading
3	Land acquisition from people	Propagate 'public good' frame and then pay market rates to get land	Framing leads to persuading
4	Land acquisition from religious groups	Make religious groups understand that this project is for the people and then compensate them well	Framing leads to persuading
5	Getting permits from government agencies	'Public good' frame allows people to feel attached to the project	Framing leads to persuading
6	The project doing extra work and installing solar panels to address the community's concern on tapping electricity from the local electricity network	The solar panels are propagated as the biggest in India	Persuading leads to framing
7	Renovation of church in exchange for getting part of church land	The renovation is propagated as part of CSR and enabled the appealing to the community strategy	Persuading leads to framing leads to hegemonizing
8	Diversion and interconnection of arch sewer	The arch sewer was diverted and interconnected to enable construction of metro station but propagated in social media as a socially responsible act	Persuading leads to framing leads to hegemonizing
9	Transplanting trees	Trees in the work front were transplanted to another location as	Persuading leads to framing

Sl. No	Instance	Strategy	Relation b/w strategies
		community protested of the number of trees being cut down for the construction of the metro rail. This was propagated in social media as an environmentally friendly responsible act	leads to hegemonizing
10	For traffic diversions, the metro rail had to invest less because people are accommodative of the disturbances caused due to construction	People are accommodative of the diversions because the practices of the community has been changed	Hegemonizing leads to persuading
11	Get government backing from politicians for next phase of the project	The public sentiment towards the project was largely positive as it had a positive frame and a positive brand image	Framing and hegemonizing leads to persuading
12	After persuading with coordination by deputation with the highways department and traffic police department, permission to work received for night hours	The workers working during the night hours were framed as ‘workers toil as city sleeps’ to promote the organization and its hardworking work culture.	Persuading strategy leads to framing and hegemonizing strategies

Thus, the overt persuading strategies depend on the covert framing and hegemonizing strategies and vice versa. The overt persuading strategies employed to manage the external stakeholders led to some adaptations made for them. These adaptations were highlighted in the news articles and social media as metro rail organization’s commitment to the external stakeholders as part of the covert framing and hegemonizing strategies. These covert strategies caused a change in the perception and preferences of the external stakeholders resulting in them

supporting the construction activities of the metro rail megaproject. This support enabled the megaproject to save cost, time, and enabled the smooth construction of the project with minimal resource outlay in the next cycle of persuading strategies along with minimal adaptations to satisfy the external stakeholders. This cyclic relation between the overt and covert strategies is depicted in Figure 8.3 along with the corresponding propositions.

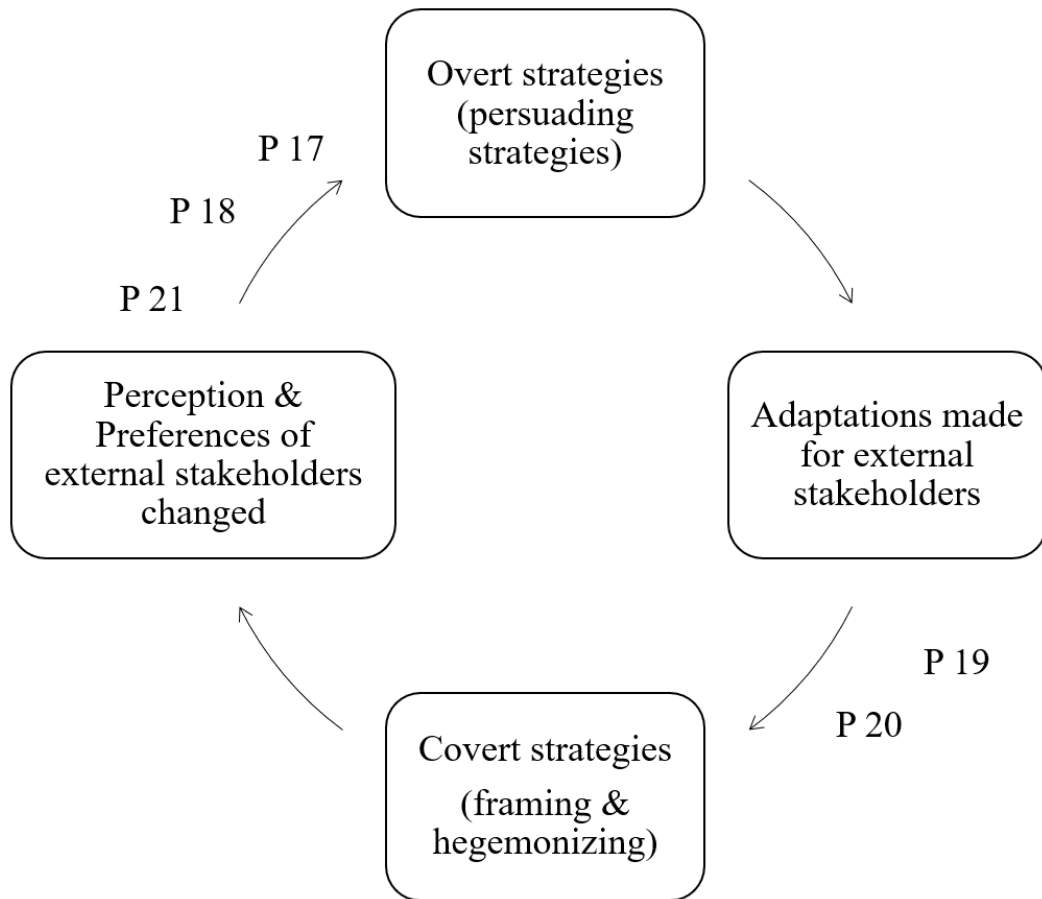


Figure 8.3: Relation between overt and covert strategies

The summary of all the propositions generated from this study spread across all the chapters of this thesis is given in Table 8.2 for quick reference.

Table 8.2: Summary of propositions

Number	Proposition
P1	The persuasion strategy was possible because the project was able to recruit on contract and recruit on deputation
P2	The deputation strategy was possible because the project was able to recruit on deputation through its government backing
P3	The ‘give and take’ strategy was possible because the project was able to recruit on deputation and because the project had fund discretion
P4	The extra work for stakeholder strategy was possible because the project was able to recruit on deputation and because the project had fund discretion
P5	The flexibility strategy was possible because the project was able to recruit on deputation, because the project had fund discretion and because the project was able to recruit talents
P6	The ‘solution’ frame on the part of the project community results from the goal framing strategy employed by the megaproject team
P7	The ‘trend-setter’ frame on the part of the project community results from the pride framing strategy employed by the megaproject team
P8	The ‘important’ frame on the part of the project community results from the community-centric framing strategy employed by the megaproject team
P9	The ‘own-up’ frame on the part of the project community results due to the blame framing strategy employed by the megaproject team without sufficient legitimacy.
P10	Community support for construction activities result from the reach of the media promoting the organization, giving progress updates and appealing to the community.
P11	Job attraction from the project team results from the reach of the media promoting the organization, giving progress updates and appealing to the community.
P12	A positive brand image in the community results from the reach of the media promoting the organization, giving progress updates, appealing to the community and targeting sections of the population.

Number	Proposition
P13	Enhanced job perception on the part of the project team result from the reach of the media promoting the organization, giving progress updates, appealing to community and targeting sections of the population.
P14	A transformation of project community into brand advocates result from the social reach of the media promoting the organization, appealing to the community and targeting sections of the population
P15	A transformation of the project team into brand advocates results from the social reach of media promoting the organization, appealing to the community and targeting sections of the population
P16	The strategies used to manage the external stakeholders in the social media trickle-down to the project team
P17	The perception of the megaproject enabled by the framing strategies along with the resources available with the project team directly impacts the megaproject team's overt strategic action.
P18	The preferences of the megaproject community enabled by the hegemonizing strategies along with the resources available with the project team affect the overt strategic action.
P19	The use of persuading strategies is highlighted and marketed through framing strategies to create a positive perception of the project
P20	The effective use of persuading strategies through framing strategies result in hegemonizing strategies
P21	The perception of the megaproject and the preferences of the project community result in re-fixing the existing resources of the megaproject

The conceptual external stakeholder management strategies framework which integrates the persuading strategies, framing strategies and hegemonizing strategies through the propositions summarized in Table 8.2 anchored in the circuits of power theoretical framework (Clegg, 1989) is shown in Figure 8.4.

Infrastructure projects are often critically delayed in India as a result of land acquisition difficulties (Sawhney et al., 2014) and government agency issues (Thomas et al., 2003). However,

infrastructure megaprojects are often the outcome of political process (Winch, 2017) and are pushed by government to start. Such a political push assures that megaprojects are treated differently from other infrastructure projects in the country. This results in the megaproject having resources such as government backing, recruitment discretion and fund discretion.

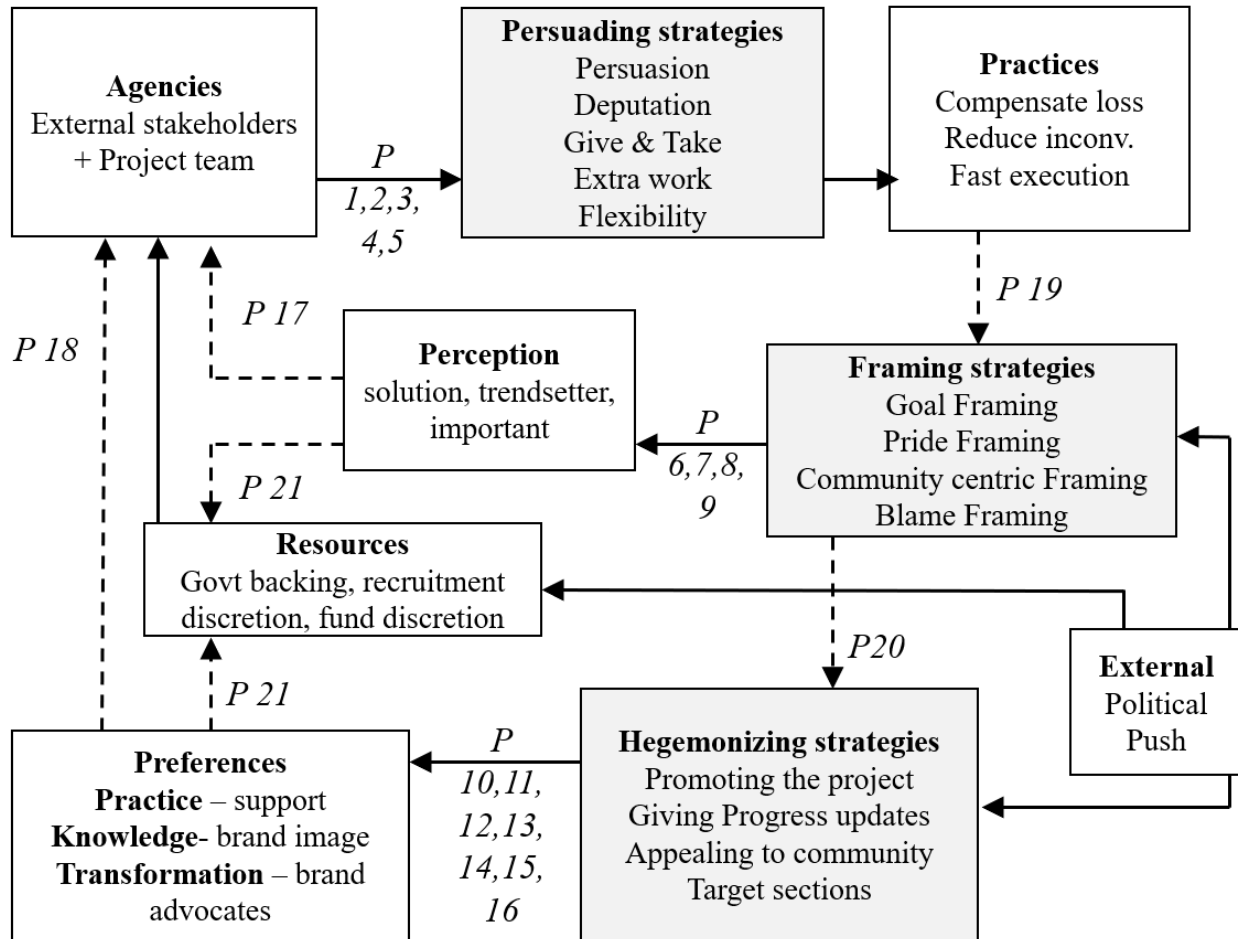


Figure 8.4: External stakeholder management strategies framework

The findings from chapter 5, in the form of P1, P2, P3, P4, and P5, show that these resources available with the project team affects strategic action on the external stakeholders. The project resorts to various overt persuading strategies such as persuasion, deputation, give and take, extra work for stakeholders and flexibility. These strategies result an external stakeholder satisfaction

either through compensating the loss of the stakeholder, or by reducing their inconvenience or through faster execution of the project.

The findings from chapter 6 show that megaprojects also use framing strategies such as goal framing, pride framing, community centric framing and blame framing and these result in a frame or perception of the project as the solution, the trend setter and an important project. The link between the framing strategies and their effects are theorized in the form of P6, P7, P8, and P9.

The findings from chapter 7 show that megaprojects use hegemonizing strategies such as promoting the organization, giving progress updates, appealing to the community and targeting sections of the population and these result in a change in preference of the project community and the project team. Due to these change in preferences through new practices, knowledge and transformation, the project team resorts to strategic action to manage the external stakeholders and the external stakeholders are more receptive to these strategies. The link between the hegemonizing strategies and their effects on the project community and the project team are theorized in the form of P10, P11, P12, P13, P14, and P15. The strategies used to manage the project community percolate and trickle-down to other stakeholders in the project such as the project team and other external stakeholders. This proposition is theorized as P16.

This framework also shows the research propositions that were generated in this chapter that highlighted the relation between strategies. Framing strategies leads to persuading strategies which is theorized as P17, hegemonizing strategies lead to persuading strategies which is theorized as P18, persuading strategies lead to framing strategies which is theorized as P19, framing strategies lead to hegemonizing strategies which is theorized as P20, and framing and hegemonizing strategies lead to re-fixing the resources that enable the persuading strategies which is theorized as P21.

Thus, the megaproject undergoes three processes upfront to stand out, compared to other projects and these are the exogeneous interventions in the circuit. The project was setup as a new organization with specific resources, the project used framing strategies and the project used hegemonizing strategies. These external factors are possible for project organizations which have a definite start time, unlike non-project organizations. Anchoring on the circuits of power theory

(Clegg, 1989), the framing strategies are part of the rules of practice and the hegemonizing strategies are part of the techniques of discipline and production. Both of them empower the obligatory passage points (OPP) in the form of the perception of the megaproject and the preferences of the external stakeholders and the project team. The agencies of external stakeholders and the project team, control and contest the OPP thereby creating the first circuit. In the background of these OPP's the project team employed resources to result in the persuading strategies.

Power is dynamic. Power is created, used and maintained through strategies. As seen in Figure 8.4, the framing strategies and hegemonizing strategies create power through creating a favourable perception of the megaproject and creating favourable preferences within the megaproject team and external stakeholders. The persuading strategies use the power of resources, the power of the perception of the megaproject and the power of the preferences of the external stakeholders. The outcome of the persuading strategies results in maintaining power through the framing strategies and hegemonizing strategies. Thus, all the three strategies, persuading strategies, framing strategies and hegemonizing strategies in subsequent iterations of the circuit maintain power. Thus, power is dynamic, and it is these strategies that make power dynamic. While the framing and hegemonizing strategies were instrumental for creating momentum for the project, the persuading strategies were useful for maintaining the momentum and stabilizing the power relations.

Next, the instruments or technologies through which power acts in the external stakeholder management framework are explained.

8.2.2 Technologies of power in management of external stakeholders

I observed the use of three forms of technologies – Information Communication Technologies (ICTs) in particular - from the case study of the metro rail megaproject by compiling interview data, news media articles and social media posts. They are visualization ICT, simulation ICT and social media ICT. Each of them is discussed below.

1. Visualization ICT

The literature on ICT in construction supports the notion that ICT is used predominantly for visualization (Fazli et al., 2014; Hartmann et al., 2008). This visualization helps all stakeholders to comprehend the project better and facilitate constructive discussions. The project team used this strategically with the external stakeholders by assisting them to understand the construction complexities and addressing their concerns by using mutually agreeable solutions, thereby gaining their support for the project. In the megaproject considered here, the project team used 3D CAD drawings for visualization. Such uses of drawings were seen with the landowners who were shown graphical prints and 3D CAD drawings of the metro rail piers near their affected property. This acted as a visual aid for enabling discussions to arrive at feasible options to reduce discomfort to the property owners. The discussions resulted in the megaproject team adjusting the pier spans thereby improving the visibility of the affected property and addressing critical concerns of the stakeholders in lands. The role of visualization to enhance participatory planning is emphasized in the literature. Jankowski (2009) note that stakeholders who are not well versed with the intricacies of the plan could visualize the construction. Visualization can also ensure deeper comprehension in communication and prepare the community for discussions and interactions (Kumar et al., 2016). Salter et al. (2007) records that the use of such visualizations in the form of GIS mapping to explain the changes in the landscape can increase stakeholders' understanding and thereby acceptance of the proposed plan.

2. Simulation ICT

ICT is used for enhancing visuals of the project by considering multiple scenarios through simulations or by using 3D renderings and morphed photographs. The use of computer enabled traffic simulations as a discussion tool to arrive at a traffic diversion plan which would cause minimum disturbance to the highway traffic were observed with stakeholders in existing services. With airports, the computer simulations of the discharges from the 22 Kilovolt overhead electric lines powering the metro rail project showed minimum electronic disturbance to the aircraft systems. The digitally morphed photographs were used with the project community when the project team convinced them to go underground in sections near heritage sites. There were also rendered pictures and walk-in animations

of stations targeted at the project community. The public relations officer of the project quoted,

“And we [metro rail project] made film on metro project ... How the tunnelling is done, how our project is going to shape, what is the ultimate result, how we are going to do this, How our standard of living increases”

In megaproject alliances, Veenswijk et al. (2010) highlights the use of 3D simulations to train participants from both the public and private organizations. Lange (1994) notes that both static and dynamic simulations can help communicate the contents of the proposal to the stakeholders and provide a common basis for discussions.

3. Social Media ICT

Social media is a set of computer-mediated tools which enables the creation, circulation, sharing and exchange of information. It is different from the static world wide web as it enables two-way communication. This research sees social media as a powerful ICT for engaging and managing external stakeholders. The public relations office used social media to engage the project community by listening to their comments and suggestions and responding to them. Supporting this, Srivastava & Pandey (2012) highlight that social media provides a better way to connect with customers as organizations can carefully watch their customer's comments and concerns. The project team also posted progress photos, celebrated regional and national festivals and publicized them in their social media page. Mayfield (2008) claims that social media provides participation, openness, conversation, connectedness and enables the creation of online communities quickly. These diverse roles of social media make it an important tool for community engagements in megaprojects. Social media provides an advantage over other ICTs in engaging and managing external stakeholders because of its quicker delivery compared to print media and the unique ability to use different forms of media content such as photos, videos and animations. It can also be used for participatory modelling of large infrastructure projects as it can reach a larger number of people spread across the reach of these megaprojects.

The eleven specific instances of the use of ICTs to manage external stakeholders that I have discussed can be categorized into different practices of ICT as shown in Table 8.3.

Table 8.3: ICT enabled external stakeholder management strategies consolidated from the metro rail case

Sl. No	Strategy Practice	Practices of ICT	Strategic use category
1	Use of 3D CAD drawings to adjust pier locations to improve visibility of private property	Visualization	Persuading
2	Digitally modified images to show how elevated sections of the metro rail would alter the streetscape near the heritage building	Simulation	Framing
3	Community engagement and discussions through social media	Social Media	Persuading
4	Updates of progress of project through social media photos and live streaming	Social Media	Framing
5	Project advertisements, rendered pictures and walk-in animations of coaches, stations and surroundings	Social Media	Framing
6	Social media tweets that claim metro rail is going to elevate the city and change the lives of its inhabitants	Social Media	Framing
7	Reporting of visits of eminent personalities to project sites on social media	Social Media	Hegemonizing
8	Celebration of regional and national festivals	Social Media	Hegemonizing
9	Update on CSR activities and complimentary rides to school children	Social Media	Hegemonizing
10	Computer generated animated traffic models to simulate traffic flows during different periods of time	Simulations	Persuading

11	Computer based simulation study of flight electronic interference during different weather conditions	Simulations	Persuading
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I observed the use of ICT for three strategic purposes anchored within the dimensions of power theory (Lukes, 2005) as described below.

1. ICT for persuading strategies

ICT was used in order to get people to do what they otherwise would not have done by enabling discussions with the affected external stakeholders thereby persuading them to favour the project by improving coordination and speeding the approval process. Visualization ICT was used as a visual aid for enabling discussions with land owners whose property was affected due to the metro rail piers. Thus, the project team was able to arrive at a mutually acceptable solution and thereby reduce discomfort to the property owners. Through participatory modelling with the highway department using traffic simulations, the project team was able to create a traffic diversion plan which would cause minimum disturbance to the highway traffic. Similar instances were observed with airport authority too where simulations of discharges were used to convince them that there would be no electronic disturbances to the aircraft systems. Even in social media, the public relations office of the metro rail listened and responded to comments and queries raised on their pages and thereby engaged the project community. In these instances, ICTs became artefacts that allowed for better communication of technical information and built transparency and trust, enabling negotiations to move forward. ICT was a critical resource for the megaproject team, acting as a communication and discussion tool to persuade external stakeholders to support the project's goals. The dynamics of persuasion observed here constitute the first (overt) dimension of power as Avelino (2011) notes. The use of ICT and face-to-face interactions for briefings is mentioned as a 'hybrid briefing model' and is seen to be beneficial for internal stakeholder engagements in the construction industry in the work of Chung et al. (2009). The persuading strategy is made possible with visualization ICTs, simulation ICTs and social media ICTs. Along with possessing these

ICT resources, the ability to operate them to facilitate discussions is also of critical importance here.

2. ICT for framing strategies

ICT was used as a strategic tool to project certain issues and hide others. When a few members of the project community objected to the construction of the elevated metro rail near heritage sites claiming that this would alter the visual landscape of the city, the project had no choice but to go underground, as these sites offered significant service opportunities. However, to gain acceptance of the increased cost of doing so, the project team used digitally morphed images and placed the elevated rail in front of heritage buildings. Through this, the project team framed the argument that going underground was necessary for sustaining the landscape of the city and underplayed the fact that the financial commitments would rise six-fold, constituting a financial burden that would be levied from the taxpayers and from users for years to come. Similarly, when the metro rail project used advertisement videos, they projected the metro rail as safe, environment-friendly and fast while hiding information such as the relatively high fares (compared to existing public transit systems) and the construction disturbances that the project would cause. The walk-in animations and rendered pictures of stations, their surroundings and rail coaches also portrayed the visual ambiance of the project while hiding the negatives.

The progress photos posted by the project team in their social media page mentioned only the positive news of the project and the images shared were appealing and aesthetic. The project chose to hide sensitive issues such as accidents, delays and other criticisms. Issues and failures can lead to negative emotions and can potentially negate the constructive effects of a brand (Rose et al., 2016). While scholars emphasize the need for full and honest engagement with external stakeholders in these projects (Nguyen et al., 2018), the practice is not so. The metro rail track near the airport runway, which had to be made underground because of requirements by the airport authority, was projected on Twitter as,

*Metro dips and climbs over city- *** [station name] -Airport Line to Rise Over *** [location], Go Underground Near Airport* (Tweet by official page on 19 November 2012)

When traffic regulations only allowed construction work to be undertaken during night hours when traffic flow is less, the metro rail organization projected it as “*Metro staff toil as city sleeps*” showing their work commitment to the city.

Messages of interconnectivity between existing services which were part of the ‘goal framing’ strategy discussed in Chapter 6 were also expressed in the social media posts, such as,

All roads to lead to metro stations. MRTS, Suburban Rail, MTC Buses to Be Integrated with First Metro Line (Tweet by official page on 17 January 2013)

*Inter connectivity with other mode of transport. Know your *** [name of city] Metro Rail better Inter connectivity with...* (Tweet by official page on 25 June 2012)

In these social media instances, the metro rail was able to highlight these frames in their own media and thus cover only one side of the story. These instances, along with social frame and natural frame (Goffman, 1974) are tabulated in Table 8.4 below.

Table 8.4: Social frame and natural frame enabled by the use of ICT

Sl.No	Instance	Social frame	Natural frame
1	Digitally morphed images	Underground metro rail near heritage buildings sustain the landscape of the city	Constructing this stretch is an option; Increased fares; Excess use of taxpayers’ money
2	Advertisements, 3D rendering and walk-in animations of stations, its	Safe, environment friendly, fast, visually pleasing	Increased fare and the construction disturbances that the project would cause

Sl.No	Instance	Social frame	Natural frame
	surroundings and metro rail coaches		
3	Social media discourse	Social media posts of metro rail as a special project elevating the city	The project is one among other infrastructure projects in the city
4	Social media discourse	Social media posts of salient features of the project used for promoting the project	These were adjustments made for the community to enable construction
5	Social media discourse	Social media posts of initiatives taken for interconnectivity between other infrastructure services	The city already has a good network of infrastructure services and interconnectivity is highlighted as the rationale for this metro rail project
6	Social media photos	Shows only the positive progress photos of the project	Photos of delays, accidents and criticism are hidden

Here, ICT can be seen as a framing tool that emphasizes certain issues at the expense of others. This strategic use of ICT enabled the project team to keep topics off the agenda (Bachrach & Baratz, 1962) and not facilitate discussion on certain topics, in contrast with the ‘persuading’ strategy. With the use of the framing strategy, there is an implicit shaping of issues which are considered relevant (Fleming & Spicer, 2007). Framing strategy is possible with simulation ICTs and social media ICTs. In particular, the use of visual ICT tools provides users the ability to creatively shape or animate landscapes that contain features that they would like to insert into the dominant frame. While literature provides evidence for the use of construction specific ICTs such as BIM and CAD for framing by

hiding information and creating information asymmetry among internal stakeholders (Forsythe et al., 2015), little work exists on the use of such ICTs with external stakeholders. This may be because BIM and CAD drawings are considered as internal documents in projects and are not expected to be shared with external stakeholders.

3. ICT for hegemonizing strategies

ICT in the form of social media was used to influence the project community by articulating their preferences, recursively feeding them back, subtly shaping concurrence, consensus and communication. Since the members of the community had a say in the project and a platform for being heard through the social media, they felt a sense of ownership in the project. Kumar et al. (2016) records how a feeling of ownership is generated when community issues and concerns are taken into account. The metro rail project also celebrated regional and national occasions and festivals by publicizing them on their social media page. Similarly, the project's initiatives which support the local community through repairing roads, churches, parks, conducting medical camps, regional food carnivals, and helping rescue operations during a fire or building collapses were also mentioned in their social media pages. The pages also contained posts on how the metro rail was beneficial for the city and information on awards and recognitions conferred on the project. Through publicizing this news in social media, the project team created dominant discourses in favour of the project thereby amplifying the community's preferences and turning themselves into brand advocates. While Collinge (2018) highlight how project artefacts in the form of drawings, digital imagery, physical objects, etc., can be treated as multimodal resources that critically affect stakeholder engagement and interpretation, this research extends it further to the hegemonizing effect of project artefacts such as social media.

The ICT enabled strategies for external management observed from the case study of the metro rail megaproject and anchored in the dimensions of power (Lukes, 2005) are represented in Figure 8.5.

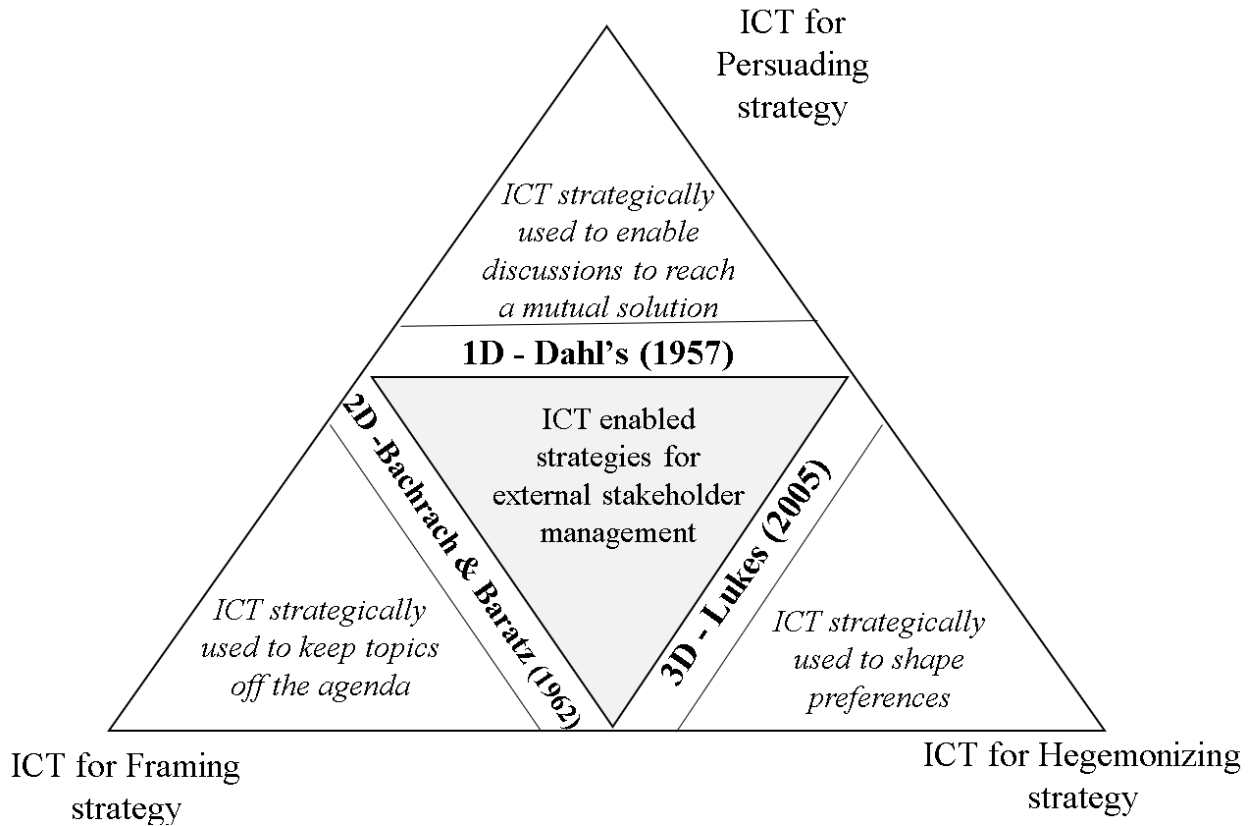


Figure 8.5: ICT enabled strategies for external stakeholder management

The three external stakeholder management strategies that were observed can also be mapped to the three different forms of ICT as shown in Figure 8.6. Visualization was used for persuading landowners by changing the layout of piers. Making matter visual achieved in a few images what thousands of words could not: as the saying goes, every picture tells a story. Simulations were used for persuading the external stakeholders, such as the traffic department and the airport authority. Alternative conceptions of existing or future states of affairs are hard to make concrete. Simulation is an affordance that assists greatly by representing different scenarios to gain support for preferred outcomes by framing the project community through digitally morphed images, rendering and advertisements. Social media was used as a discussion forum in which positive framing could occur that sought to persuade the project community by circulating news of the project while hiding negatives as well as creating dominant discourses that reflected and subtly skewed existing personal preferences.

Visualization ICT	3D CAD		
Simulation ICT	Traffic/electric interference scenario simulations	Digitally morphed image; rendered image; advertisements	
Social Media ICT	Listened and responded to comments	Photos uploaded showing only positives of project	Rhetoric & non- rhetoric shaping, articulating & amplifying personal preferences
	ICT for Persuading Strategy	ICT for Framing Strategy	ICT for Hegemonizing Strategy

Figure 8.6: Mapping forms of ICT and its strategic use

Thus, social media can be seen as an effective medium for communication with external stakeholders. Bakens et al. (2005) highlights effective communication as delivering the correct message, using suitable means of communication and conveying the project value and benefits clearly. In the case of the social media-based communication with the external stakeholders, the correct message didn't mean the truth of the project as negative news relating to accidents, delays, criticism, etc., were strategically hidden in these communications.

8.3 CONCLUDING REMARKS

In this research, I have referred to the theories of power to understand strategies employed by the megaproject team to manage external stakeholders. Understanding these strategies help me explain how megaprojects are able to deliver in an environment such as India where ordinary infrastructure projects are significantly delayed. It is seen that the strategies can be matched with the dimensions of power as persuading strategies, framing strategies and hegemonizing strategies. I also tried to understand the role of strategies in making power 'dynamic' through the circuits of power theory. While Freedman (2013) claims strategy to be the art of creating power, this research

extends strategy's role towards using and stabilizing power. It was observed that the framing and hegemonizing strategies create power, while the persuading strategies use existing power and also stabilize power in the circuits. Through this research, I have integrated the dimensions of power framework (Lukes, 2005) with the circuits of power (Clegg, 1989). From a megaproject context, it is seen that these projects undergo three processes upfront to create momentum – setting up as a new organization with specific resources, the use of framing strategies and the use of hegemonizing strategies. Subsequently, the persuading strategies reproduce the circuit and maintain the momentum.

Adding onto this, the sociomateriality perspective offers a suitable lens for exploring the diverse strategic uses of a particular ICT as determined by project team's particular need. This research demonstrates the applicability of the dimensions of power framework to explain the technologies of power – the way in which power flows in the framework - in the form of diverse uses of ICT from a strategic perspective and make sense of its multiple affordances. I observed three forms of ICTs in use from the case study– visualization ICTs, simulation ICTs, and social media ICTs. Because of the unique advantages of social media, such as quicker delivery, wider reach, ability to use different media contents, and ability to be used for persuading, framing, and hegemonizing strategies, this research highlights social media as an effective instrument for external stakeholder management.

This section contributes theoretically to the discussion on how organizations can link CSR activities with their normal business (Verma and Singh, 2016). It is seen that the metro rail megaproject adapted to the demands of the project community and broadcasted the changes as CSR activities. While this research does not claim that all of the organization's CSR activities were just adapting to the demands of the community, it was observed that some of them were. Also, this research adds framing and hegemonizing affordances of social media to the already existing affordances of communication, collaboration, and knowledge sharing (Leonardi & Vaast, 2017). Adding onto this, the categorization of ICTs according to their strategic use offers a framework to analyse strategic use of ICTs in the future. Lastly, this study adds social media to the current list of ICTs employed in project management especially for managing external stakeholders.

While this work is definitely a start, more work needs to be undertaken to understand the micro-dynamics of how strategies shape power dynamics. This research only considered the circuit from the project team perspective, however, the role of stakeholders in shaping megaprojects cannot be ignored as seen in Flyvbjerg (1998).

In the next chapter I summarize all the findings from this study and highlight the theoretical, methodological and practical contributions of this research.

CHAPTER 9

SUMMARY AND CONCLUSION

9.1 SUMMARY

Infrastructure megaprojects are essential for the socio-economic development of a region due to which there is an increase in the number of these projects worldwide. However, these projects are plagued by a history of poor performance in the form of time overruns, cost overruns and not achieving planned objectives. Multiple scholars cite complying with the demands of external stakeholders as the reason for these underperformances. Unlike internal stakeholders, these external stakeholders cannot be managed through contracts, rules and regulations. Hence, the project team has to resort to strategic action. The research motivation is to understand external stakeholder management strategies as it is critical for the performance of infrastructure megaprojects. I chose organizational power theories because they occur in multiple dimensions and can explain strategies. Also, organizational power theories consider the social actor within their social fabric and hence can explain the institutional environment's role in the strategic action.

To arrive at the research objectives for the study, I conducted exploratory studies in India and Australia in diverse infrastructure projects in different phases and tried to explain the findings using the dimensions of power theory (Lukes, 2005). Anchored in this theory, I found persuading strategies, framing strategies and hegemonizing strategies being used by megaprojects to manage external stakeholders. Since the persuading strategies are easily observable, this research sought to look at interview data to make sense of them. The framing strategies and the hegemonizing strategies are based on the covert dimensions of power and hence cannot be seen in interview data. I sought to observe the news media interactions of the megaproject with the project community for framing strategies and social media interactions of the megaproject with the project community for the hegemonizing strategies. Thus, based on the take-aways from the exploratory study, a set of research objectives that can be investigated from an organizational power perspective and the data types that can be analysed to address these research objectives are proposed.

Following this, the organizational power literature and the megaproject literature pertaining to each of these persuading, framing and hegemonizing strategies were reviewed to arrive at a set of eight research questions which would guide the in-depth enquiry.

An in-depth single case study research methodology was selected as it provides contextual understanding for such a study and thus a metro rail megaproject in India was selected. I interviewed the project team, collected news articles pertaining to the project and collected social media exchanges of the project with the project community. The data was analysed using grounded theory (Strauss & Corbin, 1990) to answer the research questions raised.

The persuading strategies compiled from the interview data were persuasion, deputation, give and take, extra work for stakeholder and flexibility. The resources which enabled these persuading strategies were government backing, fund discretion and recruitment discretion. Anchored in the influence tactics framework (Yukl & Tracey, 1992) and the bases of power framework (French & Raven, 1959), the relation between the persuading strategies and the resources that enable them are theorized with five propositions.

The framing strategies observed from the news article study were goal framing, pride framing, community-centric framing and blame framing. The framing effects of the use of the framing strategies observed from the project community's comments on the news articles were the solution frame, the trend-setter frame, the important frame and the own-up frame. Anchored in framing theory (Goffman, 1974), the relation between the framing strategies and the framing effects were theorized with four propositions.

The hegemonizing strategies observed from the social media posts were promoting the organization, giving progress updates, appealing to the community and targeting sections of the population. These hegemonizing strategies had practice, knowledge and transformation effects on the project community and the project team. With the project community, the hegemonizing strategies resulted in support for the construction activities, positive brand image and creation of community brand advocates. With the project team, the hegemonizing strategies resulted in attracting talents, enhanced job perception and creation of project team brand advocates. Anchored in the governmentality theory (Foucault, 2007), the relation between the hegemonizing strategies and the hegemonizing effects were theorized with seven propositions.

Finally, the relation between strategies were observed from making sense of all the data collected – the interviews, the news articles and social media posts. Anchored in the circuits of

power theory (Clegg, 1989), the relation between strategies were theorized with five propositions. Thus, by integrating all the twenty-one propositions from this study, I was able to arrive at an external stakeholder management strategies framework for megaprojects.

9.2 CONTRIBUTION TO THEORY

The research study contributes to the theory of strategy, organizational power and project management.

9.2.1 Contributions to strategy theory

To the theory of strategy, this research was able to classify strategies based on the dimensions of power framework (Lukes, 2005). Anchored in this theory, strategies corresponding to power in decision making, power in non-decision making and latent power were identified as persuading strategies, framing strategies and hegemonizing strategies. Adding on to this, the effects of the use of these persuading, framing and hegemonizing strategies result in the practice, perception and preference effects respectively. This strategy and effects framework can be translated to other research settings and fields.

Also, the circuitry nature of power (Clegg, 1989) can be applied to strategies to understand the relation between strategies validating Clegg & Kornberger's (2015) claim that power and strategy interact, and one leads to another. From this study, it was seen that one strategy affects another. It was seen that persuading strategies leads to framing strategies, framing strategies lead to hegemonizing strategies and both framing and hegemonizing strategies lead to persuading strategies. This contribution can help strategy scholars understand the relation between strategies used in practice.

9.2.2 Contributions to organizational power theory

To the theory of organizational power, this research highlights the role of strategies in making power dynamic. Power dynamics is how power is created, maintained and used. The earlier notion of strategy as the art of creating power (Freedman, 2013) is enhanced to include strategy's role in using power and maintaining power. It was seen from the findings that while the framing and

hegemonizing strategies created power, the persuading strategies used the created power. In subsequent iterations of the circuit, all the strategies were effective in maintaining the power in the circuit.

Again, to the theory of organizational power, this research highlights the role of Information Communication Technologies (ICTs) such as visualization, simulation and social media as technologies of power. While visualization facilitated discussion and enabled the persuading strategies, simulations in the form of videos and rendered images were used to create a glossy frame of the megaproject. Thus, simulation enabled the framing strategies. The social media was effective in branding the project and enabled the hegemonizing strategies. Thus, this research highlights the use of technologies in addition to the common discourse or rhetoric instruments and emphasizes the important role of internet enabled virtual technologies, such as social media, as technologies for creating and maintaining power.

9.2.3 Contributions to project management theory

To theory of project management, this research introduces discussions on branding theory. Discussions on branding in the project management literature was limited and was only with respect to organizations such as clients or designers and not with respect to a particular project. This research also highlights that public infrastructure projects, especially megaprojects have good scope of branding and can reap benefits such as community acceptance when practiced.

While the megaprojects literature records the importance of the shaping stage of the project, this research highlights the importance of the construction and operation stages of a project and their role in continuous stakeholder engagement. The future of an organization depends on how it is viewed by key stakeholders such as creditors, shareholders, customers and members of the community (Cornelissen, 2004) and the construction and operation phase which are the longest phases of a megaproject are critical to stakeholder engagement.

This research also highlights the role of news media and social media in continuous stakeholder engagement on a daily basis over the conventional town hall meetings. Through these mediums, the project team frequently communicated with the project community, either through collective decision making as seen with persuading strategies, or through changing community perception

regarding the project as seen with framing strategies, or through changing community preferences in favour of the project as seen with hegemonizing strategies.

Another contribution to project management theories is how strategic action takes place in these projects. The research highlights why projects with the same resources and same people can show different outcomes due to external factors. In the case of the megaproject discussed here, the positive perception of the project was created and maintained with the use of framing strategies. Also, the preferences of the community to the project were shaped through the hegemonizing strategies.

Boundaries of stakeholders are vague as the strategies used to engage with the project community percolated to external stakeholders and even to the project team. The current project management theory compartmentalizes stakeholders into internal stakeholders and external stakeholders. The theory and practice of managing these stakeholders are treated differently. However, in this study, the strategies used to create a positive project image to the project community percolated to the other external stakeholders. It was seen that the interconnectivity rationale propagated through news media articles aimed to gain legitimacy for the project with the project community, was used to get land from external stakeholders such as airport and railways. It was also observed that the strategies used to create pride with the project community percolated to the internal stakeholders such as the project team. This was observed as the ‘community pride’ of the project community was seen with the project team too as they were proud of working in the project. This was because all the project participants are also members of the community and are influenced through the news articles and the social media posts. The project team is also recruited from the project community and continue to live among the project community during the duration of the project. Therefore, even the project team is part of the social fabric of the project and are not immune to it. They are thus, both the actor and the subject to these strategies.

The study also highlights the circuitry nature of stakeholder management. While literature emphasizes that the way external stakeholders are engaged or managed affects the community’s perception of the project (Mangioni, 2018), this research highlight that the perception of the project in subsequent iterations of circuits affects the way external stakeholders are managed. Also, while literature emphasizes that the way actions are framed affects the preferences of the external

stakeholders, this research highlight that the preferences of the external stakeholders affects the way stakeholders are managed and then the way actions are framed.

The study also highlights how megaprojects shape identity. The in-depth case study of the metro rail highlight that the project communities’ identities were shaped through the hegemonizing strategies. These had an effect on other external stakeholders and also on the project team. The role of projects in shaping identity is less explored. This research contributes to this new avenue of research in project management.

The contributions to theory are consolidated in Table 9.1 for reference.

Table 9.1: Summary of contribution to theory

Theory area	Contribution
Strategy theory	Classification of strategy based on dimensions of power
Strategy theory	Relation between strategies
Organizational Power theory	Role of strategies in making power dynamic
Organizational Power theory	Role of non-rhetorical mediums of power such as Information Communication Technologies (ICTs)
Project Management theory	Branding as a construct for studying public infrastructure projects and their community acceptance
Project Management theory	Process of continuous stakeholder engagement during construction and operation phases of a project
Project Management theory	Role of news media and social media for continuous stakeholder engagement in project
Project Management theory	Role of external factors such as perception of the project and the preferences of the project community and how they can be shaped with framing and hegemonizing strategies respectively.
Project Management theory	The effect of strategies used with the project community percolated to other external stakeholders and even the internal stakeholders such as project team

Theory area	Contribution
Project Management theory	Circuitry nature of stakeholder management – stakeholder engagement affects perception and perception affects stakeholder engagement
Project Management theory	The role of megaprojects in shaping identity

9.3 CONTRIBUTION TO RESEARCH METHODOLOGY

The research contributed to the research methodologies used in construction management research. The research used news articles and social media for collecting data which were helpful for analysing the perception and preferences of the community and contributes to the study of naturalistic data in construction projects.

9.3.1 Contributions to data collection

This research discusses ways in which naturalistic data such as news articles and social media posts can be used to observe the project’s interaction with the project community. Since megaprojects attract media attention due to its colossal, costly and controversial nature, media data can be used to study megaprojects similar to political elections, health studies, disaster management or sports. Employing these naturalistic data can help avoid interview questions bias or respondent bias frequently observed in interview data study.

While news articles are currently used in project management research to triangulate the data collected from interviews (such as in the works of Matinheikki, et al., 2018), this study has highlighted how an in-depth study can be conducted with just the news articles. While the news media data used for triangulation are treated as secondary sources, this research explores them as primary data source, as I studied how project teams frame instances while presenting to the community. The study also contributes to understanding stakeholder perception through the comments of the online news articles.

Also, social media comments from the project community can be a primary data source that can be used for understanding the public opinion regarding a project. The research also highlights that naturalistic data can be collected from social media in the form of rhetorical communications

such as messages and non-rhetorical communications such as photos and videos. Miles & Haberman (1994) note that with naturalistic data, most analysis is done with words. They say these words can be assembled, subclustered, and broken into semiotic segments. Through this study on social media, this research adds naturalistic non-rhetorical data such as photos and videos and their roles in creating an impact on the external stakeholders.

This research also introduces the use of netnography (Kozinets et al., 2014) in the study of construction projects to systematically study how meaning is created online. This is particularly useful for the study of megaprojects as they have a huge online presence.

Social media was identified as a potential source to understand hegemonizing strategies. The megaproject has more control on its social media page in contrast to news media articles and other media outlets. Hence, the project can opt for multiple devices to achieve hegemonizing effects such as positive updates about the project, simulated images of stations and coaches and appealing videos of the project.

9.3.2 Contributions to data analysis

The research used qualitative content analysis for coding the Twitter data. This is because, tweets due to their shorter format and crisp data can be easily assigned a code. Each tweet generally will be focused on one topic and hence can be qualitatively coded. Thus, this research highlights the feasibility of using qualitative content analysis for analysing tweets.

This research gives insights on how data from multiple social media sources can be analysed in synchronization. While twitter data because of its crisp format were used to understand the hegemonizing strategies of the megaproject, Facebook data were used for understanding the effect of hegemonizing on the project community. This was because Facebook attracts more user engagement than Twitter (He et al., 2013). Using data from multiple social media sources were possible because the same employee of the metro rail organization operated both the pages and the posts were identical across both platforms.

The contributions to methodology are consolidated in Table 9.2 for reference.

Table 9.2: Summary of contribution to research methodology

Methodology area	Contribution
Data collection	The use of naturalistic data such as news articles and social media in projects
Data collection	A methodology to study the news articles as primary source of data to understand project team's communication and community's response
Data collection	A methodology to study the social media posts as a primary source of data in the form of rhetorical and non-rhetorical communications. This can also be used to understand project team's communications and community's response
Data collection	Introduces netnography in the study of construction megaprojects as these projects have a huge online presence
Data collection	Use of social media to study hegemonizing strategies because the organization has more control on its social media page compared to other media outlets
Data analysis	Qualitative content analysis can be used to code each tweet as they are crisp and focused on one topic
Data analysis	Using data from multiple social media sites in synchronization

9.4 CONTRIBUTION TO PRACTICE

The study makes contributions to how external stakeholders can be managed in practice. The framework generated from the study of the metro rail megaproject in India can explain the practice of external stakeholder management through strategies. A set of recommendations to practice are also proposed.

9.4.1 Explaining the practice

The integrated framework which highlights the relation between the persuading, framing and hegemonizing strategies can help explain external stakeholder management in megaprojects. This framework can help focus on specific strategies to either change the community perception of the

project or change the preferences of the project community and the project team. The community perception can be changed through framing strategies such as goal framing, pride framing, community-centric framing and blame framing. The preferences of the project community and the project team can be changed through hegemonizing strategies such as promoting the organization, giving progress updates, appealing to the community and targeting sections of the population.

9.4.2 Recommendations for practice

The study also emphasizes the role of the invisible strategies in shaping the visible stakeholder management. Visible stakeholder management is seen in the persuading strategies such as persuasion, deputation, give and take, extra work for stakeholders and flexibility. However, these strategies are not only dependent on the resources available with the project team, but also on the perception and preferences of the external stakeholders enabled through the invisible framing and hegemonizing strategies. Thus, by understanding the framework, this research shows that it is not the overt strategies that the project team needs to strengthen, but the covert strategies. Hence, strengthening the framing and hegemonizing circuits can help megaproject practitioners to deliver megaprojects with the support of community.

To practice, this research also highlights the role of social media in managing and engaging with the external stakeholders. Hennisz (2016) recommends that managers should step outside their offices and interact with their organization's myriad stakeholders in their environment. To this cause, this research highlights the role of social media as a potential medium through which such engagement can be done on a large scale as per the requirements of megaprojects. While Social Network Analysis (SNA) technology has been proposed for identifying important stakeholders (Mok et al., 2015), other technologies discussed in this thesis can be used to manage the identified and unidentified stakeholders, all of whom operate in the project community.

Also, while news articles report negative incidents in the project such as damaged buildings, cave-ins, delays, inconvenience to public, etc., the metro rail organization had more control on social media only portraying positive and brand building events such as awards received, progress, visits of celebrities, etc. This research also highlights the role of news articles in managing the

community. Together, social media posts and news articles were instrumental in creating, maintaining and shaping rationalities through day to day communications.

To megaproject stakeholder management practice, this research highlight that all stakeholders of a project are part of the project community. The research found that hegemonizing strategies employed through the social media as having an impact not only on the project community, who are the target audience, but also trickle-down on to the project team. The framing and hegemonizing strategies employed through news media articles and social media posts respectively affected the perception and preference of all the project members including external stakeholders involved in land acquisitions, other infrastructure services and utilities and not just the project community. Both external stakeholders and project team cognition is important for the successful delivery of the megaproject. Thus, this research contributes to practice by highlighting that the external stakeholder management strategies have effects on all the stakeholders of the project, both external and internal.

The research also highlights the role of non-rhetorical instruments such as computer enabled simulations and 3D drawings to create dialogues with the external stakeholders. These were instrumental in understanding the concerns of the external stakeholders and arriving at a mutually acceptable solution as part of the persuading strategies.

The contributions to practice are consolidated in Table 9.3 for reference.

Table 9.3: Summary of contribution to practice

Practice area	Contribution
Explaining practice	A framework to explain external stakeholder management strategies in infrastructure megaprojects
Recommendations for practice	The role of invisible strategies in shaping the visible stakeholder management
Recommendations for practice	Since all stakeholders of a project (internal and external) are part of the project community, the project community is an important stakeholder group which needs to be managed

Practice area	Contribution
Recommendations for practice	The use of social media and news articles to engage and manage the project community through day to day discourses
Recommendations for practice	The use of non-rhetorical instruments such as 3D drawings for engaging the community and arriving at a mutually acceptable solution

9.5 LIMITATIONS AND FUTURE SCOPE OF WORK

The study has some limitations, many of which offer directions for further research in the area. The study focused on only the construction and operation phase of a megaproject and looked at how the project team used persuading, framing and hegemonizing strategies. However, the importance of the shaping phase is stressed in many researches (World Bank, 1996; Whist and Christensen, 2011) and a similar study can be taken up in that phase too. Also, since this research case study was restricted only to an infrastructure megaproject, it is not able to observe contextual nuances that would arise in other megaprojects such as an Olympic stadium or an Apollo mission. Similar explorations can be made in other megaprojects too.

I also acknowledge that resistance to the use of the strategy was not a scope of this thesis as it looked at external stakeholder management strategies in practice by the project team. However, these strategies will vary with the resistance from external stakeholders and hence need to be investigated further. Clegg (2019) highlights that social media, which was one of areas of investigation in this thesis, is a double-edged weapon because just as it can be used to reduce potential opposition to the project, it can also be used by the resistance to mobilize against the project. Hence, future research needs to consider how resistance is mobilized and how projects operate within such an environment. Similarly, the mobilization of alternative narratives in the news media and their role in organization of community resistance need to be investigated further.

Also, I acknowledge that the single case study of the metro rail project in India permits only an analytical generalization (Yin, 1984) and not a statistical generalization of the findings. The analytical generalization resulted in integrating twenty-one propositions into a conceptual model to explain external stakeholder management strategies in megaproject. While this study is

restricted to a metro rail megaproject in India, the results of this study can be extended to megaprojects in other sectors and contexts and even to areas outside of megaprojects. Another limitation of this study is that it is restricted only to the Indian context and requires corroboration in other countries and cultures. Such future studies can provide interesting confirmations or contrasts that can refine the current theory.

This research gives plenty of other options for future studies and is a starting point for more studies on persuading, framing, hegemonizing strategies and their integration. The following directions of research are proposed. The role of ICT in managing external stakeholders needs to be explored further. With the advent of technologies such as Augmented reality (AR), virtual reality (VR) and their integration into Building Information Model (BIM), effective discussions with the external stakeholders can be enabled. Thus, their role from a persuading strategy perspective can be explored. Even though the study was undertaken for understanding external stakeholder management strategies, similar studies can be undertaken for internal stakeholder management strategies too. The persuading, framing and hegemonizing strategy and their integration framework can be used to understand how internal stakeholders such as contractors, designers, financiers, etc. can be managed.

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APPENDIX-A
INTERVIEW PROTOCOL FOR SEMI-STRUCTURED INTERVIEWS

Semi-structured interviews were conducted with the metro rail project team. Broad questions were asked relating to the challenges faced in the megaproject with special focus on external stakeholders. Rather than having a fixed set of questions and interview protocol, interviews evolved through follow up questions often probing for details and asking for clarifications. Some indicative questions that guided the interview are as follow,

1. Can you highlight some of the challenges encountered with external stakeholders?
2. What was their (external stakeholder's) concern?
3. When did you know of such a challenge?
4. How was the project affected because of this?
5. How did you manage them?
6. Where did you encounter this stakeholder?
7. Were there similar instances?
8. What are the ways they opposed?
9. How do you engage with the stakeholders?

These questions are not exhaustive and are just indicative of the kind of open-ended semi-structured interview conducted for the study.

APPENDIX-B
LIST OF NEWS MEDIA ARTICLES RETRIVED FOR THE STUDY

Sl. No	Date	News media	Title of news media article	Number of Comments
1	3-Jan-2017	The Hindu	Metro Rail's underground work to be completed soon	0
2	5-Jan-2017	The Hindu	Metro Rail tunnelling work at *** (name of station) to begin soon	1
3	5-Jan-2017	Times of India	Metro line from *** (name of station A) to *** (name of station B) may open before deadline	0
4	7-Jan-2017	The Hindu	Metro Rail Phase I extension gathers steam	0
5	11-Jan-2017	Times of India	*** (name of city) metro rail to run services in reduced frequency on three holidays	0
6	11-Jan-2017	The Hindu Business Line	*** (name of company) venture bags *** (name of city) metro deal	0
7	17-Jan-2017	The Hindu	Final inspection of Metro Rail underground stretch soon	2
8	20-Jan-2017	The Hindu	Metro Rail to tie up with mobile wallets to help commuters skip queues	0
9	25-Jan-2017	The Hindu	*** (name of city) Metro takes the green route with bike rental scheme	9
10	30-Jan-2017	The Hindu	Metro Rail commuters still waiting for foot overbridge at *** (name of station)	4
11	30-Jan-2017	Times of India	*** (name of city) metro's signalling system to get certified in February	2
12	31-Jan-2017	The New Indian Express	*** (name of city) Metro Rail cards that can now be used as debit cards	0
13	6-Feb-2017	The Hindu	Online recharge facilities for Metro smart cards soon	0

Sl. No	Date	News media	Title of news media article	Number of Comments
14	13-Feb-2017	Times of India	13 *** (name of city) Metro Rail stations get platinum rating for adopting green concepts	5
15	24-Feb-2017	Times of India	Now, six *** (name of city) Metro tunnels lead to *** (name of central railway station)	4
16	24-Feb-2017	The Hindu Business Line	*** (name of city) Metro readies tunnel on 3.4-km stretch	0
17	24-Feb-2017	Times of India	*** (name of road) stretch to widen to normal, free up traffic	2
18	14-Mar-2017	The Hindu	*** (name of another metro rail organization) Metro to lease trains from *** (name of metro rail organization)	0
19	16-Mar-2017	The Hindu	*** (name of city) Metro's underground stretch will be ready soon	0
20	17-Mar-2017	Times of India	Metro rail phase 2 gets boost, *** (name of state) to submit DPR to Centre	0
21	26-Mar-2017	Times of India	First metro rail subway at *** (name of station) to open next month	3
22	31-Mar-2017	Business Standard	*** (name of funding agency) to extend Rs 2,000 crore for *** (name of city) Metro Rail	0
23	31-Mar-2017	The Hindu	'Reduce Metro fares'	0
24	2-Apr-2017	Times of India	MRTS-Metro merger: Fare for cross-sectoral services up in the air	2
25	3-Apr-2017	The Hindu Business Line	₹he Hindu Business Line for cross-sectoral services up in the air me of c	0

Sl. No	Date	News media	Title of news media article	Number of Comments
26	4-Apr-2017	The Hindu	*** (name of city) Metro ride likely to be costliest in country	2
27	7-Apr-2017	Times of India	Now, pay less to park at airport metro rail station	0
28	9-Apr-2017	The New Indian Express	*** (name of metro) Metro rail speaks up on *** (name of region) sinkhole	0
29	9-Apr-2017	The News Minute	*** (name of city)'s road cave-in: Poor soil quality, metro construction or administration's fault	0
30	9-Apr-2017	The Indian Express	*** (name of city) road caves in, commuters safe	0
31	9-Apr-2017	Firstpost	*** (name of city) Metro work likely behind *** (name of region) road accident, cave-in takes along MTC bus and car	0
32	9-Apr-2017	India	Major road-cave in *** (name of city)'s *** (name of region), car- bus trapped, no casualties reported	0
33	9-Apr-2017	The Hindu	Major cave-in on *** (name of city)'s *** (name of region)	18
34	11-Apr-2017	The Hindu	Experts allay fears on Metro Rail safety	1
35	12-Apr-2017	Scroll	7 incidents in 2 years: Is Metro's tunnelling work causing *** (name of city) roads to cave in?	0
36	12-Apr-2017	Times of India	Final round of inspection begins in *** (name of city) Metro Rail underground line	1
37	13-Apr-2017	Deccan Chronicle	*** (name of state): Gear up to take a ride in underground metro	0

Sl. No	Date	News media	Title of news media article	Number of Comments
38	17-Apr-2017	The Hindu	Project report for elevated road on *** (name of road) ready	0
39	17-Apr-2017	Times of India	Green light to two-ways gives city a glimpse of life after metro rail	1
40	18-Apr-2017	The Hindu	Special doors at underground Metro stations to check suicide bids	0
41	18-Apr-2017	The News Minute	To counter rising suicides on tracks, *** (name of city) and *** (name of another city) Metros to have platform screen doors	0
42	21-Apr-2017	Deccan Chronicle	*** (name of city): Metro sludge floods home	0
43	29-Apr-2017	Times of India	In 5 months, underground metro network to connect north *** (name of city) to city	2
44	1-May-2017	The Hindu	Metro underground: Mobile transmitters in two months	1
45	2-May-2017	Times of India	How cool is this? Metro rail stations will get hi-tech AC	4
46	2-May-2017	The Hindu	Metro stations may soon sport solar street lights	1
47	3-May-2017	Times of India	Metro rail calls for tenders for elevated North *** (name of city) line	3
48	6-May-2017	The Hindu	Portion of road near *** (name of road) Road junction caves in	0
49	9-May-2017	Times of India	Metro rail to build public plaza & parking lot under *** (name of region) flyover	4
50	10-May-2017	Times of India	First underground metro train in *** (name of city) to run from Sunday	176

Sl. No	Date	News media	Title of news media article	Number of Comments
51	10-May-2017	The News Minute	*** (name of city)'s first underground Metro rail station to open on Sunday, line runs from *** (name of station A) to *** (name of station B)	0
52	10-May-2017	India	Much anticipated *** (name of city)'s underground Metro to become operational on Sunday	0
53	11-May-2017	Times of India	Now, travel from *** (name of station) to airport at Rs 70	7
54	14-May-2017	Business Standard	*** (name of state) CM asks Centre to expedite approval for Rs 85k-cr *** (name of city) metro	0
55	14-May-2017	The Hindu	*** (name of central minister), *** (name of Chief Minister of state) flag off underground stretch of *** (name of city) Metro	8
56	14-May-2017	Times of India	First *** (name of city) underground metro line inaugurated; services to begin at 2pm	6
57	14-May-2017	Financial Express	*** (name of city) Metro: City gets maiden underground line; here's what it looks like	0
58	14-May-2017	The Hindu Business Line	*** (name of city) metro's 1st underground line opens	1
59	15-May-2017	The New Indian Express	*** (name of city) Metro Phase II to get green light	0
60	17-May-2017	The New Indian Express	*** (name of city) Metro Rail was a *** (name of political party) project, says *** (head of political party)	0

Sl. No	Date	News media	Title of news media article	Number of Comments
61	18-May-2017	The Hindu	New underground Metro faces ‘teething troubles’	3
62	21-May-2017	Times of India	Metro ride to airport smooth, but walk to terminal tiresome	1
63	22-May-2017	The Hindu	*** (name of city) Metro Rail launches mobile app	2
64	28-May-2017	Times of India	*** (name of city) Metro to tie up with private companies to maintain stations	0
65	29-May-2017	The Hindu	*** (name of city) Metro-MRTS merger report in six months	0
66	29-May-2017	The New Indian Express	*** (name of city): Metro bicycles on hire is the latest bright idea under trial	0
67	30-May-2017	Inc42	Ola, Uber To Set Up Kiosks At *** (name of city) Metro Stations	0
68	31-May-2017	The Hindu	Metro Rail starts track work to reach *** (name of station) station	0
69	14-Jun-2017	The Hindu	IIT- *** (name of city) revives training course for *** (name of metro rail organization) engineers	0
70	16-Jun-2017	Times of India	6MW solar energy to power metro stations and maintain trains	3
71	16-Jun-2017	The Hindu	Commuters’ forum seeks pedestrian crossings near Metro Rail stations	0
72	21-Jun-2017	The Hindu Business Line	*** (name of city) Metro to draw solar power, save ₹1.5 crore a year	1
73	21-Jun-2017	Times of India	*** (metro rail organization) begins demolition of TH road subway	0

Sl. No	Date	News media	Title of news media article	Number of Comments
74	23-Jun-2017	livemint	Solar energy to power *** (name of city) Metro, Clean Max bags contract	0
75	3-Jul-2017	The Hindu	Cause of accident being examined: *** (name of city) Metro Rail official	3
76	3-Jul-2017	Times of India	*** (name of city) Metro rail, Ola come together to give last mile connectivity for commuters	1
77	4-Jul-2017	The Hindu	*** (name of city) Metro to lend bicycles	0
78	5-Jul-2017	The New Indian Express	Made in *** (name of city) coaches for Metro Rail on the anvil	0
79	5-Jul-2017	Times of India	ICF may take on world's top metro coaches	1
80	9-Jul-2017	Times of India	Metro rail begins preliminary work for Phase-2	5
81	11-Jul-2017	Times of India	IT professionals, students push push up Metro Patronage	4
82	11-Jul-2017	The Hindu	Multi-storey buildings to come up at two metro stations	3
83	11-Jul-2017	Accommodation Times	*** (name of city) Metro Rail Begins Preliminary Work For Phase-2	0
84	12-Jul-2017	The Hindu	Following *** (name of another city) Metro's footsteps, *** (name of city) Metro too hires a transgender	1
85	14-Jul-2017	The Hindu	One side of subway near *** (name of station) may be closed for Metro Rail work	0

Sl. No	Date	News media	Title of news media article	Number of Comments
86	15-Jul-2017	The Hindu	Japan awaiting Centre's nod to fund next phase of *** (name of city) Metro Rail project	1
87	15-Jul-2017	The Hindu	Metro extension: work on elevated section soon	1
88	16-Jul-2017	Times of India	*** (name of city) Metro rail Limited to start building depot at *** (name of station)	0
89	18-Jul-2017	The Hindu	Free wi-fi in Metro stations, trains soon	4
90	20-Jul-2017	The New Indian Express	*** (name of city) Metro Rail network to be extended up to *** (name of region)	0
91	20-Jul-2017	Financial Express	*** (name of city) Metro Rail: Big boost for *** (name of state) infrastructure, state to take up Rs 89,000 cr phase II project	0
92	20-Jul-2017	The Hindu Business Line	Trial run begins on new *** (name of city) Metro stretch	0
93	21-Jul-2017	Times of India	*** (name of station A) to *** (name of station B): Metro rail begins first trial on *** (name of region)	2
94	21-Jul-2017	The Hindu	Metro trial runs begin on *** (name of station A)- *** (name of station B) stretch	0
95	23-Jul-2017	Times of India	Work begins on metro-airport walkalator	1
96	24-Jul-2017	Times of India	Metro rail tests on but stretch along *** (name of station) may open late	3

Sl. No	Date	News media	Title of news media article	Number of Comments
97	27-Jul-2017	The Hindu	No takers for Metro Rail's special coaches	2
98	29-Jul-2017	Times of India	*** (name of city) metro uses Tamil, English: *** (another metro rail organization)	9
99	31-Jul-2017	Times of India	*** (name of city) metro rail to introduce contactless smart cards	5
100	31-Jul-2017	Times of India	*** (name of city) metro rail app sees over 10000 downloads in three months	1
101	1-Aug-2017	Times of India	*** (name of city) metro rail conducts educational trips for schoolchildren	2
102	5-Aug-2017	Times of India	No hindi on signboards, stations says metro rail	1
103	6-Aug-2017	The News Minute	After *** (name of another city) metro row *** (name of city) metro clarifies no hindi sign boards	0
104	8-Aug-2017	The Hindu	Metro rail sets up up day care facility	2
105	10-Aug-2017	The Hindu	Bus stops to be moved closer to metro rail underground stations	6
106	13-Aug-2017	Times of India	*** (name of city) metro rail work on 7 km elevated stretch begins	2
107	23-Aug-2017	Times of India	Metro rails daily revenue has doubled since launch in underground services	0
108	23-Aug-2017	The Hindu	With underground stretch metro patronage doubles in *** (name of city)	3
109	24-Aug-2017	Times of India	*** (name of city) metro offers festival discount	6

Sl. No	Date	News media	Title of news media article	Number of Comments
110	24-Aug-2017	Times of India	This is what metro rail is doing to in caves	0
111	25-Aug-2017	The Hindu	*** (name of city) metro offers 20% discount	1
112	29-Aug-2017	The Hindu	Where *** (name of city) metro trains come alive with freshness	0
113	6-Sep-2017	Times of India	Metro rail phase 2 to link IT corridor	9
114	8-Sep-2017	Times of India	Phase 2 metro rail lines, stations not to merge with MRTS	4
115	8-Sep-2017	The Hindu	Cities metro takes the the fight to birds	0
116	8-Sep-2017	The Hindu	Pillars on elevated corridor to sport advertisements soon	0
117	10-Sep-2017	Times of India	Elevated depot planned at *** (name of station) to keep in trains running	0
118	14-Sep-2017	The Hindu	*** (metro rail organization) plans towering monolith towering monolith near central	4
119	15-Sep-2017	The New Indian Express	*** (name of city) metro phase 1 to be over by December next year	0
120	16-Sep-2017	Deccan Chronicle	*** (name of city) metro why do ticket counters close at 10	0
121	17-Sep-2017	Deccan Chronicle	*** (name of city) metro rail helpline becoming a hit with commuters	0
122	24-Sep-2017	The Hindu Business Line	*** (name of city) metro achieves tunneling five months ahead of deadline	4

Sl. No	Date	News media	Title of news media article	Number of Comments
123	24-Sep-2017	Times of India	Metro rail tunnel linking north *** (name of city) complete	1
124	25-Sep-2017	The New Indian Express	*** (name of station A) - *** (name of station B) metro tunnel work ends five months before schedule	0
125	25-Sep-2017	The Hindu	Metro phase 1 extension extension tunnelling nears completion	1
126	26-Sep-2017	The New Indian Express	Beach station awaits makeover as metro plans MRTS takeover	0
127	27-Sep-2017	The Hindu	Metro rail outsources train operator jobs to agency	2
128	27-Sep-2017	Times of India	Will metro rail leave leave *** (name of city) high dry?	4
129	2-Oct-2017	Times of India	Metro central to be city's new year gift	3
130	5-Oct-2017	Times of India	Metro rail adopts large scale outsourcing to cut down cost	0
131	7-Oct-2017	Times of India	*** (name of city) metro rail halts for four hours due to bird hit outage	0
132	10-Oct-2017	The Indian Express		0
133	13-Oct-2017	Times of India	2500 trees axed for laying metro rail lines	0
134	13-Oct-2017	Times of India	Metro feeder bus services from *** (name of station) soon	1
135	18-Oct-2017	Times of India	*** (name of city) metro rail completes one of the two *** (name of region) tunnels	1

Sl. No	Date	News media	Title of news media article	Number of Comments
136	18-Oct-2017	The New Indian Express	Pact soon with Japan agency to bankroll *** (name of city) metro phase II	0
137	28-Oct-2017	Times of India	Metro rail opens help desks at airport arrival station	1
138	31-Oct-2017	Times of India	*** (metro rail organization) completes tunneling in north *** (name of city)	1
139	2-Nov-2017	Times of India	*** (metro rail organization) to start more bicycle hiring services at stations	0
140	2-Nov-2017	The New Indian Express	Measures to safeguard metro stations trains from disasters	0
141	7-Nov-2017	Times of India	Top speed metro rail set to lay tracks in north tunnels	0
142	9-Nov-2017	Times of India	Land survey for 2nd phase of metro rail project begins	3
143	15-Nov-2017	The New Indian Express	Revised DPR for phase 2 *** (name of city) metro cuts cost by 5000 crore	0
144	17-Nov-2017	Times of India	Metro rail phase 2 to have driverless trains	0
145	19-Nov-2017	The Hindu	Another cave-in on *** (name of region) due to metro rail work traffic diverted	0
146	20-Nov-2017	The Hindu	There is music in the air at *** (name of station) metro station	2
147	25-Nov-2017	The New Indian Express	*** (name of funding agency) to fund only 50 percent of metro rail phase 2 -*** (name of city) metro rail: MD	0
148	25-Nov-2017	Times of India	Common ticket for metro-trains buses: *** (metro rail organization) begins trial	5

Sl. No	Date	News media	Title of news media article	Number of Comments
149	25-Nov-2017	The Hindu	Work on phase 2 of metro rail to start early next year	1
150	28-Nov-2017	The Hindu	Metro rail to get-hi-tech help to resolve snags on track	1
151	2-Dec-2017	Times of India	Metro rail tunnelling has damaged 300 plus buildings since mid 2012	0
152	4-Dec-2017	Times of India	State govt floats tenders for metro rail feasibility study	0
153	5-Dec-2017	Times of India	City metro rides second most expensive in India	3
154	6-Dec-2017	The Hindu	An infra double decker double decker at *** (name of region)	10
155	8-Dec-2017	Times of India	Metro rail to complete phase 1 tunneling by Monday	2
156	12-Dec-2017	The Hindu	metro achieves *** (name of station A) - *** (name of station B) breakthrough	2
157	12-Dec-2017	Times of India	Metro rail passes final hurdle - phase 1 tunnelling complete	1
158	14-Dec-2017	Deccan Chronicle	*** (name of region) traffic woes continuing *** (name of city) metro rail work causes difficulties	0
159	22-Dec-2017	Times of India	Folk art performances to be held at *** (name of city) metro stations and in a train	0
160	23-Dec-2017	The Hindu	Wait for metro rail services to *** (name of city) gets longer	0
161	24-Dec-2017	Times of India	Metro stations to act as subways too	1

Sl. No	Date	News media	Title of news media article	Number of Comments
162	27-Dec-2017	The Hindu	Soon travel from *** (name of central railway station) to airport in 45 minutes	17
163	27-Dec-2017	Times of India	Patronage poor why hanker for phase 2: centre to metro	9
164	29-Dec-2017	Times of India	*** (name of city) metro rail to run trains past midnight on new year's eve	1
165	30-Dec-2017	The Hindu	*** (metro rail organization) to begin track laying work on *** (name of region)	1
166	30-Dec-2017	Times of India	80% of phase 2 metro to be on govt land	1

APPENDIX-C
SOCIAL MEDIA (TWITTER) DATA AND THEIR CODES FROM QUALITATIVE
CONTENT ANALYSIS

Sl. No	Date	Tweet	Strategy Category
1	12-Apr-12	*** (name of metro station) Station - *** (name of metro station) Metro Station is one of the signature Metro Stations which is having specific... http://fb.me/1db7eCamp	promoting the organization
2	13-Apr-12	ISO Certification for Environment & Safety Management System Metro Tunnelling *** (name of city), *** (name of JV partners) JV, have been... http://fb.me/1Dg4MkDQH	appealing to the community
3	14-Apr-12	Progress of Underground works –Highlights 1. Traffic diversion was made in *** (name of region) for underground stations... http://fb.me/1LQGH32rw	giving progress updates
4	15-Apr-12	RoSPA Silver Award for Metro Tunnelling Metro Tunnelling *** (name of city), *** (name of JV partners) JV have been selected for SILVER... http://fb.me/1wLPYTG5p	promoting the organization
5	16-Apr-12	Highlights of the Progress of Rolling Stock Manufacturing * The production of first DMC car (for compression... http://fb.me/1YF7I8ULc	giving progress updates
6	17-Apr-12	Successful Transplantation of Trees by *** (name of metro rail organization) - Tree Transplanting involves relocating or moving a tree safely from... http://fb.me/1Nx3Vimdm	appealing to the community
7	18-Apr-12	Metro staff toil as city sleeps After Sundown, Metro Workers Labour Inside Barricaded Worksites, Drowning... http://fb.me/1qePDxqR4	promoting the organization
8	19-Apr-12	Chairman *** (name of metro rail organization) Visit to work site_ *** (name of chairman)., Chairman, *** (name of metro rail organization) & Secretary to Government of India,... http://fb.me/1sFnOgZOs	appealing to the community
9	20-Apr-12	Nod for final leg of Metro Rail project http://fb.me/XVBGcqHi	promoting the organization

Sl. No	Date	Tweet	Strategy Category
10	22-Apr-12	*** (name of city) METRO RAIL LIMITED - DEPOT WORKS The Depot will be spread over an area of 26 Hectares of land in... http://fb.me/Azu6gdNU	promoting the organization
11	23-Apr-12	Quality Control at Elevated Construction Sites - Geotechnical Investigation works:... http://fb.me/YsqvyXnn	promoting the organization
12	24-Apr-12	Track Works • The rails for *** (name of city) Metro Rail are imported from France • The first shipment of rails (about... http://fb.me/1V5tWWeIV	promoting the organization
13	24-Apr-12	*** (name of city) Metro Rail zooms into virtual world - The *** (name of city) metro rail has zoomed into the virtual world. In a move... http://fb.me/1IUNZrcnl	promoting the organization
14	25-Apr-12	*** (name of metro rail organization) Traffic marshals to help traffic police- *** (name of metro rail organization) has introduced traffic marshals in the metro rail project work... http://fb.me/1Rseu4Gpt	appealing to the community
15	27-Apr-12	Translocation of Deer's with care. On taking over the land of *** (name of local university) at *** (name of station) by *** (name of metro rail organization), major steps were... http://fb.me/VGbxPvSy	appealing to the community
16	30-Apr-12	Track Works • The rails for *** (name of city) Metro Rail are imported from France • The first shipment of rails (about... http://fb.me/1BOA9U0pT	promoting the organization

Sl. No	Date	Tweet	Strategy Category
17	04-May-12	Two more TBMs arrived *** (name of city) for *** (name of city) Metro Rail works. Two more TBM (Tunnel Boring Machines) have arrived... http://fb.me/1olxd3fUs	giving progress updates
18	07-May-12	Visit of *** (name of metro rail organization) and GC officials to *** (name of coach manufacturer) Rolling Stock factory Officials of *** (name of metro rail organization) and GC made a visit to the... http://fb.me/1i3UfvVXr	appealing to the community
19	08-May-12	*** (name of city) Metro Rail - *** (name of station) DEPOT- The Depot will be spread over an area of 26 Hectares of land in *** (name of station)... https://www.youtube.com/watch?v=kgrqcx2Zjis	promoting the organization
20	12-May-12	Metro rail gears up for tunnelling work Work On Shafts, Which Will Accommodate Tunnel-Boring Machines, Picks Up Pace http://fb.me/1rnMic4DY	promoting the organization
21	14-May-12	*** (name of metro rail organization) – Enriching the Environment- The *** (name of city) Metro Rail Limited has taken a positive step to further continue... http://fb.me/1FKRvNtKY	appealing to the community
22	14-May-12	Details on Track Laying Works The track works for the *** (name of city) Metro Rail project covers both corridors I & II... http://fb.me/1fZDgLt6e	promoting the organization
23	17-May-12	METRO TO LINK SUBURBAN, MRTS AND BUS SERVICES Subways, Walkways, Skywalks And Foot Overbridges To Help Commuters... http://fb.me/1GE0roef9	promoting the organization

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24	24-May-12	Soon, fliers can hop off jet, RIDE METRO TO CITY Work Begins On Five-Level Rs 48cr Station At Airport; Facility... http://fb.me/1E3YuBH9j	promoting the organization
25	04-Jun-12	The *** (name of city) Metro Rail Website has been made friendly to the physically challenged... http://fb.me/25DQ4qsAx	targeting sections of the community
26	07-Jun-12	Lowering of Tunnel Boring Machine at *** (name of station) - The lowering of tunnel boring machine at *** (name of station) started on... http://fb.me/1pqDbgZeF	giving progress updates
27	08-Jun-12	I uploaded a @YouTube video http://youtu.be/4g9CeRBfGZE?a *** (name of city) Metro English Rail Film Final 640_480.mp4	promoting the organization
28	08-Jun-12	*** (name of city) Metro Rail Film http://fb.me/1HjK6X4cW	promoting the organization
29	08-Jun-12	Life of a Metro: The first look underground Chinese workers arrive to help build stations on *** (name of road in the city)... http://fb.me/1J1PmjVVh	promoting the organization
30	12-Jun-12	50 FEET UNDER YOUR STREET - Tunnelling Work On Metro Set To Start At *** (name of station) for *** (name of station A) - *** (name of station B) line... http://fb.me/ScnB77PR	promoting the organization
31	16-Jun-12	Traffic Safety Training for Marshals A Training programme on traffic safety was conducted on 15-05-12 at Nehru... http://fb.me/1W9jMtGx1	promoting the organization
32	17-Jun-12	Civil works for *** (name of metro station) substation work started. There are 3 Receiving Sub Stations (*** (name of station), *** (name of metro station) &... http://fb.me/1PUZxwS7i	giving progress updates

Sl. No	Date	Tweet	Strategy Category
33	18-Jun-12	"A Friend in Need" On 14-06-12 at 3:00 am a private loaded trailer with structural material was about to fall... http://fb.me/FJ14X57W	appealing to the community
34	25-Jun-12	Inter connectivity with other mode of transport. Know your *** (name of city) Metro Rail better Inter connectivity with... http://fb.me/134f9WRA	promoting the organization
35	26-Jun-12	*** (name of city) Metro Rail Stations and their locations – Two Corridors with a combined length of 45 Kms. It will be... http://fb.me/28l8sw3tg	promoting the organization
36	27-Jun-12	Environmental Care by *** (name of metro rail organization) - *** (name of metro rail organization) is happy to state that the saplings planted as a part of environmental... http://fb.me/GVKMGkdc	appealing to the community
37	30-Jun-12	Mock fire drill at *** (name of city) Metro Rail office A mock fire drill was conducted at *** (name of city) Metro Rail limited... http://fb.me/1rQWsUw5W	promoting the organization
38	02-Jul-12	Know your *** (name of city) Metro Rail better Salient Features of *** (name of city) Metro Rail Project : • *** (name of city) Metro Rail... http://fb.me/1IchQBzzV	promoting the organization
39	10-Jul-12	Source - Deccan Chronicle http://fb.me/1m7a7fYKH	not clear
40	11-Jul-12	A. TBM (Tunnel Boring Machine) Being Readied to Break Wall at *** (name of station) All the second TBM parts are... http://fb.me/1Lg19dKUD	promoting the organization
41	16-Jul-12	Progress of Underground works –Highlights 1. All Parts of TBMs for *** (name of work package) arrived at *** (name of station) site. It will... http://fb.me/1PgpKDZWI	giving progress updates

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42	19-Jul-12	Orientation programme for IIT students. An orientation programme was organised for the executive trainees who... http://fb.me/1QJqjE8b	promoting the organization
43	24-Jul-12	Facilities and Safety features available in Metro Rail Coaches 1. All metro coaches are of state of the art... http://fb.me/11FDAedhn	promoting the organization
44	25-Jul-12	Casting of the Base slab at *** (name of station) (Under Ground Station) Casting of the Base slab for the launching... http://fb.me/1A7G9NWbu	giving progress updates
45	26-Jul-12	Metro rail plans to ply a train every 2.5 mins. A gleaming stainless steel train will roll into a station every... http://fb.me/2j1cuW5nG	promoting the organization
46	27-Jul-12	CHOLERA AWARENESS PROGRAM FOR LABOR COLONY WORKERS AT *** (name of station A) , *** (name of station B) AND *** (name of station C) ... http://fb.me/1na0rWryx	appealing to the community
47	27-Jul-12	CHOLERA AWARENESS PROGRAM FOR LABOR COLONY WORKERS AT *** (name of station A) , *** (name of station B) AND *** (name of station C) ... http://fb.me/1na0rWryx	Not clear
48	27-Jul-12	Casting of Base Slab at *** (name of station). Casting of the Base slab for the launching shaft at *** (name of station) (Under Ground... http://fb.me/1CVbKFQt6	giving progress updates
49	28-Jul-12	*** (name of metro rail organization) Tunnelling work commences at *** (name of station) Metro Station site on 28-07-12. The *** (name of city) Metro Rail Project... http://fb.me/11Jf6E9nE	giving progress updates

Sl. No	Date	Tweet	Strategy Category
50	30-Jul-12	Tunnel boring begins at *** (name of station) http://fb.me/1SJWdc5Ud	giving progress updates
51	30-Jul-12	Lowering of TBM at *** (name of station) station started on 29.07.2012. On completion of base slab casting, lowering... http://fb.me/1xDa06QQy	giving progress updates
52	31-Jul-12	*** (name of area of coach factory) metro car unit of *** (name of coach manufacturer) to be on stream in September Located close to ... http://fb.me/zqc5bY1z	appealing to the community
53	06-Aug-12	Rains will not throw Metro work off rail, say officials http://fb.me/1AzsI27Pr	promoting the organization
54	14-Aug-12	Independence Day Wishes	appealing to the community
55	14-Aug-12	*** (name of city) Metro Rail celebrates Independence Day. *** (name of MD) , Managing Director of *** (name of city) Metro... http://fb.me/2fd6OADj1	appealing to the community
56	16-Aug-12	Progress of Rolling Stock Works. The Production of 1st train for the *** (name of city) Metro Rail Project is progressing... http://fb.me/23x1QNJT7	giving progress updates
57	17-Aug-12	*** (name of metro rail organization) observed Sadbhavana Diwas. The birthday of Rajiv Gandhi, former Prime Minister of India on 20th... http://fb.me/1p1hH96Ln	appealing to the community
58	22-Aug-12	Factory acceptance tests on Train Borne communication system Factory Acceptance Test (FAT) of Train Borne... http://fb.me/OJJkrlr1	promoting the organization
59	25-Aug-12	*** (name of metro rail organization) Public Awareness program at *** (name of area) park - *** (name of metro rail organization) in coordination with the Corporation of *** (name of city) had... http://fb.me/1fV5u2zpt	promoting the organization

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60	27-Aug-12	Progress in manufacturing of train – August 2012. Productions of the 1st and 2nd train are progressing well... http://fb.me/1QgdrnqL3	giving progress updates
61	27-Aug-12	I posted a new photo to Facebook http://fb.me/24xupWO4J	giving progress updates
62	28-Aug-12	Tunnel boring work photos at *** (name of station) Station. Tunnel boring works are in progress from *** (name of station) towards... http://fb.me/1h22tVSbo	giving progress updates
63	30-Aug-12	FIRST LOOK: The metro rail tunnel under *** (name of road) Road near *** (name of station). The tunnelling work began in the... http://fb.me/1zlyMcenke	giving progress updates
64	31-Aug-12	GEARING UP Metro tunnelling to begin at two more locations The metro rail will kick-start tunnel boring at *** (name of station) ... http://fb.me/G1lisS11	giving progress updates
65	01-Sep-12	Lowering and assembling of TBM's at *** (name of station). The two TBMs have been lowered and the lowering of backup... http://fb.me/2awFOJWds	giving progress updates
66	04-Sep-12	Seminar on EIG (Electrical Inspector to Government) Approval for *** (name of metro rail organization) Project*** (name of city) Metro Rail Limited... http://fb.me/1wTZFJjvf	promoting the organization
67	04-Sep-12	Track laying works in progress. Plinth concreting for track laying has been carried out for a length of 2500... http://fb.me/1n1QtY3tq	giving progress updates
68	05-Sep-12	CHANGING CITYSCAPE: Metro rail's elevated corridor snakes over the bustling *** (name of road) Road at *** (name of region). The... http://fb.me/1gemASZRE	promoting the organization

Sl. No	Date	Tweet	Strategy Category
69	09-Sep-12	Lowering of TBM parts at *** (name of station) UG shaft. The Front shield and other parts of TBM are being lowered from... http://fb.me/wlqBGWxr	giving progress updates
70	10-Sep-12	ERECTION OF MAST ON VIADUCT The erection of electrical masts on elevated viaduct between *** (name of station A) and... http://fb.me/xABABDtZ	giving progress updates
71	12-Sep-12	Source - Deccan Chronicle http://fb.me/11y4mrI2z	not clear
72	17-Sep-12	I posted a new photo to Facebook http://fb.me/2p5biTBGG	giving progress updates
73	24-Sep-12	Track work in progress. The track works for about 3.5 kms between *** (name of station A) and *** (name of station B) stations have been... http://fb.me/1YXowJwpD	giving progress updates
74	24-Sep-12	Excavation work at *** (name of station) station. Excavation below roof slab has been commenced at *** (name of station) station and... http://fb.me/1CfQgmg5V	giving progress updates
75	25-Sep-12	Underground station work progress – *** (name of station). The Assembling of Tunnel Boring Machinery and gantry works... http://fb.me/1YuGiKdqp	giving progress updates
76	26-Sep-12	Excavation work at *** (name of station) station. Excavation to 1st level strut has been completed and bracket fixing work... http://fb.me/2trqo3hHF	giving progress updates
77	28-Sep-12	Underground Station Work Progress - *** (name of station) Underground Station Testing and commissioning for TBM has... http://fb.me/1MWDSsT2p	giving progress updates
78	01-Oct-12	*** (name of metro rail organization) Tunnelling work commences at *** (name of station) Metro Station site today 1-10-12. The *** (name of city) Metro Rail... http://fb.me/1jx1K5C11	giving progress updates

Sl. No	Date	Tweet	Strategy Category
79	04-Oct-12	METRO UNDER AND OVER 18 Metres Deep & 18 Metres High: Tunnels And Plinths Criss-Cross The City As Pace Picks Up... http://fb.me/17WHbYtyV	promoting the organization
80	05-Oct-12	Rs. 50 crore to spruce up Metro vicinity Expect roads, bus shelters, near eight stations on *** (name of station A) - *** (name of station B) stretch... http://fb.me/2uB3Yoza2	promoting the organization
81	05-Oct-12	Two more TBMs for *** (name of work package) package arrived at *** (name of city) Port. Of the total 11 TBMs required for *** (name of city) Metro Rail... http://fb.me/2t0GBfleB	giving progress updates
82	06-Oct-12	Machines to start metro tunnelling from *** (name of station A) to *** (name of station B) soon. Two Tunnel Boring Machines (TBMs), just arrived... http://fb.me/FHdbJDX0	giving progress updates
83	18-Oct-12	Progress in manufacturing of train Eight cars shells required for the first two trains is completed and... http://fb.me/1EDuuw6GA	giving progress updates
84	25-Oct-12	Progress of work at *** (name of station) UG Station. Subject: Preparatory works for roof slab is in progress at... http://fb.me/1CZNYQdl7	giving progress updates
85	25-Oct-12	Progress of work at *** (name of station) UG Station Preparatory works for roof slab is in progress at *** (name of station) ... http://fb.me/1GfP1FzcB	giving progress updates
86	25-Oct-12	Diversion and Interconnection of Arch Sewer at *** (name of station) Station - An Arch sewer constructed in 1940's... http://fb.me/1ge4t1an1	appealing to the community
87	29-Oct-12	“Vigilance Awareness Week” celebrations in *** (name of metro rail organization). *** (name of metro rail	appealing to the community

Sl. No	Date	Tweet	Strategy Category
		organization) is observing the ‘Vigilance Awareness Week’ from 29th... http://fb.me/1longO9Yl	
88	29-Oct-12	TBM and Ganties lowered at *** (name of station). One TBM has been lowered in the shaft and the work on the reaction... http://fb.me/Ap75AWyX	giving progress updates
89	31-Oct-12	Transformer Arrival for RSS. Transformers are the major equipment that will be erected in RSS (Receiving Sub... http://fb.me/1EVXxKFJw	giving progress updates
90	02-Nov-12	Progress in manufacturing of train. As part of the quality assessment and control process, First article... http://fb.me/ML7nLBbm	giving progress updates
91	05-Nov-12	*** (name of metro rail organization) Education Support Program Conducted. Under the Income Restoration Programme for the Project Affected... http://fb.me/1meYH0RyX	appealing to the community
92	15-Nov-12	Lifts and Escalators. The Prototype of the lifts which are to be used in *** (name of metro rail organization) project, was installed at... http://fb.me/1mTJEFPne	promoting the organization
93	17-Nov-12	Progress of *** (name of station) station. Several construction works in *** (name of station) Station namely, the structural works, I-girder... http://fb.me/1HHapz0Un	giving progress updates
94	19-Nov-12	METRO DIPS AND CLIMBS OVER CITY *** (name of station A) - *** (name of station B) To Rise Over *** (name of area), Go Underground Near *** (name of landmark);... http://fb.me/2ywHvHK6l	promoting the organization
95	19-Nov-12	*** (name of metro rail organization) observes National Integration Week The birth anniversary of late Smt. Indira Gandhi, former Prime Minister... http://fb.me/1IWklxef	appealing to the community

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96	20-Nov-12	Transformers erection work in progress Transformers are the major equipment that will be erected in RSS... http://fb.me/1hNTQ3Jy5	giving progress updates
97	26-Nov-12	VISIT TO *** (place of manufacturing plant) As part of indigenization of the Metro coach manufacturing, *** (name of coach manufacturer) who is the manufacturer of... http://fb.me/24r2Gp5Fn	appealing to the community
98	27-Nov-12	Metro work rushes along on *** (name of region in city). *** (name of metro rail organization) construction activity has shifted across the road, opposite the *** (name of station)... http://fb.me/1gnLQwWbO	giving progress updates
99	29-Nov-12	Source - Dinamalar http://fb.me/23new73fk	not clear
100	03-Dec-12	Metro Rail's model coach trundles into city http://fb.me/22vzyXd8q	promoting the organization
101	13-Dec-12	A workshop on Design & Construction of Earthing, Bonding & Lightning Protection System for Under Ground Stations... http://fb.me/1SeDpchYb	promoting the organization
102	14-Dec-12	*** (name of station) Under Ground Station Work Progress The Second Roof Slab of the *** (name of station) Underground metro... http://fb.me/2114Hspid	giving progress updates
103	17-Dec-12	I posted a new photo to Facebook http://fb.me/2jP0ezAja	giving progress updates
104	17-Dec-12	*** (name of station) UG station Work progress. The Second Roof Slab of the *** (name of station) Underground Metro... http://fb.me/WymupGJg	giving progress updates
105	18-Dec-12	*** (name of station) Underground station work progress. The 2nd roof slab (20m) of the *** (name of station) Underground... http://fb.me/1Rz5EqH5X	giving progress updates

Sl. No	Date	Tweet	Strategy Category
106	18-Dec-12	Source - The Hindu http://fb.me/2ehl4fVKE	not clear
107	19-Dec-12	*** (name of city) Metro Rail work sees daylight at *** (name of station) Structures of *** (name of station A) and *** (name of station B) metro stations on elevated...	giving progress updates
108	20-Dec-12	*** (name of metro rail organization) cracks down on posters, stickers, political parties that have affixed posters on structures belonging to... http://fb.me/1mLK8mbgL	appealing to the community
109	22-Dec-12	*** (name of station) station work progress Subject : The *** (name of station) Underground Metro Station excavation works are in... http://fb.me/FQRjzJ15	giving progress updates
110	25-Dec-12	Metro rail work switches sides at *** (name of station). Traffic Will Be Routed After Black-Topping Earlier Worksite Metro... http://fb.me/1rXbYIb0F	giving progress updates
111	29-Dec-12	Interconnection of 700 mm dia water pipeline (transmitting water from *** (name of station) water works to *** (name of location) head... http://fb.me/11bdezHmx	appealing to the community
112	02-Jan-13	*** (name of city) Metro Rail Limited celebrated its 5th Foundation day on 31-12-12. CGM (PF) and CGM (C) addressed the... http://fb.me/2rAqL8rWg	appealing to the community
113	03-Jan-13	*** (name of station) Tunnelling work progress: As on Date the 1st TBM Drive at *** (name of station) has completed 227 rings at... http://fb.me/2hLEyNNto	giving progress updates
114	05-Jan-13	Source - Deccan Chronicle http://fb.me/1NX3jqwqW	not clear
115	05-Jan-13	Source - Times Of India http://fb.me/1jDqmZ3hw	not clear

Sl. No	Date	Tweet	Strategy Category
116	08-Jan-13	Site Visit by Chairman, *** (name of metro rail organization). *** (name of metro rail organization) Chairman *** (name of chairman), Secretary to Government of India,... http://fb.me/1DhH06esV	appealing to the community
117	17-Jan-13	All roads to lead to metro stations. MRTS, Suburban Rail, MTC Buses To Be Integrated With First Metro Line, Which... http://fb.me/2og4LrQhD	promoting the organization
118	19-Jan-13	The Safety Management workshop was held at the *** (name of metro rail organization) office today (19-1-13). The workshop was initiated by the... http://fb.me/HWkqpCEv	promoting the organization
119	21-Jan-13	*** (name of city) Metro Rail Ltd. participates in the TTDC 39th India Tourist & Industrial Fair 2013. The *** (name of city) Metro... http://fb.me/2zXAgsQft	appealing to the community
120	25-Jan-13	*** (name of metro rail organization) celebrates Republic Day. *** (name of MD), Managing Director of *** (name of city) Metro Rail Limited... http://fb.me/1wTuoAWVE	appealing to the community
121	27-Jan-13	I posted a new photo to Facebook http://fb.me/2xWzqOD0A	giving progress updates
122	29-Jan-13	Train operators to sit back as metro to run on autopilot Speed Control, Signal Reading and Halts Will Be Fully... http://fb.me/XwnjZP3J	promoting the organization
123	30-Jan-13	In-house Friendly Cricket match conducted A friendly In-house Cricket Match was conducted by *** (name of city) Metro Rail... http://fb.me/2pi4oYsiQ	appealing to the community
124	04-Feb-13	Source - The Hindu http://fb.me/2enSgp4Cn	not clear

Sl. No	Date	Tweet	Strategy Category
125	05-Feb-13	Rolling Stock Progress – January 2013 Manufacturing of the first train consisting of 4 cars of first train... http://fb.me/2qQU1n7vs	giving progress updates
126	26-Feb-13	The *** (name of station) Underground Metro Station work is in progress with D-Wall of two entry and exit has been... http://fb.me/1zGMUVZAr	giving progress updates
127	27-Feb-13	Progress of works at *** (name of station) UG Station.Station Works: The roof slab work at *** (name of station) UG station... http://fb.me/IHPAeUsI	giving progress updates
128	07-Mar-13	Track works in progress: The Total Plinth Track concreting done between *** (name of station A) and *** (name of station B) Station is... http://fb.me/2POQZTOXh	giving progress updates
129	14-Mar-13	First Achievement in Tunnelling. The entire team of *** (name of metro rail organization), *** (name of JV partners)– JV are happy to inform the... http://fb.me/2yT3RzsnC	giving progress updates
130	15-Mar-13	Work progress at Package *** (name of work package) (***) (name of station A) to *** (name of station B) station) 1. Diaphragm wall panels completed for... http://fb.me/24IIWBC7i	giving progress updates
131	18-Mar-13	Installation of 110 KV insulated switch gear (GIS) : The installation of 110 KV Insulated Switch Gear (GIS) at... http://fb.me/zOWbSwte	giving progress updates
132	19-Mar-13	Work progress of *** (name of station). 1. 180 nos out of 264 Stub columns have been completed 2. 3300 no... http://fb.me/2QQLbWPhB	giving progress updates
133	06-Apr-13	*** (name of work package) Package work progress 1. TBM 1 from *** (name of station A) to *** (name of	giving progress updates

Sl. No	Date	Tweet	Strategy Category
		station B) has completed 98meters 2. TBM 2... http://fb.me/2b8BNiKzY	
134	09-Apr-13	Rolling Stock progress 1. Inspection of pilot rake The pilot rake of train was inspected by the *** (name of metro rail organization) team... http://fb.me/HAzNEbOU	giving progress updates
135	10-Apr-13	*** (name of station) Underground Station Work Progress. The Construction of *** (name of station) Underground Metro Station is... http://fb.me/AntCGrVE	giving progress updates
136	10-Apr-13	I posted a new photo to Facebook http://fb.me/2ANZuviWD	giving progress updates
137	16-Apr-13	*** (name of station) Underground Station Work Progress. The Construction of *** (name of station) Underground Metro Station is fast... http://fb.me/2e7HSQpJ2	giving progress updates
138	16-Apr-13	Diversion of 900mm water pipeline across *** (name of location) for *** (name of station) Underground Metro Station. An... http://fb.me/1EknybyTO	giving progress updates
139	18-Apr-13	Work Progress of *** (name of station) Underground Metro Station as on 18-04-13. The Construction of *** (name of station)... http://fb.me/2morEtxoQ	giving progress updates
140	22-Apr-13	Work Progress of *** (name of station) Underground Metro Station as on 22-04-13. The Construction of *** (name of station) ... http://fb.me/GtCgORQW	giving progress updates
141	23-Apr-13	Asia Pacific Rail Conference held at Hong Kong recently. The Asia Pacific Rail Conference took place at Hong... http://fb.me/2WxNbrDL0	appealing to the community
142	25-Apr-13	Work Progress of *** (name of station) Ramp as on 25-04-13. The Guide wall work is in progress for the 2nd stage D... http://fb.me/18NNT5GyN	giving progress updates

Sl. No	Date	Tweet	Strategy Category
143	26-Apr-13	Work Progress of *** (name of station) Underground Metro Station as on 26-04-13. The Plunge column work has been... http://fb.me/2VEaRImus	giving progress updates
144	30-Apr-13	Installation work of Escalators and Lifts commenced at *** (name of station) Station. Installation work of Escalators have... http://fb.me/sx3pPtEU	giving progress updates
145	30-Apr-13	Work Progress of *** (name of station) Underground Metro Station as on 29-04-13. 50% of Roof Slab work has been... http://fb.me/LsYP8W17	giving progress updates
146	03-May-13	Deccan Chronicle writes about *** (name of city) Metro Rail http://fb.me/18NS1O70c	not clear
147	10-May-13	Work progress *** (name of station) Station as on 09-05-13. The *** (name of station) Elevated station civil works are fast... http://fb.me/1bEqdVg8J	giving progress updates
148	16-May-13	First metro line to be commissioned by mid-2014. Empty rakes of metro rail trains will operate several times over... http://fb.me/2oGKdNQTh	promoting the organization
149	16-May-13	Fire Fighting Training Program conducted for *** (name of work package) Package. A Training Program on Fire Fighting was conducted... http://fb.me/1HZL3n7FN	promoting the organization
150	20-May-13	Work progress from *** (name of station A) to *** (name of station B) Elevated Metro Section as on 20-05-13. The elevated section... http://fb.me/2ItrEU73u	giving progress updates
151	21-May-13	Work progress from *** (name of station A) to *** (name of station B) Elevated Metro Section as on 20-05-13. The elevated section... http://fb.me/1r3QtgRPJ	giving progress updates
152	21-May-13	*** (name of metro rail organization) observes Anti-Terrorism Day. Anti-Terrorism Day was observed on 21st	appealing to the community

Sl. No	Date	Tweet	Strategy Category
		May 2013 by *** (name of metro rail organization). ... http://fb.me/2jGCvqVwj	
153	21-May-13	Site Visit by JICA representative at *** (name of station) underground site. The chief representative from JICA, *** (name of representative) ... http://fb.me/AHSRtmIg	appealing to the community
154	21-May-13	I posted a new photo to Facebook http://fb.me/W3WU8128	giving progress updates
155	23-May-13	Work progress from *** (name of station A) to *** (name of station B) Elevated Metro Section as on 23-05-13. The elevated section civil works... http://fb.me/2nOrdxZVJ	giving progress updates
156	27-May-13	Work progress from *** (name of station A) to *** (name of station B) Station as on 27-05-13. The Metro Rail civil works from ... http://fb.me/2oi2IDFeW	giving progress updates
157	29-May-13	Track Work progress in Elevated Section. 1. Plinth concreting done for a length of 11129 m and track connected... http://fb.me/2nTYpu5k6	giving progress updates
158	29-May-13	Source - The Hindu http://fb.me/zuwAx6Hf	not clear
159	30-May-13	UITP Integrated Mobility Award. *** (name of city) Metro Rail Limited has been awarded UITP Integrated Mobility Award for... http://fb.me/2LpQDJPxm	promoting the organization
160	30-May-13	TBM1 reaches *** (name of station) station on 30-05-13 The Underground Tunnelling of TBM 1 of *** (name of work package) package has... http://fb.me/IOAqMRud	giving progress updates
161	31-May-13	*** (name of metro rail organization) Video on Animated Train: http://youtu.be/Tcn05fP5tSg?a via @YouTube	promoting the organization
162	31-May-13	*** (name of city) Metro Rail first train arrives *** (name of city). Pilot rake of *** (name of metro rail organization)	giving progress updates

Sl. No	Date	Tweet	Strategy Category
		Train has arrived *** (name of city) Port today... http://fb.me/A6kaTftM	
163	06-Jun-13	Source - The New Indian Express http://fb.me/laiG4mPHv	not clear
164	06-Jun-13	Work progress from *** (name of station A) to *** (name of station B) Elevated Section. The elevated civil works from *** (name of station A) to *** (name of station B)... http://fb.me/KqupC8UR	giving progress updates
165	06-Jun-13	First *** (name of metro rail organization) Train shifted to Depot . The Pilot rake of *** (name of metro rail organization) train arrived in *** (name of city) Port from *** (name of coach manufacturer) Lapa... http://fb.me/FG0NRnVD	giving progress updates
166	09-Jun-13	Source - Times Of India http://fb.me/2qj4dlnR8	not clear
167	10-Jun-13	*** (name of city) Metro Rail First Train Unloaded to Delivery Track. The first train dispatched from *** (name of coach manufacturer) factory in... http://fb.me/1GiNOv9sN	giving progress updates
168	11-Jun-13	Work progress of *** (name of station) Station as on 11-06-13 The *** (name of station) Elevated station civil works are fast... http://fb.me/QcYafuVQ	giving progress updates
169	12-Jun-13	*** (name of metro rail organization) takes Anti-Child Labour Pledge. To mark the occasion of Anti-Child Labour Day, Anti-Child Labour Pledge was... http://fb.me/XrjiO1PN	appealing to the community
170	16-Jun-13	Workshop on Transit Oriented Development and Joint Development. *** (name of metro rail organization) in	promoting the organization

Sl. No	Date	Tweet	Strategy Category
		collaboration with *** (name of local real estate association), the..	
171	17-Jun-13	Source - The Hindu http://fb.me/20NahJLPn	not clear
172	17-Jun-13	Work progress at *** (name of station) Station.The elevated station works at Station is fast progressing. This Station is on... http://fb.me/2xNt1tTED	giving progress updates
173	20-Jun-13	Progress of track works from *** (name of station A) to *** (name of station B) as on 20.06.2013. Between *** (name of station) and *** (name of station B) a total of 11865... http://fb.me/CkZ6vAxu	giving progress updates
174	26-Jun-13	Work Progress of *** (name of station) Underground Metro Station as on 26-06-13. The Construction of *** (name of station)... http://fb.me/2vJgbTTMn	giving progress updates
175	01-Jul-13	Work Progress of *** (name of station) Underground Metro Station as on 01-07-13. *** (name of city). 120 out of 230m of Roof... http://fb.me/2cPsCsRqx	giving progress updates
176	04-Jul-13	Source - The New Indian Express http://fb.me/xSFMbKZ6	not clear
177	07-Jul-13	Work progress from *** (name of station) to *** (name of station) Metro Section as on 06-07-13.Subject: The elevated civil...	giving progress updates
178	08-Jul-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter June-2013.... http://fb.me/6pAMouWBt	promoting the organization
179	09-Jul-13	TBM 2 reaches *** (name of station) Underground Metro Station on 09-07-13. The Underground Tunnelling of TBM 2 of *** (name of work package)..	giving progress updates

Sl. No	Date	Tweet	Strategy Category
180	11-Jul-13	*** (name of metro rail organization) distributes Mosquito nets. *** (name of metro rail organization) distributed 392 mosquito nets to the Project Affected Families. *** (name of metro rail organization).	appealing to the community
181	12-Jul-13	Track work progress in Elevated Section as on 12-07-13. 1. Plinth concreting done for a length of 12709 m at...	giving progress updates
182	17-Jul-13	*** (name of metro station) Elevated Metro Station work progress as on 16-07-13. *** (name of metro station) Metro Rail Station is one of the signature..	giving progress updates
183	20-Jul-13	*** (name of station) Station work progress as on 19-07-13. *** (name of station) Metro Station is one of the integrated..	giving progress updates
184	24-Jul-13	Shifting and interconnection of Metro Water pipelines. Interconnections for 600mm and 450mm pipelines and fixing.	appealing to the community
185	25-Jul-13	Special workshop on General Rules conducted. A Special Workshop on General Rules for regulating the operation..	promoting the organization
186	30-Jul-13	Second TBM breaks D- Wall at *** (name of station) Metro Station. The *** (name of city) Metro Rail tunnelling work of *** (name of work package) packages,..	giving progress updates
187	03-Aug-13	RSS at *** (name of station) depot energised. The *** (name of station) Receiving Sub Station (RSS) has been energised. All the switch... http://fb.me/2RopnGnJm	giving progress updates
188	08-Aug-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter July-2013.	promoting the organization
189	13-Aug-13	Test Track at *** (name of metro rail organization) Depot Completed. Laying of Test track at *** (name of metro rail	giving progress updates

Sl. No	Date	Tweet	Strategy Category
		organization) depot has been fully completed. The test track..	
190	16-Aug-13	*** (name of city) Metro Rail celebrates Independence Day. *** (name of MD), Managing Director of *** (name of city) Metro... http://fb.me/Ijp4N1mn	appealing to the community
191	19-Aug-13	*** (name of metro rail organization) Education Support Program Conducted. Under the income restoration programme for the project affected... http://fb.me/12YJI9dzA	appealing to the community
192	30-Aug-13	The Road cum Relief and Rescue Vehicle imported from Germany has reached *** (name of metro rail organization) Depot at *** (name of station). This...	promoting the organization
193	30-Aug-13	Underground Tunnelling work progress as on 30-08-13. http://fb.me/H3OdhD86	giving progress updates
194	31-Aug-13	Doordarshan Documentry on *** (name of metro rail organization): http://youtu.be/XwVzBDDnSM?a via @YouTube	promoting the organization
195	02-Sep-13	First Base Slab casted at *** (name of station) Ramp area. The 1st base slab of 15m long has been casted at...	giving progress updates
196	03-Sep-13	Source - The New Indian Express http://fb.me/2kkF0d8fi	not clear
197	04-Sep-13	Documentary about *** (name of metro rail organization) Project in *** (name of local TV channel) TV: via @YouTube	promoting the organization
198	06-Sep-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter August-2013...	promoting the organization

Sl. No	Date	Tweet	Strategy Category
199	06-Sep-13	Skin Cancer Awareness Program Conducted. Skin Cancer awareness program was conducted by *** (name of the contractor), for their.	appealing to the community
200	11-Sep-13	A tree soul saved. An 159 years old Banyan tree got uprooted and fell due to the recent rains, at *** (name of station)... http://fb.me/6sCOWuVrg	appealing to the community
201	19-Sep-13	Source- Times Of India http://fb.me/MEXqFjsh	not clear
202	08-Oct-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter September-2013..	promoting the organization
203	08-Oct-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter September-2013..	not clear
204	25-Oct-13	Train berthed in test track. The first train of *** (name of metro rail organization) was berthed in test track from workshop line. A battery..	giving progress updates
205	25-Oct-13	*** (name of city) Metro Rail participates in the Green Building Congress – 2013 Exhibition. The *** (name of city) Metro Rail...	appealing to the community
206	28-Oct-13	*** (name of metro rail organization) takes Vigilance Awareness Pledge. *** (name of metro rail organization) observes ‘Vigilance Awareness Week’ from 28th October to 2rd..	appealing to the community
207	28-Oct-13	TBM -1 started its tunneling work from *** (name of station) Station. TBM-1: TBM-1 has started erecting permanent rings from..	giving progress updates
208	30-Oct-13	TBM -2 nearing *** (name of station) Station. TBM-2 of *** (name of package) package is nearing *** (name of station) Station. So far it has... http://fb.me/139qAJYq6	giving progress updates

Sl. No	Date	Tweet	Strategy Category
209	31-Oct-13	*** (name of metro rail organization) observes “Vigilance Awareness Week” from 28th October to 2nd November, 2013. In.	appealing to the community
210	01-Nov-13	A workshop on Fire strategy and Life safety. A workshop on Fire strategy and Life safety was conducted for *** (name of metro rail organization)..	promoting the organization
211	01-Nov-13	Third TBM for *** (name of work package) Package. Third TBM is to be used in *** (name of work package) package by *** (name of partners in JV) JV. Lowering and..	giving progress updates
212	06-Nov-13	The Honorable Chief Minister Of *** (name of state), *** (name of CM) inaugurated the *** (name of city) Metro Rail Test Run at...	appealing to the community
213	11-Nov-13	Test Run of *** (name of metro rail organization) First Train - with CM	appealing to the community
214	13-Nov-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter October-2013..	promoting the organization
215	14-Nov-13	Honourable Chief Minister of *** (name of state) along with *** (name of metro rail organization) Officials. http://fb.me/ULM883CU	appealing to the community
216	14-Nov-13	Inspection by commissioner for Metro Rail safety. The Commissioner for Metro Rail Safety *** (name of commissioner)...	promoting the organization
217	15-Nov-13	Inspection by commissioner for Metro Rail safety. The Commissioner for Metro Rail Safety *** (name of commissioner)..	promoting the organization
218	16-Nov-13	Diesel shunting Locomotive for *** (name of metro rail organization). The Diesel Shunting Locomotive shipped	giving progress updates

Sl. No	Date	Tweet	Strategy Category
		from USA arrived *** (name of station) depot..	
219	19-Nov-13	*** (name of metro rail organization) observes National Integration Week. The birth anniversary of late Smt. Indira Gandhi, former Prime.	appealing to the community
220	26-Nov-13	*** (name of station) Station. The *** (name of station) Station the first elevated station. This station is connected to the depot..	giving progress updates
221	27-Nov-13	Second and third trains of *** (name of metro rail organization) arrived *** (name of city). The second and third train sets for the *** (name of city) Metro Rail..	giving progress updates
222	27-Nov-13	Workshop on Interoperability with *** (name of metro rail organization). A workshop on "Interoperability with *** (name of metro rail organization)" was conducted at *** (name of metro rail organization) office.	promoting the organization
223	28-Nov-13	Over Head Equipment works in progress. OHE (Over Head Equipment) conductor stringing works are in progress in..	giving progress updates
224	29-Nov-13	Completed Track works inspected by *** (name of metro rail organization) officials. *** (name of city) Metro Rail Track works between *** (name of station) depot and.	giving progress updates
225	30-Nov-13	Second and Third trains reached *** (name of station) Depot. The Second and Third train sets of *** (name of metro rail organization), which arrived *** (name of city).	giving progress updates
226	04-Dec-13	For latest updates please click the link below - *** (name of metro rail organization) Newsletter November-2013..	promoting the organization
227	10-Dec-13	Source - Dinamalar http://fb.me/S9F7AzXO	not clear

Sl. No	Date	Tweet	Strategy Category
228	16-Dec-13	Ariel View of NH crossing – Shunting neck near *** (name of station)	promoting the organization
229	17-Dec-13	Workshop held for developing area around *** (name of station) Station. *** (name of city) Metro Rail Limited (***) (name of metro rail organization)) has organized a one..	appealing to the community
230	18-Dec-13	Track work progress as on 18-12-13. Plinth completed for a length of 17719m on viaduct between *** (name of station) and.	giving progress updates
231	19-Dec-13	Design & Erection of a Long Span Through type steel Bridge for *** (name of metro rail organization) near *** (name of station) Station. Corridor-1 of Metro..	giving progress updates
232	21-Dec-13	Third TBM of *** (name of work package) Package starts tunneling. Third TBM of *** (name of work package) package (***) name of JV partners (JV)) has started its..	giving progress updates
233	24-Dec-13	Source - Times Of India http://fb.me/3uVBsZfSp	not clear
234	27-Dec-13	New Managing Director appointed. *** (name of MD), has been appointed as the New Managing Director..	giving progress updates
235	31-Dec-13	*** (name of city) Metro Rail Limited celebrated its 6th Foundation day today (31-12-13). The..	appealing to the community
236	01-Jan-14	Source - The Hindu http://fb.me/6SMF5wn1e	not clear
237	06-Jan-14	ADMINISTRATIVE BUILDING AT *** (name of station) DEPOT. Admin building at *** (name of station) depot is a 6 storey building. It is.	promoting the organization

Sl. No	Date	Tweet	Strategy Category
238	13-Jan-14	*** (name of metro rail organization) pavilion in TTDC 40th India Tourist & Industrial Fair 2014. The *** (name of city) Metro Rail Limited has..	appealing to the community
239	18-Jan-14	I posted a new photo to Facebook	giving progress updates
240	18-Jan-14	I posted a new photo to Facebook	giving progress updates
241	18-Jan-14	I posted a new photo to Facebook	giving progress updates
242	18-Jan-14	I posted a new photo to Facebook	giving progress updates
243	18-Jan-14	I posted a new photo to Facebook	giving progress updates
244	18-Jan-14	Transfer of Technology and Progress in production of trains at *** (place of manufacturing plant). The activities in *** (name of coach manufacturer) factory at ..	giving progress updates
245	21-Jan-14	I posted a new photo to Facebook	giving progress updates
246	21-Jan-14	I posted a new photo to Facebook	giving progress updates
247	21-Jan-14	TBM breakthroughs Dwall at *** (name of station) station. The underground tunneling of TBM 1 of *** (name of work package) package...	giving progress updates
248	25-Jan-14	I posted a new photo to Facebook	giving progress updates
249	25-Jan-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
250	25-Jan-14	I posted a new photo to Facebook	giving progress updates
251	25-Jan-14	I posted a new photo to Facebook	giving progress updates
252	25-Jan-14	I posted a new photo to Facebook	giving progress updates
253	25-Jan-14	*** (name of metro rail organization) CELEBRATES REPUBLIC DAY. *** (name of MD), Managing Director of *** (name of metro rail organization)..	appealing to the community
254	27-Jan-14	I posted a new photo to Facebook	giving progress updates
255	27-Jan-14	I posted a new photo to Facebook	giving progress updates
256	27-Jan-14	I posted a new photo to Facebook	giving progress updates
257	27-Jan-14	I posted a new photo to Facebook	giving progress updates
258	27-Jan-14	Fourth and Fifth trains reached *** (name of city). The fourth and fifth train sets of *** (name of metro rail organization) arrived *** (name of city) port today..	giving progress updates
259	28-Jan-14	I posted a new photo to Facebook	giving progress updates
260	28-Jan-14	I posted a new photo to Facebook	giving progress updates
261	28-Jan-14	I posted a new photo to Facebook	giving progress updates
262	28-Jan-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
263	28-Jan-14	Receiving Substation work in progress at *** (name of metro station). A Receiving Substation(RSS) is being built near *** (name of metro station)(Metro).	giving progress updates
264	28-Jan-14	I posted a new photo to Facebook	giving progress updates
265	28-Jan-14	I posted a new photo to Facebook	giving progress updates
266	28-Jan-14	I posted a new photo to Facebook	giving progress updates
267	30-Jan-14	I posted a new photo to Facebook	giving progress updates
268	30-Jan-14	I posted a new photo to Facebook	giving progress updates
269	30-Jan-14	I posted a new photo to Facebook	giving progress updates
270	30-Jan-14	I posted a new photo to Facebook	giving progress updates
271	30-Jan-14	I posted a new photo to Facebook	giving progress updates
272	30-Jan-14	I posted a new photo to Facebook	giving progress updates
273	30-Jan-14	I posted a new photo to Facebook	giving progress updates
274	30-Jan-14	Train 1 trail run over ramp conducted. The Inaugural trail run of *** (name of metro rail organization) train (from Depot) in the ramp and..	giving progress updates

Sl. No	Date	Tweet	Strategy Category
275	07-Feb-14	*** (name of station) Station works in progress. *** (name of metro rail organization)'s *** (name of station) Station is the last and terminal station in the corridor -1..	giving progress updates
276	7-Feb-14	I posted a new photo to Facebook	giving progress updates
277	7-Feb-14	I posted a new photo to Facebook	giving progress updates
278	7-Feb-14	I posted a new photo to Facebook	giving progress updates
279	7-Feb-14	I posted a new photo to Facebook	giving progress updates
280	10-Feb-14	I posted a new photo to Facebook	giving progress updates
281	10-Feb-14	I posted a new photo to Facebook	giving progress updates
282	10-Feb-14	I posted a new photo to Facebook	giving progress updates
283	10-Feb-14	I posted a new photo to Facebook	giving progress updates
284	10-Feb-14	I posted a new photo to Facebook	giving progress updates
285	10-Feb-14	Work Progress of *** (name of station) Underground Station. The Construction of *** (name of station) Underground Metro Station is.	giving progress updates
286	12-Feb-14	TBM 1 tunnelling from *** (name of station) started. The underground tunnelling of TBM 1 of *** (name of work package) package ...	giving progress updates

Sl. No	Date	Tweet	Strategy Category
287	12-Feb-14	I posted a new photo to Facebook	giving progress updates
288	12-Feb-14	I posted a new photo to Facebook	giving progress updates
289	14-Feb-14	I posted a new photo to Facebook	giving progress updates
290	14-Feb-14	I posted a new photo to Facebook	giving progress updates
291	14-Feb-14	I posted a new photo to Facebook	giving progress updates
292	14-Feb-14	I posted a new photo to Facebook	giving progress updates
293	14-Feb-14	I posted a new photo to Facebook	giving progress updates
294	14-Feb-14	I posted a new photo to Facebook	giving progress updates
295	14-Feb-14	I posted a new photo to Facebook	giving progress updates
296	14-Feb-14	I posted a new photo to Facebook	giving progress updates
297	14-Feb-14	Trail run conducted between *** (name of station) and *** (name of station). Trail run was conducted between *** (name of station) and *** (name of station)..	giving progress updates
298	20-Feb-14	Quiz for students. *** (name of city) Metro Rail Limited conducts Quiz competition for school students as part of awareness..	targeting sections of the community
299	24-Feb-14	Breakthrough at *** (name of station) Underground Station. The underground tunneling of TBM2 of ***	giving progress updates

Sl. No	Date	Tweet	Strategy Category
		(name of work package) package *** (name of contractor) ...	
300	24-Feb-14	I posted a new photo to Facebook	giving progress updates
301	24-Feb-14	I posted a new photo to Facebook	giving progress updates
302	24-Feb-14	I posted a new photo to Facebook	giving progress updates
303	24-Feb-14	I posted a new photo to Facebook	giving progress updates
304	25-Feb-14	I posted a new photo to Facebook	giving progress updates
305	25-Feb-14	I posted a new photo to Facebook	giving progress updates
306	25-Feb-14	I posted a new photo to Facebook	giving progress updates
307	25-Feb-14	I posted a new photo to Facebook	giving progress updates
308	25-Feb-14	Platform Slab casted at Nehru Park Station. Works are fast progressing at Nehru park station.First platform slab..	giving progress updates
309	27-Feb-14	First Train from Sri City delivered to *** (name of metro rail organization). The first indigenized train for *** (name of metro rail organization) was handed over to Dr. Sudhir.	giving progress updates
310	27-Feb-14	I posted a new photo to Facebook	giving progress updates
311	27-Feb-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
312	27-Feb-14	I posted a new photo to Facebook	giving progress updates
313	27-Feb-14	I posted a new photo to Facebook	giving progress updates
314	27-Feb-14	I posted a new photo to Facebook	giving progress updates
315	27-Feb-14	I posted a new photo to Facebook	giving progress updates
316	27-Feb-14	I posted a new photo to Facebook	giving progress updates
317	27-Feb-14	I posted a new photo to Facebook	giving progress updates
318	27-Feb-14	I posted a new photo to Facebook	giving progress updates
319	04-Mar-14	Concreting work completed at *** (name of station) station. Base slab concreting works have been completed in..	giving progress updates
320	07-Mar-14	Best Upcoming Metro Rail Operator of the year. *** (name of city) Metro Rail Limited was awarded the best upcoming Metro..	appealing to the community
321	07-Mar-14	I posted a new photo to Facebook	giving progress updates
322	07-Mar-14	I posted a new photo to Facebook	giving progress updates
323	07-Mar-14	TBM 2 initial drive. TBM-02 has started tunneling from *** (station A) to *** (station B). First ring has been..	giving progress updates
324	10-Mar-14	I posted 3 photos on Facebook in the album "Mobile Uploads"	giving progress updates

Sl. No	Date	Tweet	Strategy Category
325	10-Mar-14	Train no 11 reached depot from *** (place of manufacturing plant). The second train manufactured from *** (name of coach manufacturer) factory, *** (place of manufacturing plant) andhra..	giving progress updates
326	15-Mar-14	I posted a new photo to Facebook	giving progress updates
327	15-Mar-14	I posted a new photo to Facebook	giving progress updates
328	15-Mar-14	I posted a new photo to Facebook	giving progress updates
329	15-Mar-14	I posted a new photo to Facebook	giving progress updates
330	15-Mar-14	Work progress of *** (name of station) UG Station. Work is progressing at *** (name of station) station. Total 78 no's of D wall panels, 19 no's of..	giving progress updates
331	19-Mar-14	I posted a new photo to Facebook	giving progress updates
332	19-Mar-14	I posted a new photo to Facebook	giving progress updates
333	19-Mar-14	I posted a new photo to Facebook	giving progress updates
334	19-Mar-14	I posted a new photo to Facebook	giving progress updates
335	19-Mar-14	I posted a new photo to Facebook	giving progress updates
336	19-Mar-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
337	19-Mar-14	I posted a new photo to Facebook	giving progress updates
338	19-Mar-14	I posted a new photo to Facebook	giving progress updates
339	19-Mar-14	I posted a new photo to Facebook	giving progress updates
340	19-Mar-14	Balanced Cantilever Construction work completed. Balanced Cantilever Bridge construction over *** (name of location) flyover,..	giving progress updates
341	20-Mar-14	I posted a new photo to Facebook	giving progress updates
342	20-Mar-14	I posted a new photo to Facebook	giving progress updates
343	20-Mar-14	Breakthrough at *** (name of station) Underground Station. The underground tunnelling of TBM 1 of *** (name of work package) package *** (name of contractor)..	giving progress updates
344	21-Mar-14	I posted a new photo to Facebook	giving progress updates
345	21-Mar-14	I posted a new photo to Facebook	giving progress updates
346	21-Mar-14	I posted a new photo to Facebook	giving progress updates
347	21-Mar-14	Work progress of *** (name of station) station. Work is fast progressing at *** (name of station) station. All station D walls, Entrance D.	giving progress updates
348	24-Mar-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
349	24-Mar-14	I posted a new photo to Facebook	giving progress updates
350	24-Mar-14	I posted a new photo to Facebook	giving progress updates
351	24-Mar-14	Awareness program conducted. An awareness program on *** (name of city) Metro Rail Project was conducted at *** (name of institute), *** (location of institute) recently. A presentation on the various features and benefits of *** (name of city) Metro Rail was screened. All faculty members and students of *** (name of institute) participated in this program.	targeting sections of the community
352	25-Mar-14	I posted a new photo to Facebook	giving progress updates
353	25-Mar-14	I posted a new photo to Facebook	giving progress updates
354	25-Mar-14	I posted a new photo to Facebook	giving progress updates
355	25-Mar-14	I posted a new photo to Facebook	giving progress updates
356	25-Mar-14	I posted a new photo to Facebook	giving progress updates
357	25-Mar-14	Mock-up train of *** (name of metro rail organization) for pub*** (name of station) view. *** (name of city) Metro Rail Limited contractor Ms. *** (name of coach manufacturer) Transport S.A. France and..	promoting the organization
358	28-Mar-14	Source - Times Of India	not clear

Sl. No	Date	Tweet	Strategy Category
359	31-Mar-14	I posted a new photo to Facebook	giving progress updates
360	31-Mar-14	I posted a new photo to Facebook	giving progress updates
361	31-Mar-14	I posted a new photo to Facebook	giving progress updates
362	31-Mar-14	Sixth and seventh trains reached *** (name of city). The sixth and seventh train sets of *** (name of metro rail organization) arrived *** (name of city) port from.	giving progress updates
363	02-Apr-14	Diesel Locomotive hauls 8 cars of Rolling Stock. The Diesel Locomotive of *** (name of metro rail organization) was placed on the mainline in the..	giving progress updates
364	02-Apr-14	I posted a new photo to Facebook	giving progress updates
365	02-Apr-14	I posted a new photo to Facebook	giving progress updates
366	02-Apr-14	I posted a new photo to Facebook	giving progress updates
367	09-Apr-14	I posted a new photo to Facebook	giving progress updates
368	09-Apr-14	I posted a new photo to Facebook	giving progress updates
369	09-Apr-14	I posted a new photo to Facebook	giving progress updates
370	09-Apr-14	I posted a new photo to Facebook	giving progress updates
371	09-Apr-14	Rail over Bridge work in progress.Erection of Steel Girder Rail over Bridge near *** (name of station) station is in..	giving progress updates

Sl. No	Date	Tweet	Strategy Category
372	11-Apr-14	I posted a new photo to Facebook	giving progress updates
373	11-Apr-14	I posted a new photo to Facebook	giving progress updates
374	11-Apr-14	I posted a new photo to Facebook	giving progress updates
375	11-Apr-14	*** (name of station) Station work progress. Works at *** (name of station) station are swiftly progressing. All Diaphragm wall panels and..	giving progress updates
376	16-Apr-14	I posted a new photo to Facebook	giving progress updates
377	16-Apr-14	I posted a new photo to Facebook	giving progress updates
378	16-Apr-14	I posted a new photo to Facebook	giving progress updates
379	16-Apr-14	*** (name of station) UG station work progress. Works are progressing at *** (name of station) UG station..	giving progress updates
380	28-Apr-14	I posted a new photo to Facebook	giving progress updates
381	28-Apr-14	I posted a new photo to Facebook	giving progress updates
382	28-Apr-14	*** (name of station) Metro Station Work progress. Work is progressing at *** (name of station) Metro Station. All diaphragm wall panels and..	giving progress updates
383	29-Apr-14	TBM 1 reaches *** (name of station) Station D wall. The Tunnelling of TBM 1 of *** (name of work package) package has reached *** (name of station) station D wall. The.	giving progress updates

Sl. No	Date	Tweet	Strategy Category
384	02-May-14	The British Safety council" award *** (name of metro rail organization) contractor- *** (name of contractor). An international safety award and merit certificate was..	promoting the organization
385	02-May-14	The Third train set manufactured from *** (name of coach manufacturer) factory, *** (place of manufacturing plant), has reached depot today (02-05-14)...	giving progress updates
386	02-May-14	The Third train set manufactured from *** (name of coach manufacturer) factory, *** (place of manufacturing plant), has reached depot today (02-05-14)...	not clear
387	02-May-14	The Third train set manufactured from *** (name of coach manufacturer) factory, *** (place of manufacturing plant), has reached depot today (02-05-14)...	not clear
388	02-May-14	The Third train set manufactured from *** (name of coach manufacturer) factory, *** (place of manufacturing plant), has reached depot today (02-05-14)...	not clear
389	08-May-14	I posted a new photo to Facebook	giving progress updates
390	12-May-14	I posted a new photo to Facebook	giving progress updates
391	12-May-14	I posted a new photo to Facebook	giving progress updates
392	12-May-14	I posted a new photo to Facebook	giving progress updates
393	12-May-14	I posted a new photo to Facebook	giving progress updates
394	12-May-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
395	12-May-14	Rolling Stock Progress. Train set 1 – high speed dynamic trials are progressing as per schedule and is ready for..	giving progress updates
396	15-May-14	I posted a new photo to Facebook	giving progress updates
397	15-May-14	I posted a new photo to Facebook	giving progress updates
398	15-May-14	I posted a new photo to Facebook	giving progress updates
399	15-May-14	I posted a new photo to Facebook	giving progress updates
400	15-May-14	*** (name of station) Metro station work progress. Station area: All station box D wall, plunge columns, Base slab,.	giving progress updates
401	20-May-14	*** (name of station) Station work progress. Entire station box of *** (name of station) station has been completed...	giving progress updates
402	20-May-14	I posted a new photo to Facebook	giving progress updates
403	20-May-14	I posted a new photo to Facebook	giving progress updates
404	20-May-14	I posted a new photo to Facebook	giving progress updates
405	23-May-14	An accident occurred near *** (name of metro rail organization) site at *** (name of station) today . MTC bus rammed into the *** (name of metro rail organization) barricade board . *** (name of metro rail organization).	promoting the organization
406	23-May-14	I posted a new photo to Facebook	giving progress updates
407	23-May-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
408	23-May-14	I posted a new photo to Facebook	giving progress updates
409	23-May-14	I posted a new photo to Facebook	giving progress updates
410	23-May-14	I posted a new photo to Facebook	giving progress updates
411	30-May-14	*** (name of metro rail organization) participated in World Multiple Sclerosis Day 2014. On the occasion of World Multiple Sclerosis Day, The	appealing to the community
412	30-May-14	I posted a new photo to Facebook	giving progress updates
413	30-May-14	I posted a new photo to Facebook	giving progress updates
414	30-May-14	I posted a new photo to Facebook	giving progress updates
415	30-May-14	*** (name of station) station work progress. All Diaphragm wall panels for main station box have been completed. Excavations.	giving progress updates
416	04-Jun-14	TBM 1 tunnelling towards *** (name of station) station started. The underground tunnelling of TBM 1 of *** (name of work package) package.	giving progress updates
417	07-Jun-14	TBM 1 tunnelling towards *** (name of station) started.The underground tunnelling of TBM 1 of *** (name of work package) package..	giving progress updates
418	08-Jun-14	I posted a new photo to Facebook	giving progress updates
419	08-Jun-14	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
420	08-Jun-14	I posted a new photo to Facebook	giving progress updates
421	07-Jun-14	First Cross passages work started. Cross passages are provided as a connecting link between the twin tunnels..	giving progress updates
422	08-Jun-14	I posted a new photo to Facebook	giving progress updates
423	08-Jun-14	I posted a new photo to Facebook	giving progress updates
424	08-Jun-14	I posted a new photo to Facebook	giving progress updates
425	08-Jun-14	I posted a new photo to Facebook	giving progress updates
426	08-Jun-14	Trial run extended up to *** (name of metro station). The first trial run of Metro Train conducted between *** (name of station).	giving progress updates
427	08-Jun-14	I posted a new photo to Facebook	giving progress updates
428	08-Jun-14	I posted a new photo to Facebook	giving progress updates
429	08-Jun-14	I posted a new photo to Facebook	giving progress updates
430	08-Jun-14	I posted a new photo to Facebook	giving progress updates
431	11-Jun-14	The last two trains (no 8 & 9) from *** (name of coach manufacturer), Lapa, Brazil have reached *** (name of metro rail organization) *** (name of place of depot) depot . The trains after.	giving progress updates

Sl. No	Date	Tweet	Strategy Category
432	18-Jun-14	*** (name of metro rail organization) repaired and beautified the *** (name of church) at *** (location of church) and was handed over to the church authorities..	appealing to the community
433	19-Jun-14	RDSO conducts tests. Research Designs and Standards Organisation (RDSO) Director, *** (name of director)..	promoting the organization
434	24-Jun-14	*** (name of metro rail organization) Office Shifted. *** (name of city) Metro Rail office has been shifted to *** (name of station), *** (name of city). The office address is ..	giving progress updates
435	26-Jun-14	Breakthrough at *** (name of station) Underground Station. The underground tunnelling of TBM 3 of *** (name of work package) package *** (name of JV partners) – JV...	giving progress updates
436	29-Jun-14	*** (name of metro rail organization) offers its machines (JCB/crane/ tractors/gas cutters etc)/workers from *** (name of metro rail organization) contractors (*** (names of contractors)) to help the rescue work at the accident site of building collapses at *** (name of location)	appealing to the community
437	08-Jul-14	Track works started at *** (name of station). Track works from *** (name of station) towards *** (name of metro station) have started. Rail and flash butt welding..	giving progress updates
438	10-Jul-14	Honourable Chief Minister *** (name of station) facilitated *** (name of metro rail organization) officers for *** (name of location) rescue operations. The Honourable Chief..	appealing to the community
439	10-Jul-14	TBM 1 reaches *** (name of station) station. TBM 1 of *** (name of work package) package made successful cutting of station D wall and entered.	giving progress updates

Sl. No	Date	Tweet	Strategy Category
440	10-Jul-14	Breakthrough at *** (name of station) Metro. The underground tunneling of TBM of *** (name of work package) package of *** (name of JV partners) JV...	giving progress updates
441	14-Jul-14	Sign language training for CRA's of *** (name of city) Metro Rail. A training session on Indian Sign language is being..	promoting the organization
442	14-Jul-14	Breakthrough at *** (name of station) Underground Station. The underground tunnelling of TBM 1 of *** (name of work package) package *** (name of contractor) ...	giving progress updates
443	15-Jul-14	Breakthrough at *** (name of station) Underground Station. The underground tunnelling of TBM 1 of *** (name of work package) package *** (name of contractor) ...	giving progress updates
444	16-Jul-14	Tbm 2 drive through from *** (name of station A) towards *** (name of station B). TBM 2 of *** (name of work package) package has started its..	giving progress updates
445	19-Jul-14	Breakthrough at *** (name of station) Underground Station. The underground tunnelling of TBM 2 of *** (name of work package) package *** (name of JV partners)– JV..	giving progress updates
446	22-Jul-14	Operation Control Centre work in progress. Operation Control Centre is located in Admin building, *** (name of station)..	giving progress updates
447	23-Jul-14	Installation of Signal Equipment's. Installations of operation system console in Operation Control Centre are..	giving progress updates
448	24-Jul-14	Safety Workshop for Systems & Construction Contractors. A safety workshop was conducted on 23.07.2014 at *** (name of metro rail organization).	promoting the organization

Sl. No	Date	Tweet	Strategy Category
449	28-Jul-14	Train no 14 reached depot from *** (place of manufacturing plant). The Fifth train set manufactured from *** (name of coach manufacturer) factory, ...	giving progress updates
450	02-Aug-14	TBM 1 tunnelling towards *** (name of city) Metro started.The underground tunnelling of TBM 1of *** (name of work package) package of *** (name of contractor)-.	giving progress updates
451	11-Aug-14	Latest updates on Trains : Train 1: Subjected to Oscillation and Emergency Breaking Distance (EBD) trials by..	promoting the organization
452	14-Aug-14	Track works started in corridor-I. Track works in elevated corridor -I - *** (name of station A) to *** (name of station B) started.	giving progress updates
453	14-Aug-14	*** (name of city) Metro Rail celebrates Independence Day. *** (name of MD), Managing Director of *** (name of metro rail organization)...	appealing to the community
454	25-Aug-14	Breakthrough at *** (name of station) Underground Station. The underground tunnelling of TBM 2 of *** (name of work package) package *** (name of contractor)..	giving progress updates
455	28-Aug-14	*** (name of station) work progress. All structural works are completed. Interior works such as granite flooring, painting,..	giving progress updates
456	01-Sep-14	Rail Over Bridge work started. Erection of Steel Girder Rail over Bridge near *** (name of station) station is in progress..	giving progress updates
457	01-Sep-14	Train no 15 reached depot from *** (city of manufacturing plant). The Sixth train set manufactured from *** (name of coach manufacturer) factory, ...	giving progress updates

Sl. No	Date	Tweet	Strategy Category
458	03-Sep-14	TBM 2 D wall breakthrough at *** (name of station) Station. TBM 2 of *** (name of work package) package made a successful breakthrough and...	giving progress updates
459	03-Sep-14	SPEED CERTIFICATE FROM RDSO- The statutory certification of Metro System involves, Oscillation and Emergency	promoting the organization
460	03-Sep-14	Tunnelling work started towards *** (name of station). - Tunnelling works of TBM 1 of *** (name of work package) package has been started.	giving progress updates
461	06-Sep-14	Inspection and review of implementation of *** (name of city) Metro Rail Project by Hon'ble Minister for Urban Development,.	appealing to the community
462	17-Sep-14	23 underground tunneling sections of *** (name of city) Metro completed -*** (name of station A) Metro to *** (name of station B) station – 2..	giving progress updates
463	26-Sep-14	Tunnelling work progress at *** (name of work package) package - TBM 1 completed 792m out of 983m from *** (name of station) station.	giving progress updates
464	13-Oct-14	*** (name of station) station work progress- 150m of roof slab, 214 m concourse slab and 354m base slab work completed in..	giving progress updates
465	13-Oct-14	*** (name of station) station work progress- Subject: Entire roof slab, concourse and base slab completed in main station.	giving progress updates
466	14-Oct-14	Signalling work progress -Signalling Work progress at Main Line. - All Signals from *** (name of station A) to *** (name of station B) Platform..	giving progress updates

Sl. No	Date	Tweet	Strategy Category
467	14-Oct-14	Signalling work progress -Signalling Work progress at Main Line.- All Signals from *** (name of station A) to *** (name of station B) ..	giving progress updates
468	23-Oct-14	The New Indian Express	not clear
469	24-Oct-14	First TBM to complete its tunneling in an Underground. - TBM 1 of the underground tunneling of *** (name of work package) package..	giving progress updates
470	27-Oct-14	*** (name of metro rail organization) takes Vigilance Awareness Pledge- *** (name of metro rail organization) observes 'Vigilance Awareness Week' from 27th October to 1st November..	appealing to the community
471	01-Nov-14	As part of observance of vigilance awareness week 2014, seminars were organised on Ethics & Corporate Governance..	appealing to the community
472	01-Nov-14	Skit on Truth Alone Triumphs Performed:To mark the occasion of Vigilance awareness week, the Operations Division..	appealing to the community
473	05-Nov-14	Successful Breakthrough at *** (name of work package) Package.TBM 1 of *** (name of work package) package made a successful breakthrough ...	giving progress updates
474	05-Nov-14	Successful Breakthrough at *** (name of work package) Package.TBM 1 of *** (name of work package) package made a successful breakthrough and entered...	giving progress updates
475	11-Nov-14	Train no 16 reached depot from *** (location of coach manufacturing plant). The seventh train set manufactured from *** (name of coach manufacturer) factory, ...	giving progress updates
476	23-Nov-14	Rolling stock testing status - Signalling/Telecom testing works progress: Routine Dynamic tests of Signalling...	promoting the organization

Sl. No	Date	Tweet	Strategy Category
477	01-Dec-14	Deccan Chronicle	not clear
478	06-Dec-14	*** (name of metro rail organization) celebrates 7th Foundation day.- The Managing Director, *** (name of MD) inaugurated the..	appealing to the community
479	08-Dec-14	Photos on work progress during night at *** (name of metro rail station) Ug station	giving progress updates
480	10-Dec-14	Sport events conducted - As part of foundation day celebrations, sports day events were conducted at *** (name of metro rail organization)	appealing to the community
481	10-Dec-14	Track work started in ramp section. - Track work started in ramp section between *** (name of station A) and *** (name of station B) ...	giving progress updates
482	16-Dec-14	Second TBM completes its tunnelling in an Underground. TBM 2 of the underground tunneling of *** (name of work package) package..	giving progress updates
483	19-Dec-14	*** (name of metro rail station) Receiving substation. - The 110kV/33kV/25kV Receiving substation is located at *** (name of location) Depot.	promoting the organization
484	29-Dec-14	Train no 17 reached *** (name of metro rail organization) depot from *** (location of coach manufacturing plant). The train set manufactured from *** (name of manufacturer) factory, ...	giving progress updates
485	01-Jan-15	Times of India - 02-01-15	not clear
486	08-Jan-15	Oral Cancer Screening Programme for *** (name of metro rail organization) contract labours - Oral Cancer Screening Programme was conducted for..	appealing to the community

Sl. No	Date	Tweet	Strategy Category
487	14-Jan-15	*** (name of regional festival) CELEBRATED IN *** (name of metro rail organization)- *** (name of regional festival) was celebrated today (14-1-2015). The Managing Director, ...	appealing to the community
488	20-Jan-15	Eighteenth Train reached *** (name of metro rail organization) depot. The 18th train set manufactured from *** (name of coach manufacturer) factory, *** (location of manufacturing plant) has ...	giving progress updates
489	25-Jan-15	*** (name of city) Metro Rail celebrates Republic Day. *** (name of MD), Managing Director of *** (name of city) Metro.	appealing to the community
490	01-Feb-15	Two TMBs in *** (name of package) package completes its tunneling. TBM 3 of *** (name of package) package made a successful breakthrough and.	giving progress updates
491	01-Feb-15	Times of India- dated: 2-2-2015	not clear
492	16-Feb-15	Tunneling work is nearing completion between *** (name of station A) and *** (name of station B). -Already one tunnel is completed between..	giving progress updates
493	18-Feb-15	TBM starts its tunneling for second tunnel at *** (name of station). TBM has started its tunneling work for building..	giving progress updates
494	23-Feb-15	Blood Donation Camp in *** (metro rail organization) organized a blood donation camp in office...	appealing to the community
495	02-Mar-15	Train No.19 arrived at *** (name of metro rail organization) depot. - The train set no 19 manufactured from *** (name of coach manufacturer), *** (place of manufacturing plant) has reached..	giving progress updates
496	06-Mar-15	Train sets No.20 and 21 reached *** (metro rail organization) depot. - The train sets no 20 and 21	giving progress updates

Sl. No	Date	Tweet	Strategy Category
		manufactured from *** (name of coach manufacturer) factory,..	
497	20-Mar-15	Tunneling work progress in *** (name of region) stretch.TBM 1 of *** (name of package) *** (name of JV partners)- JV package has completed..	giving progress updates
498	20-Mar-15	*** (name of station) Underground station work progress. Entire roof, concourse and base slab have been completed in.	giving progress updates
499	27-Mar-15	*** (name of station) Metro station work progress. Roof, base and concourse slab is fully completed in the main station box..	giving progress updates
500	07-Apr-15	Commissioner for Metro Railway Safety completes first phase of statutory inspection.- Commissioner for Metro.	promoting the organization
501	07-Apr-15	*** (name of metro rail organization) provides escalator facilities to public.- Central Metro underground station work is progressing near.	appealing to the community
502	22-Apr-15	Second part of statutory inspection by - Commissioner for Metro Railway Safety on *** (name of metro rail organization)- Commissioner for Metro..	promoting the organization
503	22-Apr-15	Tunnelling work completed between *** (name of station A) and *** (name of station B) . - TBM 1 of *** (name of work package) package (name of JV partners)-JV had a..	giving progress updates
504	02-May-15	OHE work in progress between *** (name of station A) and *** (name of station B)- Over Head Electrical work is in progress between ..	giving progress updates
505	15-May-15	Track work progress - Underground section- Track works started in underground section between *** (name of station A) and.	giving progress updates

Sl. No	Date	Tweet	Strategy Category
506	20-May-15	Train sets No.22 reached *** (name of metro rail organization) depot. The train set no 22 manufactured from *** (name of manufacturer) factory, *** (location of factory) has reached..	giving progress updates
507	30-May-15	Train sets No.23 and 24 reached *** (name of metro rail organization) depot. The train sets no 23 and 24 manufactured from *** (name of manufacturer) factory,	giving progress updates
508	08-Jun-15	Train set No.25 arrived at *** (name of metro rail organization) depot. - The train set no 25 manufactured from *** (name of manufacturer) factory, *** (location of factory) has also.	giving progress updates
509	08-Jun-15	Environment Day celebrated in *** (name of metro rail organization). World Environment Day was celebrated in *** (name of metro rail organization) on 5th June 2015 at all..	appealing to the community
510	28-Jun-15	Inauguration of *** (name of station A) - *** (name of station B) Metro Rail Passenger Service -Hon'ble Chief Minister of *** (name of state) .	appealing to the community
511	28-Jun-15	*** (name of city) METRO RAIL LIMITED - FARE CHART (In Rupees) AND TIME TABLE	giving progress updates
512	29-Jun-15	*** (name of station A) - *** (name of station B) Metro Rail Passenger Service Inaugurated- Hon'ble Chief Minister of *** (name of state) ..	appealing to the community
513	29-Jun-15	Congratulatory Message from MD, CMRL-The Hon'ble Chief Minister of *** (name of state) inaugurated the first Metro Rail.	appealing to the community
514	29-Jun-15	Store Value Card	promoting the organization

Sl. No	Date	Tweet	Strategy Category
515	29-Jun-15	DOs and DON'Ts	giving progress updates
516	02-Jul-15	*** (name of metro rail organization) inauguration by *** (name of Chief Minister of state)	appealing to the community
517	08-Jul-15	TBM 1 Dwall break through at *** (name of station).- TBM 1 of *** (name of work package) package had a successful breakthrough at *** (name of station)...	giving progress updates
518	16-Jul-15	*** (name of city) Metro service notification - Timings notifications for train operations on Sundays. - With effect from.	giving progress updates
519	18-Jul-15	*** (name of city) Times - 18/07/15	not clear
520	20-Jul-15	Dinamalar - Women's Special - 20/07/15	targeting sections of the community
521	27-Jul-15	Surprise visit for 10th and 12th public examination district toppers. To celebrate and honor the district..	targeting sections of the community
522	27-Jul-15	*** (name of metro rail organization) pays homage to a real Bharat Ratna-Former President Dr. APJ Abdul Kalam @APJAbdulKalam .Irreplaceable loss to the nation.	appealing to the community
523	29-Jul-15	Public notification for Metro Services - From 1st of August 2015 – New Time Table - With effect from 1st August.	giving progress updates
524	29-Jul-15	"6 Possible ways how *** (metro rail organization) is going to change our lives" Courtesy - *** (name of city) Live - 104.8 FM	promoting the organization

Sl. No	Date	Tweet	Strategy Category
525	05-Aug-15	*** (name of contractor) is executing Ballastless Trackwork Project of *** (name of city). This work is labour intensive and.	promoting the organization
526	06-Aug-15	UITP congratulates *** (name of metro rail organization) for inaugurating the first line of *** (name of city) Metro Rail Services to public. UITP (L'Union...	appealing to the community
527	14-Aug-15	*** (name of city) Metro Rail celebrates Independence Day. *** (name of MD), Managing Director of	appealing to the community
528	15-Aug-15	*** (name of city) Metro Rail celebrates Independence Day. *** (name of MD), Managing Director of	appealing to the community
529	17-Aug-15	#### (name of other city) Metro comes calling - A team from #### (name of other metro rail organization) along with the Managing Director.	appealing to the community
530	18-Aug-15	National Leprosy Eradication Drive - *** (name of metro rail organization)- *** (companies involved in JV partnership) JV (Tunnelling) organized National Leprosy Eradication Drive.	appealing to the community
531	18-Aug-15	NSS VOLUNTEER STUDENTS OF *** (name of college) COLLEGE AWARDED FOR "TRAFFIC MANAGEMENT AND CUSTOMER GUIDANCE SUPPORT A.	targeting sections of the community
532	18-Aug-15	*** (name of metro rail organization) Monthly Newsletter July 2015 has been uploaded on *** (name of metro rail organization) Website. Please click the below link for the same..	promoting the organization
533	19-Aug-15	School students ride the Metro - *** (name of metro rail organization) along with Lions Club of *** (name of city) organized a "Joy Ride "on.	targeting sections of the community

Sl. No	Date	Tweet	Strategy Category
534	23-Aug-15	*** (name of city) Week celebration – Flash Mob dance on women empowerment & rain water harvesting - at *** (name of station) Metro..	targeting sections of the community
535	29-Aug-15	Spend Less Ride More ! We value your patronage...To serve *** (name of city)Public better - We are introducing "Trip.	not clear
536	29-Aug-15	Spend Less Ride More ! We value your patronage...To serve *** (name of city)Public better - We are introducing "Trip.	promoting the organization
537	31-Aug-15	Good Afternoon *** (name of city)!! Trip Passes will be available with effect from 1st September 2015.	giving progress updates
538	31-Aug-15	Hello *** (name of city) - We are now on Instagram - Follow us at	promoting the organization
539	01-Sep-15	TBM 2 Makes Successful Breakthrough at *** (name of station) Station. TBM 2 (Tunnel Boring Machine) of *** (line name) has made a..	giving progress updates
540	02-Sep-15	Train 26 & 27 reached *** (name of metro rail organization) depot from *** (name of manufacturing plant location).Train No. 26 & 27 transported from *** (name of manufacturer of coaches)	giving progress updates
541	04-Sep-15	Train 28 & 29 reached *** (name of metro rail organization) depot from *** (name of manufacturing plant location). - Train No. 28 & 29 transported from *** (name of manufacturer of coaches) ,.	giving progress updates
542	06-Sep-15	To serve our guests better, *** (name of metro rail organization) introduces Tourist Card at Discounted rates with Refundable facility. The..	promoting the organization

Sl. No	Date	Tweet	Strategy Category
543	15-Sep-15	The Honorable Chief Minister of *** (name of state), *** (name of CM) has announced in *** (name of state) Legislative Assembly..	appealing to the community
544	15-Sep-15	*** (name of metro rail organization) campaigns for “Celebrating mobility week” The International Association of Public transport (UITP) has.	appealing to the community
545	15-Sep-15	*** (name of metro rail organization) campaigns for “Celebrating mobility week” - Being a member of UITP, *** (name of metro rail organization) is participating in this campaign	appealing to the community
546	22-Oct-15	Mock fire drill conducted at *** (name of station) metro station. - A Mock Fire Drill and Hands on Training on Fire Safety system.	promoting the organization
547	07-Oct-15	133 *** (name of residents of a location) take up *** (name of station) Metro Rail Journey - A group of 133 students from ...	targeting sections of the community
548	09-Oct-15	Mock fire drill conducted at metro stations.- A Mock Fire Drill and Hands on Training on Fire Safety system for.	promoting the organization
549	16-Oct-15	Trail Run conducted between *** (name of station A) and *** (name of station B) today (16-10-15). - Trail Run between ..	giving progress updates
550	16-Oct-15	Trail Run conducted between *** (name of station A) and *** (name of station B) today (16-10-15). - Trail Run between ..	Not clear
551	17-Oct-15	Press Release-TRIAL RUN BETWEEN *** (name of station A) RAMP TO *** (name of station B) TOWER STATION - 1.TRIAL with OHE Inspection.	promoting the organization

Sl. No	Date	Tweet	Strategy Category
552	27-Oct-15	Vigilance Awareness Pledge-*** (name of metro rail organization) observes Vigilance Awareness Week, from 26th Oct 2015 to 31st Oct 2015. The..	appealing to the community
553	31-Oct-15	Vigilance week celebrations at *** (name of metro rail organization).-To emphasis the importance of this year's theme on Preventive Vigilance as.	appealing to the community
554	12-Nov-15	Press Release-GC/*** (name of city) Metro Rail Engineer *** (name of person)is the first candidate from India who has received.	appealing to the community
555	12-Nov-15	Trip Pass Notification	promoting the organization
556	01-Dec-15	Due to heavy rush, to cater the stranded passengers. *** (name of metro rail organization) has operated train services all through out yesterday(01-12-15) night.	giving progress updates
557	01-Dec-15	*** (metro rail organization) caters to crowded metro stations today.	promoting the organization
558	02-Dec-15	Kind attention to metro passengers-In view of current passenger inflow, the last train will depart from..	giving progress updates
559	03-Dec-15	Kind attention to metro passengers-In view of current passenger inflow, the last train will depart from..	giving progress updates
560	06-Dec-15	Kind attention to metro passengers - To cater to our metro passengers, the first train will depart from *** (name of station).	giving progress updates
561	12-Dec-15	Kind attention to metro passengers,To cater to our metro passengers returning to *** (name of city), the first train will.	giving progress updates

Sl. No	Date	Tweet	Strategy Category
562	12-Dec-15	Foot over bridge (FOB) escalator on *** (name of station) station side at *** (name of central railway station) opened to public.Foot over bridge.	giving progress updates
563	18-Dec-15	PRESS RELEASE-NSG METRO INTERVENTION TRAINING HELD ON 18-12-2015 -Counter Terrorism Drill was conducted by..	promoting the organization
564	26-Dec-15	Kind attention of metro passengers, In order to serve passengers returning from their holidays, *** (name of metro rail organization) train.	giving progress updates
565	26-Dec-15	Extended train services on New Year's Eve, *** (name of metro rail organization)train services are being extended on 31/12/15; the last train.	giving progress updates
566	28-Dec-15	Trains 30, 31 & 32 reached *** (name of metro rail organization) depot from Sricity. Train No. 30, 31 & 32 transported from *** (name of coach manufacturer) Factory,	giving progress updates
567	08-Jan-16	Kind attention of metro passengers, Extension of train services is being done to facilitate the passengers going.	giving progress updates
568	25-Jan-16	*** (name of city) Metro Rail Republic Day celebrations.- *** (name of MD), Managing Director hoisting the.	appealing to the community
569	16-Feb-16	PRESS RELEASE-GOLDEN TROPHY AWARD BY NATIONAL SAFETY COUNCIL (INDIA) TO *** (name of metro rail organization) AND *** (name of contractor) TRACK TEAM	promoting the organization
570	17-Feb-16	10% discount for Group Tickets- 26, 33,822 tickets sold. Save with ***(name of metro rail organization)'s Smart Card facility.	promoting the organization

Sl. No	Date	Tweet	Strategy Category
571	18-Feb-16	Press Release - Elevated corridor viaduct completed between *** (name of station A) Ramp and *** (name of station B)- ECV 07 Via - R contract..	giving progress updates
572	25-Feb-16	VTS 01 1: Metro rail video	promoting the organization
573	25-Feb-16	*** (name of city) Metro Rail 45 sec Video	promoting the organization
574	01-Mar-16	*** (name of metro rail organization) inspection trial run between *** (name of station A) station and *** (name of station B) station today (01-03-16) - inspection trial run.	promoting the organization
575	14-Mar-16	66,000 saplings planted by *** (name of metro rail organization) “International Environment Management Award- 2015” Environmental Management is..	appealing to the community
576	13-Apr-16	*** (name of state) New Year Metro Train Services -On account of *** (name of state) New Year on 14-04-16, the following pattern of train..	giving progress updates
577	15-Apr-16	NSCI Golden Jubilee Celebrations-Hon’ble Minister for Labour and Employment, Government of India presents Golden award..	appealing to the community
578	15-Apr-16	NSCI Golden Jubilee Celebrations - Hon’ble Minister for Labour and Employment, Government of India presents Golden..	appealing to the community
579	16-Apr-16	Press Release - Event Recorder and Energy Regeneration in *** (name of metro rail organization) Metro Trains. - Event Recorder (EVR): -A special..	promoting the organization
580	20-May-16	21-05-16 – Change in Metro Train Services Notification: The Peak hour train services have been cancelled in the.	giving progress updates

Sl. No	Date	Tweet	Strategy Category
581	25-May-16	Have a Joyful Ride with Metro Rail this summer! The Food Carnival will be at *** (name of station) Metro Station (Street..	appealing to the community
582	27-May-16	I posted 21 photos on Facebook in the album "**** (name of city) Metro Rail Food Carnival 2016	appealing to the community
583	02-Jun-16	#Metronival Let's beat the heat this summer with #Metronival!! There is a food carnival at *** (name of station) Metro..	appealing to the community
584	02-Jun-16	#metronival	targeting sections of the community
585	03-Jun-16	#Metronival Drawing Competition for school children in the age group between 10-15 yrs Painting competition for.	targeting sections of the community
586	03-Jun-16	#metronival	targeting sections of the community
587	04-Jun-16	Lots n lots of fun... Laughter & colours. We had the best time today with all the kiddos who...	targeting sections of the community
588	04-Jun-16	Drawing competition participants @ *** (name of place) Metro Station	targeting sections of the community
589	04-Jun-16	Celebrating #metronival with hand prints by all participants and kids at the carnival @...	targeting sections of the community
590	04-Jun-16	I posted a new photo to Facebook	giving progress updates

Sl. No	Date	Tweet	Strategy Category
591	04-Jun-16	I posted a new photo to Facebook	giving progress updates
592	04-Jun-16	I posted a new photo to Facebook	giving progress updates
593	04-Jun-16	I posted a new photo to Facebook	giving progress updates
594	04-Jun-16	I posted a new photo to Facebook	giving progress updates
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596	04-Jun-16	I posted a new photo to Facebook	giving progress updates
597	04-Jun-16	I posted a new photo to Facebook	giving progress updates
598	04-Jun-16	I posted a new photo to Facebook	giving progress updates
599	04-Jun-16	I posted a new photo to Facebook	giving progress updates
600	04-Jun-16	I posted a new photo to Facebook	giving progress updates
601	04-Jun-16	Just posted a photo @ *** (name of place) Metro Station	giving progress updates
602	04-Jun-16	I posted a new photo to Facebook	giving progress updates
603	04-Jun-16	Painting competition at 4pm Topic - Go Green Metro Timing 4pm to 6 pm Dont forget to bring your paints..	targeting sections of the community

Sl. No	Date	Tweet	Strategy Category
604	04-Jun-16	Painting competition at 4pm Today !!! Topic - Go Green Metro Timing 4pm to 6 pm Dont forget to bring your paints..	Not clear
605	05-Jun-16	Thank you, all participants of the painting competition. The #metronival was a success	targeting sections of the community
606	15-Jul-16	I posted 6 photos on Facebook in the album "Rolling Stock taken from *** (place of Depot) to *** (name of station place)"	giving progress updates
607	14-Aug-16	*** (name of city) Metro Rail celebrates Independence Day. ***(name of MD), Managing Director of *** (name of city).	appealing to the community
608	14-Aug-16	*** (name of city) Metro Rail celebrates Independence Day. ***(name of MD) Managing Director of ..	appealing to the community
609	19-Aug-16	We are pleased to announce our updated *** (name of city) Metro Rail Limited website! kindly click the link below..	promoting the organization
610	31-Aug-16	We are Hiring!!!EMPLOYMENT NOTIFICATION No.:***/HR/04/2016 *** (name of city) Metro Rail Limited entrusted with the.	giving progress updates
611	31-Aug-16	We are Hiring!!!EMPLOYMENT NOTIFICATION No.:***/HR/04/2016 *** (name of city) Metro Rail Limited entrusted with the.	Not clear
612	01-Sep-16	The following pattern of train services will be operated on 05th September 2016 being a Holiday on the eve of.	giving progress updates
613	20-Sep-16	The Hon'ble Chief Minister of *** (name of state), *** (name of Chief Minister) Will inaugurate *** (station A) -	appealing to the community

Sl. No	Date	Tweet	Strategy Category
614	20-Sep-16	The Hon'ble Chief Minister of *** (name of state), *** (name of Chief Minister) will inaugurate	appealing to the community
615	20-Sep-16	The Hon'ble Chief Minister of *** (name of state), *** (name of Chief Minister) Will inaugurate *** (station A) to *** (station B)	appealing to the community
616	21-Sep-16	Inauguration of the Passenger Service of *** (name of city) Metro Rail Limited from *** (station A) to *** (station B) by the Hon'ble.	appealing to the community
617	22-Sep-16	The Hon'ble Chief Minister of *** (name of state), *** (name of Chief Minister) -inaugurated *** (name of station A) to *** (name of station B) line	appealing to the community
618	30-Sep-16	Shuttle Services from *** (name of station) Metro Station from 1st October 2016. - In an endeavor to cater to the *** (name of city) public	giving progress updates
619	30-Sep-16	*** Metro Rail celebrates (Joy of Giving Week) "Festival of Giving" from Oct 2nd to Oct 8th 2016 at all Metro.	appealing to the community
620	08-Oct-16	The following holiday time table will be followed from 10/10/2016 to 12/10/2016 on account of POOJA HOLIDAYS	giving progress updates
621	28-Oct-16	*** (place of metro station) Station fares and Facilities	giving progress updates
622	28-Oct-16	Holiday Time Table – Diwali Train Services- The following Holiday Time Table will be followed tomorrow 29/10/16	giving progress updates
623	28-Oct-16	*** (place of metro station) station fares and facilities	giving progress updates
624	30-Oct-16	Metro train service notification -Train services on 31/10/2016 (Monday) will start from 0500 hrs in both	giving progress updates

Sl. No	Date	Tweet	Strategy Category
625	11-Dec-16	Notification for Metro Train Passengers: 60 kmph wind speed has been reported in *** (name of station) 60 kmph wind	giving progress updates
626	12-Dec-16	Notification for Metro rail Passengers:-Due to power disruption , all metro train services have been halted until further notice.	giving progress updates
627	12-Dec-16	Notification for Metro Train Passengers: - Holiday timetable will be followed on the evening of Miladi un nabi	giving progress updates
628	12-Dec-16	Notification for Metro Train Passengers: The Metro Train services have been resumed post energization at 2000 hrs	giving progress updates
629	16-Dec-16	*** (place of metro station) Metro Station - Fare Table	giving progress updates
630	06-Jan-17	*** Metro Rail celebrates *** (name of regional festival) festival at *** Metro Station on 7th &8th Jan 2017 and 21st and	appealing to the community
631	19-Jan-17	*** (name of festival) 2017- *** Metro Rail Limited celebrates *** in the month of January	appealing to the community
632	14-May-17	To cater to the *** people better and to enjoy the newly opened underground metro rail services from ...	giving progress updates
633	23-May-17	*** METRO RAIL - MOBILE APP FEATURES -The *** Mobile Application may be downloaded in Android mobiles from	promoting the organization
634	23-May-17	*** METRO RAIL - MOBILE APP FEATURES -The *** Mobile Application may be downloaded in Android mobiles from	Not clear
635	23-May-17	*** METRO RAIL - MOBILE APP FEATURES -The *** Mobile Application may be downloaded in Android mobiles from ...	Not clear

Sl. No	Date	Tweet	Strategy Category
636	12-Jun-17	Public Notice	giving progress updates
637	16-Jun-17	Metro Rail Operations Extended for Civil Services Exam on the 18.06.2017 - To facilitate smooth	giving progress updates
638	05-Jul-17	Now, *** (name of metro rail organization) Metro partners with Uber, Ola	promoting the organization
639	17-Jul-17	Educational trips for Government School Students- In an attempt to bring awareness to the students of Government	targeting sections of the community
640	01-Aug-17	Press Release- Educational trips for Government School Students - In an attempt to bring awareness to the students	targeting sections of the community

LIST OF PUBLICATIONS BASED OF THIS THESIS

Paper(s) Published in Journals

1. Ninan, J., Clegg, S. R., Mahalingam, A. (2019). Branding and Governmentality for Infrastructure Megaprojects: The role of Social Media. *International Journal of Project Management*, 37(1), 59-72.
2. Ninan, J., Mahalingam, A., Clegg, S. R. (2019). External Stakeholder Management Strategies and Resources in Megaprojects: An Organizational Power Perspective. *Project Management Journal*. 8756972819847045, 1-16.
3. Ninan, J., Mahalingam, A., Clegg, S. R., Social and Political Resilience in Infrastructure Projects: A Study of Framing in News Media Articles. *Journal of Management in Engineering* (Invited for special issue - under review)
4. Ninan, J., Mahalingam, A., Clegg, S. R., Asset Management through Strategic Discourses and its effect on Project Team Rationalities. *Infrastructure Asset Management*. (Invited for special issue - under review)
5. Ninan, J., Mahalingam, A., Clegg, S. R., Power and Strategies in the External Stakeholder Management of Megaprojects – A Circuitry Framework. *Engineering Project Organization Journal*. (under review)
6. Ninan, J., Mahalingam, A., Clegg, S. R. Sankaran, S., ICT Enabled Strategies for External Stakeholder Management in Megaprojects: Sociomateriality from a Power Perspective. *Construction Management Economics*. (under review)

Full Paper(s) Published in Conference Proceedings

7. Ninan, J., Mahalingam, A. (2016). Power Dynamics in Infrastructure Megaprojects - A case of Metro. *International Conference on Construction, Real Estate, Infrastructure and Projects (CRIP)*, NICMAR Pune, Page 448-462; ISBN -978-98-5268-179-2.
8. Ninan, J., Mahalingam, A. (2017). Influence Tactics in Infrastructure Megaprojects - Directions for Research. *Project Management Institute - Research & Academic Conference (PMI RAC)*. IIT Delhi, New Delhi, Page 439-446; ISBN – 978-81-923200-3-8.

9. Ninan, J., Mahalingam, A. (2017). Stakeholder Management Strategies in Infrastructure Megaprojects – A Dimensions of Power Perspective. *Engineering Project Organization Conference (EPOC)*, California, USA.
http://epossociety.org/EPOC2017/papers/Ninan_Mahalingam.pdf
10. Ninan, J., Mahalingam, A., Clegg, S. R. (2019). Managing Project Community in Infrastructure Megaprojects. *Project Management Institute - Research & Academic Conference (PMI RAC)*. IIM Kozhikode, Page 489-506; ISBN: 978-81-926239-9-3.
11. Mahalingam, A., Ninan, J. (2019). External Stakeholder Management in Megaprojects – a Framework of Strategies and Power in Practice *Engineering Project Organization Conference (EPOC)*, Vail, Colorado, USA.
https://img1.wsimg.com/blobby/go/19ec593e-0c9c-4cf8-a445-b774ad9dacfa/downloads/Mahalingam_Ninan.pdf?ver=1564862526954

Talks given at conferences/workshops/Seminars/Posters

12. Ninan, J., (2017). Stakeholder management strategies in infrastructure megaprojects – a power perspective. Poster presentation at the Engineering Project Organization Conference (EPOC), California, USA - **won best poster award**.
13. Ninan, J., (2017). Governmentality for External Stakeholder Management in Megaprojects. *Merging worlds - UTS FASS HDR Conference*, Sydney, Australia.
14. Ninan, J., (2017). Organizational Power in External Stakeholder Management of Megaprojects. *UTS Business School 2017 PhD Student Conference Program*, Sydney, Australia
15. Ninan, J., Mahalingam, A. (2018). Circuit of Power and Strategies: External Stakeholder Management in Megaprojects. *Strategic Management Society (SMS) Special Conference*, Hyderabad, India.
16. Ninan, J., Mahalingam, A. (2018). External Stakeholder Management Practices and the Normative Universe of the Megaproject Team. *Megaproject workshop*, Shanghai, China.

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2009 Bachelor of Technology (B. Tech)

Institution: Mar Athanasius College of Engineering (MG University, Kerala)

Specialization: Civil Engineering

2011 Master of Technology (M. Tech)

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