Social conflict management framework for project viability: Case studies from Korean megaprojects

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Abstract

Traditionally, conflict management in construction projects has focused on disagreement among internal stakeholders, such as employer, contractors, and subcontractors. However, as social consciousness and personal welfare demands increase, social conflicts among external stakeholders, such as local residents, local and central governments, and NGOs, have become more critical factors in enhancing project viability. In Korea, these conflicts have an impact of US $70 billion annually on social costs. To alleviate social conflicts and costs, this study aims to propose a conflict management framework based on twenty-two representative public construction projects. This study identifies and frames the various causes, impacts, and resolutions of conflicts through the case history of project viability. Through these findings, five types of conflict scenarios were derived: project termination, early mitigation, late mitigation, project enforcement, and late occurrence. Furthermore, this study suggests root causes, pathway of conflict propagation, and characteristics of each conflict scenario, which will assist project stakeholders in developing sustainable management for conflict solutions in line with each project's unique situation.
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1. Introduction

Since many external stakeholders participate in construction projects, including contractors, residents, governments, and non-government organizations (NGOs), social conflicts frequently occur. Public construction projects are now reaching megaproject size, therefore the structure of external stakeholders is becoming increasingly complicated, and the level of social conflict more serious (Li et al., 2013; Toor and Ogunlana, 2016). Despite the increasing importance of social conflict management, previous studies only focused on conflicts among internal stakeholders,

such as owners and contractors, contractors and subcontractors, employers and employees, and joint ventures (Awwad et al., 2016; Harmon, 2003; Leung et al., 2014; Mitropoulos and Howell, 2001; Ock and Han, 2003). As the national income level, social consciousness, and welfare demand increase, people become more concerned with their quality of life and values like equality, human rights, and a maturing civil society (Barkin and Lemus, 2014; Deller et al., 2001; Wong, 2001). And, concurrently, the social conflict among external stakeholders composed of governments, residents, and third parties, such as Non-Government Organization (NGO) or civic groups is worsening (Winch and Bonke, 2002). The Not-In-My-Backyard (NIMBY) and Please-In-My-Front-Yard (PIMFY) syndromes are representative cases. These social conflicts can have negative effects on a construction project, and may even lead to a project becoming unsustainable (Brockman, 2013). Further, one-way

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communication between stakeholders frequently makes providing solutions more difficult (Li et al., 2012, 2013).

Conflicts among external stakeholders have a significant impact on project performance as well as on social governance (Anderson and Polkinghorn, 2008; Jia et al., 2011; Kumaraswamy, 1998; Wang and Chou, 2003). In Korean construction projects, external conflicts have resulted in average delays of 3.6 years and cost increases of 290% (Park and Jung, 2015). In addition, social costs of US$ 70 billion are incurred annually from direct and indirect influences of managing social conflicts (Park et al., 2009). Despite these impacts, external conflicts in a construction project are considered only one of a project's various risk factors that occur during the construction phase, such as civil complaints and public resistance (Chan et al., 2010; Hastak and Shaked, 2000; Wang and Chou, 2003; Wang et al., 2016). A number of studies have focused on finding external conflict itself, and deriving conflict management strategies based on one or two conflict cases (Awakul and Ogunlana, 2002; Manowong and Ogunlana, 2008). These studies fail to identify, however, the pathways of conflict occurring in the whole project phase, including pre-project planning.

To manage conflicts effectively, conflicts must first be recognized, and alternatives systematically presented using a systematic approach. For this reason, this paper develops a typology of conflict scenarios among external stakeholders for public construction projects, which uncovers conflict factors and their root causes, pathways of conflict propagation, and characteristics of conflict scenarios. In particular, it is necessary to focus more on social conflicts among external stakeholders than on internal conflicts that arise in any construction project. Internal stakeholders who are contractually involved in the project, such as financiers and employers, also incur conflict. But, conflicts between the client and the contractor can be called a claim or a dispute. Although a claim and a dispute also affect projects, this research focuses on conflicts with significant social impacts such that big-sized public projects rather than private projects should be targeted.

The research proceeds in three parts, as illustrated in Fig. 1. Part one examines the retrospective case studies to identify the key conflict drivers. Twenty-two representative public construction projects were selected based on their social effects. Second, the progress of actual conflict-related incidents, phases of conflict, and the evolution of these conflicts are depicted by using a modified path diagram that can present the whole relationship of conflict drivers-events-propagation consequences. From a modified path diagram, five conflict scenario types emerged: project termination, early mitigation, late mitigation, project enforcement, and late occurrence. In part three, the features of these conflict scenarios are investigated, and implications from the five conflict scenarios are provided by matching Moore's (2014) conflict types, which classify conflicts into value conflict, relationship conflict, interest conflict, data conflict, and structural conflict based on conflicts' intrinsic properties.

2. Research background

2.1. Literature review

2.1.1. Overview of conflict among stakeholders

One main cause of conflict during a project involves the differences in stakeholder positions (Takim, 2009; Winch and Bonke, 2002). Larger and more complex projects involve more stakeholders, so understanding the causes of conflict and identifying solutions becomes difficult (Jaffar et al., 2011). One way to resolve conflicts is by evaluating stakeholder satisfaction (Li et al., 2013) and stakeholder interest (Brockman, 2013). Winch and Bonke (2002) define two types of stakeholders in construction projects, internal and external stakeholders. Internal stakeholders are contractually involved in the project on the demand side such as financiers and employers and on the supply side such as contractors, engineers, and architects. External stakeholders are typically composed of the public and private sectors without any legally recognized relationship, which include governments, local residents, and third parties such as NGOs or civic groups (Takim, 2009; Winch and Bonke, 2002). Progress has been made in the study of conflicts among internal stakeholders (Awwad et al., 2016; Harmon, 2003; Leung et al., 2014; Mitropoulos and Howell, 2001; Ock and Han, 2003). In contrast, there exist only limited studies on conflicts among external stakeholders, although the conflicts among external stakeholders more often involve social issues
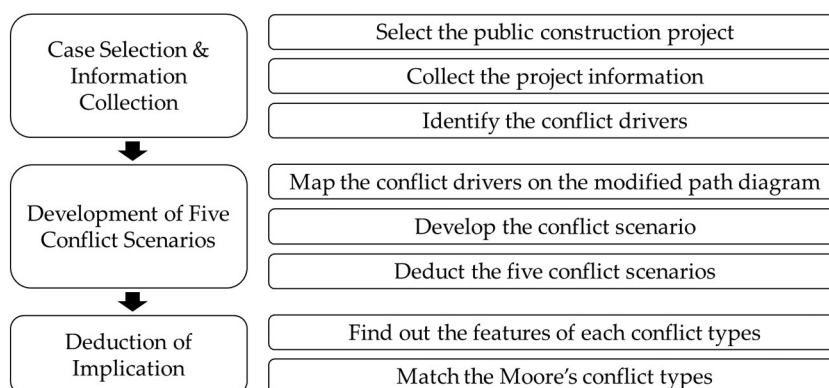

Fig. 1. Research process.