THE IMPACT OF INFORMAL RELATIONSHIPS IN GOVERNANCE ON PROJECT SUCCESS IN CHINESE SOFTWARE DEVELOPMENT

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Abstract

There is an ever-increasing discussion on project governance in recent project research, but relatively little attention has been paid to the informal relationships in the governance despite their importance in Chinese business affairs. In this study, we investigate the impact of informal relationships in governance on the software project success. An exploratory case study was used to explore what was meant by informal relationships and how these relationships impacted the project success involving formal governance. Three major determinants of informal relationships were identified: cooperation norms, trust and stakeholder relationship. A set of propositions for the impacts of the governance, including informal relationships and formal mechanisms, on the project success were also developed.

Keywords: Informal mechanism; Relationship; Project Governance; Project Success.
1 INTRODUCTION

Nowadays, Software industry becomes the growth industry in China with the rapid development of information technology and the popularization of IT application (Wang and Li 2006). The annual increase rate of Chinese software industry is expected to be about 22-25 percent in 2014. As a result, the success rates in software project and the critical success factors have been hot topics in both academe and industry (Abrahamsson 2013; Kendra and Taplin 2004; Qi and Chau 2012; Wang and Chen 2006).

Project governance, as one of the most efficient means to realize project success, has been paid more and more attention (Ahola et al. 2013). It falls into two primary classes - formal mechanism and informal mechanism (Luo and Peng 2014; Wang and Chen 2006; Zheng et al. 2008). The former comprises contractual incentives for clear and equitable risk allocation, including market transactions through formal contracts and depersonalized exchange (Luo and Peng 2014; Rahman and Kumaraswamy 2011). Informal mechanisms, as a component of the collective consciousness formed from national culture and an unwritten rule of the social game (Hofstede 2011), include non-contractual incentives to enhance mutual trust, enable cooperation, facilitate open communication and share knowledge. Chinese culture stresses the relationship of the project stakeholders in informal governance (Chen et al. 2012). Informal mechanism has been identified as one of the major factors to project governance (Hoetker and Mellewigt 2009). Despite its importance, the impact of informal relationships in the mechanism on project success has received limited attention. In this research, we propose to study the effect of informal mechanism on the project success. More specifically, we focus on the informal relationship in Chinese culture context. The following two research questions will be explored:

RQ1: How the informal relationship impacts the software projects succeed in China?

RQ2: Is there any relations between informal relationship and formal mechanism in ensuring success in software project management?

The next section presents the theoretical background to our research by a review of literature on the project governance and the relation between governance and project success. After the description of the method, the main factors of the informal relationships are distinguished. Then we investigate how the informal relationships affect the project succeed regarding the formal mechanism. Finally, a casual model is proposed and the findings, limitations and the suggestions for future research are discussed.

2 CONCEPTUAL BACKGROUND

2.1 Project Governance and Informal Mechanism

Project governance provides the structure, through which the objectives of the project are set, and the means of attaining those objectives are determined, and the means of monitoring performance are determined (Turner 2006). About the concept of project governance, there are two streams of research, one of which addresses project governance as a phenomenon external to any specific project, and the other views project governance as internal to a specific project, based on the transaction cost theory or agency theory (please refer to Ahola et al. (2013)). Project governance provides hybrid structures comprising formal mechanism and informal mechanism (Hellström et al. 2013; Müller 2009). Governance mechanisms provide the economic actors safeguards to protect their interests against opportunistic behaviour (Wathne and Heide 2000). Those safeguards include formal written contracts, relational norms, specific investments and pledges (Cannon et al. 2000; Heide et al. 2007; Wang et al. 2013; Zhang and Zhou 2013).
From the external point of view, formal mechanisms govern the project through written contracts and performance monitoring systems (Ahola et al. 2013). Contracts help to construct different governance structures for the stakeholders (Guo et al. 2013). Different contract types, as different governance structures, optimize governance costs in different types of organizations (Turner and Simister 2001). From the internal point of view, formal mechanisms govern the project by the way of controlling the project objects, which concerning the cost control, the schedule control and the scope control (Pryke 2005). Then in this paper, we adopted the governance structure i.e. contractual relations and the objects (time, cost and scope) controls to measure the formal mechanism of software project governance.

Contracting parties can manage and control the uncertainties through informal mechanisms, which cannot deal with by the formal governance especially in the early stages of a project (Hellström et al. 2013). Informal relationships are not governed by contracts, but by unwritten rules arising from cultures (Chen and Manley 2014). The Chinese term ‘guanxi’ (interpersonal connections or relationships) as a social and cultural asset in Chinese society is an avenue that individuals and firms can use to promote cooperation and efficiently govern relationships (Park and Luo 2001). But there are very few literatures on the study of the informal relationships in governance in Chinese software project. Then this research focuses on the informal relationships in studying the informal mechanism.

2.2 Software Project Success and Governance

Before we could begin our study, two concepts should be clarified, as (Savolainen et al. 2012). One is the distinction between sub-contracting software development versus in-house software development. Sub-contracting software means the supplier and the customer are from different organizations and there are contracting relationships between them. The in-house project is undertaken within the same organization. The other concepts distinguish bespoke software development from software product. Bespoke software is developed only for one customer whereas software products are produced for mass markets. For the former, the relationship between the project team and customers is more distinct and stronger than the latter (Cusumano 2004). Project governance provides some mechanisms to explore the relations within the stakeholders from different fields or organizations. So the sub-contracting software and the bespoke software development projects are our focuses.

Cost, Time and Quality have been considered as the project success criterion because they are included in the description of project management (Rubinstein 2007). But there are always many sceptics which think those are not enough to evaluate the project (Atkinson 1999; Baccarini 1999). Successful projects are more likely to emphasize project success criteria rather than project management success criteria (Jugdev and Müller 2005). Because the focus in this paper is the project governance, in our survey, project success maintains an open concept, which depends on the respondents’ own understanding.

Governance help the managers manage the project by fostering better understanding/communication among management team and other stakeholders. The importance of project success has become the central discussion among academicians and practitioners, but there is little research on the effect of the informal governance on the success, especially the informal relationship in Chinese software project. This requires a systematic investigation into the informal relationships, formal governance and project success. With the conclusions of the exiting literatures, we argue that what is important to investigate the project success and informal mechanisms from the managers’ perspective. In fact, on this question, the practitioners might have different opinions from researchers, especially the sense of maintaining relationship has been embedded in project stakeholders due to Chinese culture and its effect in the project governance has not received much attention from researchers. We adopt an exploratory case study to identify prominent factors of the informal relationships that impact the project success and then develop a theoretical model involving the formal mechanism.
3  METHOD

A multiple case study approach was employed to answer the research questions in consideration of the limited availability of literatures on the informal relationship in the software project. With the theory-building nature, a case study is useful for asking “how” or “why” questions about a contemporary phenomenon that is not easily separated from its context (Yin 2009). In examining the state of project management research, case study method is appropriate for understanding fundamental issues of projects and project organizations in the field lacks in-depth case studies, studies of processes and studies in real-time (Söderlund 2004). A multiple case design offers the researcher an even deeper understanding of cases than a single case, and the chance to test (not just develop) hypotheses (Miles and Huberman 1994). The ambition and the aim of this research were to understand the informal relationship and project success in Chinese software development and to explore the relationships among them and the formal mechanism.

Nine software development projects (P1-P9) were selected from six large-scale Chinese software companies (Company 1 to 3 two projects were selected for each company from the different fields and Company 4-9 only one for each one). Another criterion for the case selection was the software developed by the team should be both sub-contracting and bespoke ones. Project governance is undertaken by the managerial personnel. Hence, in our analysis, all the respondents were selected from the middle management and upper management in the projects, mainly including project managers and top managers, who could have a good understanding of the project governance and project success. In addition, other managers who were recommended by the team were considered. The data collection took around seven months.

The interview questions were developed in an open-end format with a specific rationale which performs a guide to keep the answer within the intended purpose. However, the questioner provided freedom for the respondent to express their opinion in each question. After the training session, we selected 21 interviewers (2 for each project except P1-P3 which provided 3 for each one). The interview was organized mainly around four questions: 1) to gain the objects of the project, what will you consider first, the formal written contracts or informal relationship management? why? And 2) what kind of informal relationship do you think is very useful or not? And 3) do you think the informal relationship between you and your partner could affect the results of the negotiation and even the terms of final contracts? And 4) what is the role of the formal contracts in building the informal relationship?

The home reference for coding procedure and analysis of the interview data was the work of Miles and Huberman(1994) and Krippendorff(2012). There are there concurrent activities for the coding and analysis: data reduction, data display, and conclusion drawing and verification. First, we coded the interviews in categories that indicated whether the respondents perceived informal relationship as useful or not. Then content analysis was used to further discover the factors and impact patterns of the informal relationship and the project success.

4  RESULTS

Each interviews lasted between 40 minutes and 70 minutes. All the interviews were audio-taped and observational notes were made. Demographic information on the samples is listed in Table 1. All the respondents considered their informal relationship as an important factor of the project success. This section presents the managers’ understand of the informal relationship and the significance of the informal mechanisms for the project success derived from the case study.

<table>
<thead>
<tr>
<th>Items</th>
<th>Age</th>
<th>Tenure</th>
<th>Gender</th>
<th>Education level</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>26-41</td>
<td>7-19</td>
<td>17 males; 4 females</td>
<td>13 undergraduate degrees; 8 master degrees</td>
<td>3 top managers; 9 project manager; 9 assistant managers</td>
</tr>
</tbody>
</table>
4.1 Informal relationship and the direct impact on project success

Relational-based governance emphasizes the role of mutual trust, commitment, and relational capital in the governance process (Lee and Cavusgil 2006). For Chinese managers, informal relationship meant not only the supportive and cooperative relationship but also an affectionate relationship outside work as well, with the latter usually more fundamental (Chen and Partington 2004). Three major determinants of informal relationship, as the most frequently mentioned factors, were identified: cooperation norms, trust and stakeholder relationship.

4.1.1 Cooperation norms

Cooperative norms are some expectations about cooperative behaviour, which are not through enforceable rules but through moral control internalization (Jap and Ganesan 2000). Relational norms are seen as an indicator for the harmony of both parties’ interest to reduce the risk of opportunistic behaviour (Davis and Love 2011). Cooperation through long term interactions can develop cooperative norms by which social sanctions may become more efficacious (Dyer and Chu 2000). All the reviewers expressed that informal cooperation norms are critical to the project success. For example, one employee mentioned:

- ...the written contract could not resolve all the problems especially some potential ones...before the formal agreement, market manager had discussed their requirement planning with them for three times and then developed a preliminary proposal...these steps were very helpful.

This cooperation norms can be deemed the special investments, which comprise all investment one party makes in transactions with a partner that would have limited value outside this focal relationship (Burkert et al. 2012; Oliver 1985).

Another employee commented:

- Facing the uncertainty, we and our partner would rather work out a new deal than hold each other to the original terms. ....

4.1.2 Trust

The most determinant factor in the success of cooperation is trust (Thorgren and Wincent 2011). In recent years, trust has become the focus of the study in organizational theory (Gulati and Nickerson 2008; Nooteboom 1996), especially in the informal governance (Calabrò and Mussolino 2013; Kim 2013; Müller et al. 2013). Trust is a willingness to rely on another party and to tack action in circumstances where such actions make one vulnerable to the other party (Griessmair et al. 2014). Trust can help the partners develop an informal mechanism of control and coordination (Zanini and Migueles 2013).

Two kinds of trust were discovered from those cases, initial trust and posterior trust.

Initial trust is understood as the partners’ confidence at the beginning of a cooperation relationship with no prior interaction history (McKnight and Chervany 2002). Initial trust can be considered as an individual expectation of the predictability and intentions of a system (Ogonowski et al. 2014). Although initial trust forms during the first encounter and within a short amount of time, it can still be very important to the project success. In fact, new stakeholders who lacking national reputation and impressive size can join the project team mainly relying on other partners’ initial trust.

- We had no complete contract, but we believed their original promise. It turned out that we were right. Long-term cooperation was built based on the confidence we had placed in them...
Posterior trust is the probability that the willingness of a party to be vulnerable to the actions of another party based on previous cooperation experience or the agreement developed by the two partners. Previous cooperation can help them assess their partners’ credit correctly and then give or maintain their confidence. Also as the collaboration agreement is reaching, trust will increase and then benefits will come into being: a reduction in transaction costs and the facilitation of the decision-making process (Del Campo et al. 2013).

And initial trust is helpful to the posterior trust and the following cooperation of the stakeholders. Under environment of uncertainty, they would rely on initial trust or posterior trust instead of controlling cooperation through formal governance mechanisms. One stated that,

- There is strategic partnership between us. …we establish a trust that can endure. I think that is the reason why our project is so smoothly.

This finding that trust includes initial trust and posterior trust is in line with the result of Griessmair et al. (2014) that trust can be differentiated into general trust and knowledge-based trust.

4.1.3 Stakeholder relationship

The reviewers focus on four kinds of stakeholder relationship: the client relationship, the superior relationship, the subordinate relationship and the peer relationship.

Project governance should focus on the relationship between project teams and their clients (Turner and Keegan 2001). Client relationship was the primary factor respondents mentioned when they were asked what kind of stakeholder relationship you thought very useful for the project success, almost all of them (100%). Good relationship between the team and the client facilitates the understanding of the users’ requirement for the team.

The relation between the superiors and the project team are significant for the in informal governance. Governance is usually implemented at different layers of the organisation. In China, subordinates who have a good personal relationship with their supervisors are usually treated as in-group members and provided favours (2013). Pleasant relationship between project team and supervisors help them communicate effectively and promote their cooperation.

- …I get along well with my boss. Our two families often have dinner together. I can understand his command very well, avoiding unnecessary rework, so my work always goes on smoothly. ...

From the cases, we found that a good working relationship with their subordinates and the relationship with the other managers (namely peer relationship) are also the critical key factors to the successful project management as well as the informal governance, with 20 out of 21 (95.2%) and 19 out of 21 (90.5%) respectively. The good interpersonal skills are essential for managers to management and control their project process (Kerzner 2013; Young 2013). Good relation with the subordinates is one of the most important employee-prompting methods as well as a performance management tool. And the harmonious relation with the other managers will make the team gain the required resources and obtain the project objects successfully.

- …Yes, it is also necessary for me to have a good personal friendship with my staff and the other managers. You know, some important information about the work could be obtained from your competitors. So it is not incompatible for me to make friends with my competitors...

4.2 Interaction between Informal Relationship and Formal Governance

From the above section about informal relationship distinguishing, the obvious conclusion is that the cooperation norms, trust and stakeholder relationship positively affect project success. All the respondents considered the formal mechanism had positive effect on project success. And 13 managers out of 21 (61.9%) expressed that the informal relationships were more important than formal mechanism to the project success.
Contracts are very important, but in our project processes interpersonal relationships are more important. In good relationships, most of the terms and conditions of the contracts can be revised, such as time, cost, and function and so on. ...

Another respondent, who had been working as a project manager for more than nine years, made the following statement,

... Aha, controls rules and contracts, just like the marriage certifications, unless there isn't another alternative, we would not resort to them. Many problems can be resolved in private. ...

Informal governance is seen as a substitute for complex and explicit contracts by serving to reduce the hazards of exchange entailed by formal governance (Yu et al. 2006). The changes of informal relationship can affect the building of the written contracts.

Cooperation norms complete written agreements in case a conflict arises between two parties (Ivens 2006; Kaufmann 1987). As Kaufmann (1987) argued, norms affect the parties’ ability to increase value and govern the process of value distribution. For example, one manager stated that,

- We entered into that kind of contract just because of our previous relationship investment, such as our technical support and equipments. ...

Trust has direct impacts on the choice of formal governance mechanism (Luo and Peng; Ogonowski et al. 2014; Zanini and Migueles 2013). Although formal control and trust represent two governance structures derived from distinctive disciplines, they may be substitutes in their function of safeguarding transactions (Wuyts and Geyskens 2005). That indicates that more trust was given in the cooperation, then less formal clauses would be needed. For example, one employee mentioned,

- With the big uncertainty of project outcome, our initial contract was very rough and simple, but we successfully completed the task depending on the atmosphere of openness and honesty between us and our client.

Good informal relationships between stakeholders increase the mutual understanding that can improve the efficiency of the formal governance mechanism.

For legal reasons, many cooperation rules must be established through the use of explicit contracts (formal documents) (Zanini and Migueles 2013), but over time most problems could be resolved relying on informal control such as relationships. Good informal stakeholder relationship is conductive to the implement of formal governance mechanism. One interviewee made the following statement,

So the informal mechanism affects the project success through the formal mechanisms.

- The relations help us reach agreements...We have been working in collaboration with each other for about four years. So the written contracts are just a formality for us. It is no exaggeration that the project plan can be executed very well based our relationship...

5 PROPOSITION DEVELOPMENT

![Proposed Research Model of Informal Relationship in Project Governance](image)
The following indications can be drawn from the case studies. First, informal relationship consist of cooperation norms, trust and stakeholder relationship. Second, formal mechanism and informal relationship have positive effects on the project success. Third, informal relationship affects on the project success through the formal mechanism. In the following section, we discuss each empirically identified factor and its relationship to project success, refer to related literature to validate our argument, and then offer specific propositions concerning project governance and project success. The proposed relationships are represented in Figure 1.

5.1 Formal Governance

Since the concept of project government was put forward, the researchers have followed with interest in the relationships between project government and project success (Abednego and Ogunlana 2006). Effective formal governance is the key to the project success (Guo et al. 2013). The formal governance includes decision making, contracts and governance structures determined by contracts (Mosavi 2013). Appropriate operation control process and formal governance mechanisms adopted by the project organization can promote project success through the organization playing right roles of the broker and steward (Turner and Keegan 2001). To measure the implementation of formal mechanisms, we define the implementation intensity of formal mechanisms as the strength of the contractual relations and the degree of completeness, i.e., the adequacy of the contract items. So we propose that,

- Proposition 1 (P1): The implementation intensity of formal mechanisms is positively associated with project success.

5.2 Informal Relationships

The implementation intensity of informal mechanisms is a greater predictor of project performance variance than that of formal mechanisms (Chen and Manley 2014). Relational norms have the important effect of reducing transaction cost and increasing cooperative performance by restrict the partner firms from acting opportunistically (Huang et al. 2014). The existence of trust between two partners can help to achieve the project goals by facilitating joint planning and problem solving (Claro et al. 2003), and creating stable and committed relationship (Yu et al. 2006). So the informal relationship mechanisms have a positive effect on the project success. The above discussion leads to the following proposition specifically relating to informal governance:

- Proposition 2 (P2): Informal relationship is positively associated with project success.
  - Proposition 2 (P2.1): Cooperation norm is positively associated with project success.
  - Proposition 2 (P2.2): Trust is positively associated with project success.
  - Proposition 2 (P2.3): Stakeholder relationships are positively associated with project success.

5.3 The Mediating Effect of Formal Governance

How do the formal mechanisms and informal mechanisms affect the project success? There are two different influence paths. The one is the formal mechanisms impact on the project success via informal mechanisms. Regulatory rules will sustain the long-term cooperation and strengthen their relationship, thus increasing the chance to achieve a more successful partnership which consequently increases project performance (Abednego and Ogunlana 2006). They focus on the informal relationship which impact on stakeholders’ expectations for the future cooperation. So this influence path is suitable for the works we call routine cooperation. The other one is the informal mechanisms improves the project performance successfully via formal mechanisms. The relationship among the stakeholders will create a path for the formal governance structure by which the team can complete the project successfully (Hellström et al. 2013). Poppo and Zenger (2002) pointed out that high levels of relationship governance could strengthen the cooperation of the stakeholders by increasingly customized contracts. This path adapts the project affairs, namely one-time jobs.
With the effect of Chinese culture, project managers will pay greater attention than Western project managers to building and maintaining personal relationships within the project team, compared to the task (Chen and Partington 2004). They will tend to be more reluctant to use a formal relation than informal relation. Even though in modern China contracts are important methods for business activities, the residual manifestation of deep-rooted cultural values makes the underlying relationship more important than the contract (Bian 2002). Good relationship contributes to the sign of formal contract and the implementation of the objects set by the contracts (Zhang and Zhou 2013). So in this context, we propose that the influence of informal relationship on the project success is mediated by formal governance.

With relation norms, firms prefer to formulate common goals by norms that are equally formulated in a rather rough and open manner under changing circumstances rather than to establish complete contracts (Ivens 2006). The use of suitable norms can reduce the complexity of formal contract and at the same time ensure cooperation. Relation norms are expected to promote the efficiency of formal controls (Licht et al. 2007), that is, can reduce the implementation intensity of formal mechanisms. Therefore, the following hypothesis is put forward:

- Proposition 3 (P3): Cooperation norm is negatively associated with implementation intensity of formal mechanisms.

Trust will substitute for contractual safeguards as a governance mechanism (Jiang et al. 2013). Considering that maintaining trust relationships involve some costs in terms of time and effort, trust will makes it unnecessary to specify or monitor contractual clauses (Yang et al. 2011). When there is a high level of trust, firms are less inclined to rely on elaborate contracts for specifying, monitoring and enforcing agreements, that is to say, applying formal control is unnecessary when there is trust (Huang et al. 2014). Through the development of norms and trust, exchange partners cooperate to offset the weaknesses of formal control (Ivens et al. 2009). Hence, we proposed,

- Proposition 4 (P4): Trust is negatively associated with the implementation intensity of formal mechanisms.

Harmonious relation is conductive to long-term cooperation between the project team and the clients. Good personal relationship between stakeholders could eliminate most of the problems in cooperation. The inconsistent implementation of the law and the ambiguity of property rights in China make the use of relational governance mechanisms even more critical for businesses (Yu et al. 2006). Good relationships can help the stakeholders understand the clients’ demand and the contract items, and then facilitate the implementation of the formal mechanism. Thus, it is hypothesised that:

- Proposition 5 (P5): Good stakeholder relationship is positively associated with the implementation intensity of formal mechanisms.

### 5.4 Control variables

In this research, the important factors in informal relationships influencing project success are identified from the view of Chinese managers’ view rather than from existing literature. There are several other informal governance factors which can affect on the project success. A project needs a special leadership structure to integrate stakeholders. Leadership in the informal mechanism is an important factor of the project success (Walker and Lloyd-Walker 2011). Team workshops are widely used to generate the vision for project delivery and develop the principles for the commercial arrangement (Chan et al. 2009; Davis and Love 2011), as can promote effective coordination for the project team. Project governance emphasizes the cooperation, joint decision making and information sharing. Communication system provides effective communication tools and rules (Chen and Manley 2014). Then leadership, team workshops and communication system are controlled for the influence of the informal mechanisms on the project success while focusing on the relationship from the view of Chinese culture.
DISCUSSION

Informal relationship, embedded in individual daily life and business activities, is deeply affected by Wu Lun of Confucianism, which has influenced Chinese society for over 2500 years (Cheng et al. 2013). Project governance has received increasing attention in recent years (Garland 2009; Müller 2009). However, despite the importance of informal relationships in Chinese business affairs (Chen and Partington 2004), very few studies have examined how the informal relationship affects the project success under Chinese culture. In this research, we presented a case study of the impact of the informal relationship in project governance on the success of Chinese software projects. A set of propositions was further developed based on the discussion in order to generalize the observations from the case study.

Three critical informal relationships are identified from empirical investigation: cooperation norms, trust and stakeholder relationship. These informal relations, as well as the formal mechanism, have positive effect on the project success. And also the study found that cooperation norms and trust both negatively affect the implementation intensity of formal mechanisms. The formal mechanism, including contractual relations and object controls, mediate the relation between informal relationship and project success. The casual model can be tested in future research and be used as a starting point to study related topics. In practice, our study demonstrates what is meant by good relationship governance and that adequate cooperation norms and trust will help project managers or top managers build suitable formal governance structure to realize the project objects.

The finding of this study are, of course based on a limited sample of manager from Chinese software companies and the subjects are context-specific, which might prevent some otherwise important factors from being identified in this research. Although we didn’t explain what is project success, and just leave the definition as the respondents’ comprehension to avoid the subjective interference. We argue that our purpose is not to provide a complete list of influence factors to the informal mechanism. Rather, our focus is the informal relationship relying on the Chinese culture. Further research is warranted to test this proposition.

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References


Baccarini, D. "The logical framework method for defining project success.".


Poppo, L., and Zenger, T. (2002). "Do formal contracts and relational governance function as substitutes or complements?" Strategic management journal, 23(8), 707-725.