Managing local communities in Large Projects, Appraisal of Two complex Projects in Iran

Roya Derakhshan Alavijeh
Universidad Politecnica da Madrid
Madrid, Spain
roya.derakhshanalavijeh@polimi.it

Abbas Ahmadi
Industrial Engineering Faculty
Amirkabir University of Technology (Tehran Polytechnic)
Tehran, Iran
abbasahmadi00@gmail.com

Abstract

Large projects are designed to change the shape of society by bringing economic values for a wide range of stakeholders. They are however, prone to influence cultural and societal values of society and therefore, project organizations need to have a better understanding of demands and values of the society in which the project is deployed. Considering local communities, this research tries to deduce a theory for perceptions of local communities from activities and behavior of project organization. The method of this research is case study and it uses documents from companies as well as interviews from three groups of stakeholders: project organization, local communities and local government. The role of local government is considered as the communicator standing between local communities and project organizations. The results of this research show that transparency, social and environmental sustainability and the organization background highly influences local community’s perception of the behavior of project organization activities. This research makes contributions to theory, by building the model from the local community’s viewpoint and to practice, by giving a more clear view of the benefits of communications with local communities.

Keywords
Stakeholder Management, Local Community, Transparency, Sustainability, Project Governance

Introduction
Stakeholder theory emphasizes on spreading project’s value with a broader range of stakeholders, which Freeman, (1984) calls management-for-stakeholders. These benefits can go beyond financial achievements of the projects and project managements should be attuned to the cultural, organizational and social environments surrounding projects. Sharing values with stakeholders has two sides, creating and capturing values.

Reviewed researches show that while value creation is one of the most recognized topics of research, value realization has been over looked. From the viewpoint of an important group of stakeholders, local communities, this research aims at understanding how local communities decide to capture the value or not. The results of this research will contribute to literature by development of the model which introduces the variables influencing local community’s perception and to practice by introducing a new aspect in stakeholder management: managing local communities through understanding their point of view.

Literature Review
This research is directed to explore and identify how to enhance success of complex projects using the amounts of value realized in the whole lifecycle of the project by three different selected stakeholders. According to
Freeman (1984)’s classification, stakeholders can be classified into two major groups of internal and external stakeholders. According to Freeman’s definition, internal stakeholders are those, which have financial transactions with the project organization, while the second group are not able to control the project resources. Results of the research of Di Maddaloni & Davis (2017) reveals that research on stakeholder management has focused strongly on the first group, whilst the effect on the legitimate ‘secondary stakeholders’ such as local community, remains widely unexplored.

The demands and concerns of different stakeholders should be considered in design and planning phase of the project. In addition and resulted from the definition of value, benefit and cost, the optimum mechanism of value/cost sharing among stakeholders should be explored. Different project governance mechanisms can result in different levels of realized of projects which needs further investigation. With wide variety of stakeholders and lifecycle of decades, extra-large, super high-technology projects, globally known as megaprojects have further levels of complexity in their success evaluation (Chih & Zwikaël, 2015) and therefore, have been chosen as the context of this research.

Reviewing the results of successful megaprojects leads to the surprising conclusion that these projects are conceived as part of a project management environment where iron triangle have not prevailed as the leading criteria for determining their perceived “success” (Unit, 2009); (Zhai et al., 2009)) and probably stakeholders used other scales so that they considered these projects as “successful”. There are just a few numbers of internal stakeholders in a project whose perception of success is linked to the project management success (Shenhar et al., 2000). For other stakeholders a combination of other criteria such as project’s efficiency, impact on the team, knowledge and experience gains, preparation for future and business prosperity can be perceived as different dimensions of success (Shenhar et al., 2000).

From academic point of view, there is a gap in identifying the influence of different concepts on maximization of project’s realized value. As researchers argue, there are two separate processes linked to value: creation and capturing (Bowman & Ambrosini, 2000). These two processes should be discerned and managed properly in order to maximize the level of success of a project and the values captured by stakeholders. However, project management literature has not yet evaluated the effect of different concepts on maximization of value.

Current practices of project management fail to comprehend the complexity of project environments today and therefore, project leaders may be blinded to enormous values that performing a project may bring for their organization in terms of future business success, knowledge and experience, team building, reputation and increasing competitiveness. From this point of view, applying theories might lead to increased value creation and improvement of benefit realization in industrial practices. Development of a model that considers contradicting and merging desires of all of the stakeholders for projects’ success appraisal will contribute to future wise selection of megaprojects and consequently better deals of value for societies.

The very first use of the concept of value in management and business field can be traced back to 1940s, when the notion generated to optimize processes (Oliomogbe & Smith, 2013). From 2000 onwards, a number of researchers tried to consider value in project context through introducing concepts such as value, benefit, worth and success ((Marrewijk, 2007); (Akintola et al., 2010); (Eweje et al., 2012); (Liu et al., 2014); (Laursen & Svejvig, 2016)). Within this research stream, some researchers conceptualize projects as value creation processes (Winter & Szczepanek, 2008) or a process of delivering beneficial objectives of change (Turner & Müller, 2003) developing a different view on final creation of the project: from a unique product or service to beneficial or valuable changes.

Value management was later established as a more generic term to focus on the overall achievement of a project and as the combination of costs and benefits. Laursen & Svejvig (2016) define benefit as: “the improvement resulting from a change (outcome) that is perceived as positive by one or more stakeholders.” The intention of value management is then, the optimization of both benefits and costs in projects. But till today, practices are narrowed to enhancing value by reducing capital cost rather than increasing the benefits (Morris P., 2013). It has been just quite recently that, practitioners of the project management field have illustrated a shift from sole focus on product creation (project output) to a broader focus on both product and benefit, Laursen & Svejvig (2015) state.

The concept of value is recognized to be multifaceted and highly confusing. Scholars from different fields (strategic management, organizational behavior, strategic human resource management, corporate finance, marketing and organizational psychology, social science, etc.) address value differently ((Lepak & Smith, 2007); (Barney, 2013); (Della Corte & Del Gaudio, 2014); (Laursen & Svejvig, 2016)). The process of value creation is confounded with two questions: who creates value and who captures value. It is believed that these two processes should be distinguished as two separate processes (Bowman & Ambrosini, 2000).

Value creation depends on the relative amount of value that is captured by a target user (or buyer) who is the focus of value creation (i.e. individual, organization or society). Purpose of the organizations is to create value in many different ways for many different targets, including earning for owners, pay for employees, benefits for
customers, and taxes for the society. But by definition, various stakeholders (value targets) have different views as to what is valuable. That is due to the unique knowledge, goals and context conditions that affect how the novelty of the new value will be evaluated.

Chang et al., (2013) state stakeholders play a central role as an active resource for creating and capturing value during project lifecycle. External stakeholders, in particular, have been transformed from passive audience to active players (Prahalaad & Ramaswamy, 2000). Stakeholders’ knowledge, which has an experiential nature, emerges during the project lifecycle. As Prahalaad & Ramaswamy (2004) states, personalized experiences which is captured through cognition and emotions of stakeholders is a major source of the created value. Stakeholders’ consequent competencies, gained after knowledge gains, is another important source of value in project.

Due to uncertain nature of projects (Turner & Müller, 2003), it is very difficult to precisely predict what values will be delivered at the end of the project. Value creation is a continuous process, going on during the whole lifecycle of a project. Due to different perception of value for different stakeholders, all of them should be engaged in this process. With the use of this approach, value is co-created during the combined efforts of firms, employees, customers, stockholders, government agencies and other entities. Resulted from value co-creation process, despite the uncontrollable nature of social, governmental, environmental and ecological surroundings of a project, these could be better managed and integrated to be used as sources of value creation (Vargo et al., 2008). However, prosperity of the value co-creation is highly dependent on the ability of the organization leaders (i.e. project owner, financier, project manager, etc.) to keep constant contact with stakeholders, investigate and explore their knowledge and interest and try to align the skills, knowledge and efforts of both sides to each other.

From the reviewed literature, it becomes clear that realized value can highly influence prosperity of the project. The phenomenon, to be investigated in this research, is that sometimes the value is created but not captured by the target user and therefore it is slipped. In this research, focusing on local community as an important group of external stakeholders, the reasons behind this slippage will be investigated.

**Theoretical Background**

This research aims at understanding why local communities make a certain perception about values created specifically for them by project organizations. To understand the reason behind their perception, this research has to have a look at the process of judging organization’s behavior from local community’s viewpoint and through the lens of a theory which is suitable for their viewpoint.

After digging the literature, it became clear that stakeholder theory (Freeman, 1984) is suitable for analyzing project organization’s viewpoint while in organization studies attribution theory is widely used to analyze the perception of customers and managers (Martinko, Harvey, & Dasborough, 2011) and leadership (Tyssen, Wald, & Spieth, 2013). After further studying this theory from psychology sources ((Heider, 1958), (Kelley, 1960), (Kelley, 1967), (Malle, 1999)) and management studies ((Martinko M., 1995), (Martinko, Harvey, & Dasborough, 2011) (Kutsch, Maylor, Weyer, & Lupson, 2011)) this theory seemed to be suitable to be used as the theoretical lense of this research.

When we refer to attribution theory we are referring to the work of Heider (1958), Kelley (1973), and Weiner (1986), which define attributions as individuals’ explanations for the causes of their successes and failures. The basic premise is that people have an innate desire to understand the causes of important outcomes in their lives and that their attributions influence their responses to these outcomes (Heider, 1958). Typical attribution explanations for outcomes are ability, effort, the nature of the task, and luck. In addition to attributions for specific events, recent research demonstrates that attribution styles are useful for understanding individual behaviors (Martinko et al., 2007). Attribution styles are stable, trait-like tendencies to make certain types of attributions that affect behaviors across situations.

This research is based on this specific branch of attribution theory that is founded on a few fundamental ideas coming below:

First, people have perceptual and cognitive systems that filter, group, and integrate certain stimulus inputs into such concepts or categories as agent, intention, belief, and reason. Second, people make assumptions about these categories and their relationships. For example, coordinated movements of agents are classified into the category intentional action and the concept of intentional action relies on the interplay of multiple mental state categories, including belief and desire. Intentionality is arguably the core of this framework. It directly connects behavior with mind by classifying a behavior as intentional when it is characteristically generated by certain mental states (such as belief, intention, and awareness).

The model below shows how people attribute the causality of a behavior. In this research the behavior of the agent is the value created by project organization for local communities and the observer is local community.
who decide how to perceive this value and whether capture it or not. The main objective of this research is to modify this model to what “causal history of reasons” and “enabling factors” are being considered by local communities when judging organization and what are the reasons and intentions they assume for this judgment.

![Diagram](image)

**Figure 1: People’s perception of behavior (Malle, 1999)**

Through the lense of the theory explained before, this research is designed to address two main research questions:

**RQ1:** How does local community perceive values created for them by project organization?

**RQ2:** What are the variables which may influence their perceptions?

In the next section, the method used to answer to these questions will be explained.

**Methodology**

The nature of research questions and the fact that for the first time in the field of project management, this research will consider local communities’ view point to consider their demands and concerns, lead to the design of the research as exploratory. Therefore, having a theory building inherite, a qualitative inductive approach was taken for this research. The case study research was selected to be appropriate for this research, which includes interviews with practitioners and collection of other types of qualitative data such as documents from organizations, reports, news and pieces from media.

This study is cross sectional, as the empirical stages capture the situation at one point in time. This approach supports the variation in success dimensions used to define megaproject success across organisations from onshore Oil&Gas sector. The choice of organisations from this sector is due to the specific charasteristics of the sector (Eweje et.al., 2012) which is based on the allocation of reseurces more on primary stakeholders. The selection of onshore projects is because the influence of local community on onshore projects is obviously more than those on offshore projects. It is predicted that the results from the literature analysis, interviews, survey, and focus group provide evidence to support the claim that the conclusions will be applicable to Oil & Gas complex projects.
The industry to be investigated in Oil & Gas and the reason is firstly because considering the competitive candidate industries (infrastructures (Flyvbjerg, Bruzelius, & Rothengatter, 2003), air force (Chang et al., 2013), and defense) there has been less done in project management literature about this industry. However, due to special characteristics of environmental, social and financial interrelations of project organizations of this industry and their external stakeholders, given in literature, it doesn’t seem logical to include other industries in this research.

Another criterion considered for case selection is based on the social and political conditions of the country of the project. Based on the attribution theory basics, people from developing countries make lower levels of attribution while it is quite opposite for north Europeans and Americans (Malle, 2011). Therefore, conducting a comparison between values and attributions of local community of developing and developed countries will be worthy for future research.

At the very beginning of this research, a few interviews were conducted with project managers and contractors of Oil & Gas sector and during these interviews the potential issues of communication with local community were investigated. This activity, paired with literature review, resulted in the design of the research. Insights coming from practitioners and literature led to performing more guided reviews of literature and shed light upon actual issues in the industry and introduced some new cases which were facing issues with relations with local community. Collected data from news about unsatisfied local community or sabotages on the project site are the ultimate criteria for case selection.

Yin (2013) and Eisenhardt (1989) suggest that for theory building purposes, a multi case analysis is likely to create a more robust theory and therefore for this research a multiple case analysis is adopted. For the number of cases based on Yin’s (2013) suggestion the saturation of data is considered. A multiple case study is also compatible for the cross sectional time horizon of this research.

There are some semi-structured interviews designed for this research which form the core of data collection. Additionally there were site visits and and archival records (organizational charts for stakeholder map and historical records of communication with stakeholders, Social Environmental Impact Assessment) which were used as supporting interviews and to form data triangulation. The main respondents of the interviews were project managers, local community representatives, local government authorities and active individuals of media. Data from news and documentary movies have also been collected. Multiple sources of data collection, or triangulation, will result in higher data reliability. Interviews with three groups of stakeholders in the main source of triangulation, accompanied by other means of data collection. Eisenheardt (1989) suggests that use of multiple investigators will leads to a better confidence in research findings. In this research there the two authors collaborated for data collection resulting in reduction of observer bias.

Figure 2 illustrates different phases of this research, from research design to data collection, analysis and write up.

**Figure 2: Consequent phases of research**
Although this research is exploratory and the case study adopts an inductive approach, there is a need to select a theory to develop a blueprint for research design of, research question development, unit of analysis and case selection and finally data interpretation. Sutton & Staw, (1995), explained that theory gives the investigator a lens to understand “why acts, events, structure, and thoughts occur”. According to Eisenhardt & Graebner (2007), use of theory, in doing case studies, is an immense aid in defining the appropriate research design and data collection. The same theoretical orientation also becomes the main vehicle for generalizing the results of the case study.

Case Description

There are two cases selected for this research. Case selection strategy was theoretical and was based on a few criteria: the context of the research (complex project in Oil & Gas sector), the accessibility of data and the influences on local communities. Considering these criteria, there are two cases selected for this research and below some brief descriptions of the cases are given.

**Case 1:** This case is a complex project in south of Iran. The project is a part of portfolio developed by public sector of the country for gaining benefit from Oil & Gas reservoirs. The case has been going on for about 30 years and the project is still in the construction phase. The fact that the project has several embedded projects and each project is in a different phase of life cycle helps to go beyond cross sectional research and adopt an ethnographical approach. Rehabilitation of local communities happened a few times within this project and sabotages are ransomly happening. The location of the project is beside some under developed parts of the country and therefore the results of the case study should be analyzed considering this environment.

**Case 2:** Located in south western of Iran, this project is located beside a small town with medium development level. Local community living near the projects are familiar with this type of projects since the first phase of that was constructed and executed more than 30 years ago and is still operating. However, the construction of the second phase has just been started and it worth noting that the second phase is much bigger than the first one and therefore the negative and positive influences on the surrounding environment and society are much higher.

Selecting the two cases, data collection started by contacting respective project organizations of each case. Interviewees from this group included project managers, contractors, consultants of social environmental impact assessment and communication managers. Then authorities of the nearby town or area were contacted to be interviewed. They were selected among city council members. Local news paper reporters were considered as the third sources of data for the purpose on this research. The interviewees were then coded to extract the influencing factors on negative/positive causalities which local communities consider when observing organization’s behaviour. Table 1 illustrates a full list of data collected from both cases.

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<tr>
<th>No.</th>
<th>Data Type</th>
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<tr>
<td>1</td>
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<td>Project Manager</td>
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<td>2</td>
<td>Interview</td>
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<td>3</td>
<td>Interview</td>
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<td>4</td>
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<td>EIA Consultant</td>
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<td>7</td>
<td>Interview</td>
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<td>8</td>
<td>Document from Organization</td>
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<td>10</td>
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<tr>
<td>13</td>
<td>Document from Organization</td>
<td>Organization's format questionnaire</td>
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Table 1. Qualitative data collected fro two cases
Discussion

All interviews performed within two cases were transcribed and coded based on Yin (2013)’s suggestions. The coded data were then classified into groups to highlight the emerged themes which built the construct of the modified theory. The results showed that there are three independent variables influencing the perceptions of local communities from project organization behaviour.

Based on the analyzed transcripts, transparency of project organization in project announcement, providing public accessibility to environmental social impact assessment reports, direct communication with local communities (email, phone, knock on the door) and decisions made about project and the goals and objectives of the project itself and values created for local communities can directly influence the causality made by local communities.

In both cases the projects were announced to the communities through local and national newspapers. However understanding the culture of community, it seemed that reading newspapers was not a normal habit of the public and therefore this method of communication was not adequate to achieve its target, that is announcing project to the communities. Selection of the suitable and appropriate mean of communication with local communities is a very important influencing factor of transparency.

Majority of Environmental Social Impact Assessment reports are classified as confidential reports, however, this can result in communities making negative perceptions from the behaviour of project organization.

“Local communities relate every negative environmental, social and cultural to our project. Even when the reason is not the project.” (project manager, case 1)

“After the construction of this project the number of illegal acts in the area has boomed. This is because of the project construction and its workers who are all around the town.” (Local community, case 1)

Comments like these two show that there is a need for complete transparency with local communities in order to achieve their trust from consequences of the projects. Otherwise, they will start to make negative judgements from the project and it’s outcome. Accessibility of local communities to assessment reports helps in building trust with them and results in local communities building more positive perceptions from project organization’s behaviour.

The second item is organization background, in terms of legitimacy and history of existence within the area or in a nearby area. This item has two sections. If an organization was active in an area for a long term, the causality will be based on the legitimacy of the organization made by people before, even former generations. This perception, whether positive or negative, can’t be changed easily. The second part is about organizations which have no background in the area, for them the majority of perceptions are made in a negative way, unless after years of transparency and gaining legitimacy, the perceptions be moderated.

Nature of activities to empower local communities is the third emerged concept. It covers all aspects of sustainability so it could be very broad. In cases of rehabilitation, organizations which constantly monitor the community lifestyle and try not to impose any change in the culture of the community face with more positive perceptions. While on the other hand, organizations ignorant of respecting the community’s culture and lifestyle, trying to “modernize” the community are prone to create values perceived as negative for local communities. Knowledge creation in particular and trying to empower communities to be capable of being involved in project activities have positive influence on causality made by locals.

As a part of social responsibility and sharing values with local communities, organizations try to build some infrastructures for local communities. In the reviewed cases they include roads, schools, shopping malls and parks. The analysis showed that the compatibility of created value with the cultural lifestyle and demands of stakeholders is essential to prevent value slippage (Lepak & Smith, (2007)). Otherwise the negative perceptions made by local communities increase:
“There is this mall built by project organization, we never use it, this is not compatible with our life style. It was also not even made for us. They built it for their own workers and they are those who use it. Not us.” (Local community, case 2)

The last emerged area, is project governance. The governance mechanism of the organization influences the decision made at the project level and organization level (project management or context) and decisions made about communications with local communities, transparency and resource allocations. This newly emerged area still needs further investigations to see exactly which parts of project governance can influence the causalities.

The modified model (till the date now) is illustrated in figure 3.

![Modified Model](image)

**Figure 3: Local community’s perception of values created for them (Modified model)**

**Conclusion**

Local communities are being influenced by complex projects while the majority of their perceptions about the changes brought to their life is influenced by project organization’s behavior. Consequently, these perceptions can be mediated and controlled by selection of proper governance mechanism, transparency, being socially, environmentally and economically sustainable. Additionally, the results of this qualitative theory building research revealed that activities and behaviors of project organization can make a history profile for them which can influence their legitimacy and reputation in long term.

Decision makers of organizations should be aware that they can influence stakeholders’ perceptions by the management style they adopt and academics are suggested to have a shift from focusing on project organization’s view point to stakeholder’s.

There was a model built in this research with case study method, in Iran and within Oil & Gas sector. This model can be tested in other sectors, within communities with different characteristics and as a comparison with the current research.

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