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Managing the "Becoming"

An Institutional View of Resource Integration Misalignment in Projects

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1 Introduction

1.1 Motivation

In a business world of constant change and disruption, it is increasingly common to deliver products and services through temporary organizations such as projects. In the face of the Project Economy (PMI, 2020), organizations are experiencing "a fundamental paradigm shift in which projects are no longer adjacent to operations but primary to how work gets done, and problems get solved" (PMI, 2020, p2). In ensuring on-time, on-quality, and on-budget delivery of products and services, business performance is mostly dependent on how well the temporality, dynamic, and complexity in the operational process is managed. According to the Project Management Institute's Pulse of the Professions, 75% of executives surveyed indicated that operational efficiency would be a high priority for resource allocation over the next years (PMI, 2017). In 2018, "9.9% of every dollar was wasted due to poor project performance" (PMI, 2018, p2). The primary cause of project failure is a lack of discipline for strategy implementation (PMI, 2017), which indicates a significant gap between strategy formulation and the day-to-day execution.

Projects as the most representative temporary organizations are essential in navigating changes and resources in a dynamic environment. Over the last decades, project management has developed a number of tools that can be successfully applied to combine knowledge, skills, and technologies to improve project execution. However, when comparing the typical sources of project difficulties examined by Morris and Hough (1987) with the reported most important factor responsible for project failure in the 2017 PMI Pulse of the Professions, most of the factors have been dominating the project challenges since decades ago. Due to the rapidly changing business environment and intensified competition that requires immediate adaptability (Meyerson et al., 1996), it is vital to know how to ensure the operation and performance of the temporary systems.

1.1.1 Importance of research in practice

Temporary organizations are known to provide flexibility for industries, but little is known about their implications for how work is accomplished and coordinated (Bechky, 2006). To ensure the successful deliveries of projects and ultimately business strategies, it is essential to understand the project's internal process, which is primarily formed by the actors' interactions, in terms of what the major obstacles are and how the effects of the obstacles can be minimized.

Different from permanent organizations, temporary organizations like projects, rely less on the permanent structure and hierarchical coordination but interactive and reciprocal coordination to accomplish tasks within a limited period of time with a group of new team members. The nature of the project's temporariness indicates an inherent tension between projects' flexibility and the wider context's institutional stability and permanence. In addition, as temporary organizations are often embedded in permanent organizations (Sydow and Braun, 2017) and wider environment, the multilevel embeddedness further indicates project members' diverging institutional prescriptions which will influence the actual behavior of project members in their daily operations in terms of what to do, how to do and when to do. However, current literature rarely provides empirical insights and approaches to handle tensions or conflicts in projects' day-to-day operations. Therefore, it is critical to find out solutions to tackle tensions and conflicts in projects.

This research takes projects as an empirical focus and investigates qualitatively the institutional misalignments revealed from micro-level interactions in project processes. It is believed that,

actions are the "enactment of the subjective and inter-subjective realities of individuals and groups of individuals" (Packendroff, 1995, p325) and are influenced by the institutional settings, in which individuals are embedded. Due to the institutional misalignments among project actors, it is noted that the agency of individual actors is essential in creating a foundation for smooth coordination. A set of four categories of 27 enabling practices are distilled from the qualitative data as practical managerial implications to tackle the potential misalignments in the future.

1.1.2 Importance of research in theory

Project research is still relatively young and lacks an epistemological foundation or strong theoretical basis (Turner et al., 2010). Traditional project research typically focuses on the hard system, such as tools and techniques of the project, and aims at the execution of a defined task. A more open and soft system perspective is increasingly applied to take contextual issues of projects into consideration. The contextual perspective "highlighting the importance of the exterior environment of temporary organizational forms for interior processes, is one of the major accomplishments in temporary systems research in recent years" (Bakker, 2010, p481). But how the interior project processes interact with wider institutional issues is a major weakness of current theorizing (Söderlund and Sydow, 2019). Scholars urge for researches about the missing "actuality" of projects (Cicmil et al., 2006), particularly how the boarder systems are filtered, decoded, and translated (Suddaby, 2010) into the daily interior project process. Institutional perspective as a comprehensive contextual perspective is applied in this study. Though the neoinstitutional perspective incorporating normative and cognitive dimensions has attracted some attention in project research, institutions so far are mostly taken as constraining. But the active role of reflexive agents in decoding and translating the multilevel institutional prescriptions during the

dynamic interior processes of a temporary organizational setting is acknowledged as critical (e.g., Windeler and Sydow, 2001; Suddaby, 2010; Sydow and Braun, 2017; Danwitz, 2018).

In view of the theoretical fragmentation in current temporary organizations, this research first presents an integrative project research framework based on a review of current literature, then develops a new ontology of temporary organization by drawing implications from the institutional theory and the service-dominant logic. The temporary organization is seen as an episode of a service ecosystem, in which all social actors are bundles of resources. Institutions are emphasized as coordinating the resource integration process in such an episode of a service ecosystem. With a dialectical approach, this research empirically unveils the dimensions of institutional (mis)alignments resulting from the multilevel institutional embeddedness by exploring the micro-level of interactions in project processes.

1.2 Research question and methodology

This research aims to explore how the completion of temporary organizations such as projects can be improved to ensure better business deliveries by seeking to answer the following questions:

- 1. What are the institutional misalignments in temporary organizations such as projects?
- 2. How can institutional misalignment in projects be reconciled?

Qualitative methodology is taken to examine the aforementioned research questions in terms of "what" and "how". Qualitative methodology is known as a suitable technique to understand the

empirical situation and capture the variability in details. Two rounds of semi-structured qualitative interviews are conducted for data collection.

1.3 Research outline

Chapter 1 introduces the motivation of the research project, research questions, and the outline of the whole dissertation.

Chapter 2 reviews the development of project research and provides an integrated framework of the current project research. An overview of coordination mechanisms of projects is provided to reveal the management of interdependencies in temporary settings.

Chapter 3 identifies critical issues that are missing in current related academic works as the research gap, which lays the ground for the research question of this work.

Chapter 4 illustrates the conceptual framework developed. A new ontology of a temporary organization is proposed.

Chapter 5 presents the appropriateness of qualitative methodology applied in research with a detailed explanation of research design, data collection, and analysis process.

Chapter 6 presents the qualitative research findings based on two rounds of qualitative interviews.

Chapter 7 discusses significant contributions to both academia and managerial implications, and reviews the limitations of this research and indicates future research directions.

2 Literature Review

2.1 Introduction

In response to the rapid changes in the social environment and societal needs served by organizations, projects as temporary organizations have been playing an increasing role in delivering business objectives by mobilizing resources and activities. However, the project researches still lack an epistemological foundation or a strong theoretical basis (Turner et al., 2010). The emergency of the dominant evaluative approach to project management dates back to the 1950s and 1960s (Shenhar and Dvir, 1996), despite few industries noted before the Second World War was already project-intensive (Minzberg, 1990). Project-related researches for both academic knowledge and practical advice are pluralistic and also fragmented. Due to the nature of project temporariness, which indicates an unstable operational environment and dynamic and multi-dimensional process, it is common to see project failures in various aspects. Most traditional literature on projects is likely to focus on a single function of the project (Shenhar and Dvir, 1996). Not until recently have scholars gradually moved away from the "lonely perspective" (Engwall, 2003) to a more system perspective. This chapter gives an overview of the variation of project typologies and paradigms in project research with a presentation of an integrated framework.

The nature of project temporariness requires a non-traditional coordination mechanism with a more interactive and reciprocal approach. Structural perspective and relational perspectives have been applied by earlier studies to capture the pattern and the quality of dyadic exchanges in projects. From a system perspective, projects are usually not only embedded in a permanent organization but also embedded in the broader networks and ecologies. The simultaneous embeddedness in a

multi-level environment encompasses the existing differences in institutional requirements across levels. Project actors, involved in the temporary settings may also have disparate intentions, unmatched expertise, and conflicting demands. To respond to the complexity and uncertainty in tasks, resources, and broader context, substantial coordination is needed. The new institutional perspective acknowledged not only the multi-level embeddedness of the project but also the tensions between institutions' constraining effects and the agency of the actors. Coordination as managing interdependencies between activities (Malone and Crowston, 1994) are, in principle, actors-centered. The analytical units, such as the action, actor, and practice, are increasingly gaining attention in project research.

2.2 Project as temporary organizational form

2.2.1 Typologies of projects

"Project" itself has been labeled in various ways such as transitory organization (Palisi, 1970), ephemeral organization (Lanzara, 1983), disposable organization (March, 1995), temporary organizational form (Bakker, 2010), etc. The notions of project-related forms range from projectized organization (Youker, 1977), short-term project (Faulkner and Anderson, 1987), inter-organizational project (DeFillipp and Arthur, 1998), project-based organizations and multi-project firms (Hobday, 1998; Gann and Salter, 2000; Söderlund, 2004; Whitley, 2006), project-oriented organizations (Turner et al. 2007), projectified industries (Ekstedt, 2009), project network (Lundin et al., 2015; DeFellippi and Sydow, 2016), etc.

Due to the recent considerable expansion of project research and the pluralism of project forms, the approaches of distinguishing projects have attracted some attention in the literature (e.g., Wheelwright and Clark, 1992). Shenhar and Dvir (1996) proposed a two-dimensional first-order construct with system scope (assembly, system, array) and technological uncertainty (low, medium, high and super) as two dimensions to frame projects. Söderlund (2004b) noted two lines of project research, namely the "management of projects" and the "management by projects" (Gareis, 1989), and created a framework of project researches according to the nature of project types (see Table 2-1) with project and firm as the two dimensions. In his framework, the projects span from a single project (project-centric) to multiple projects, and from single-firm (firm-centric) to multiple-firms. While the "management of projects" usually considers a single project as an object aiming at the successful performance of the project, the "management by project" approach considers the project-oriented company as an object aiming at the survival of a project-oriented company (Söderlund, 2004b). Jones and Lichtenstein (2008) proposed that types of inter-organizational projects can be classified as single project organizing, multi-party organizing, network alliances, and constellations. Dille and Söderlund (2011) drew on prior project researches and reviewed various notions of projects by project size (e.g., major, mega, grand-scale projects), empirical context and industries (e.g., infrastructure, biotechnology, film-making, construction projects), as well as organizational conditions (e.g., inter-organizational, global, virtual, co-located projects). Despite the diversification of project classifications and typologies, none of them has developed into a standard framework in general.

2.2.2 Paradigms in project research

2.2.2.1 From traditional to current paradigms

Investigations of projects have recently become both "theoretically sophisticated and methodologically pluralistic" (Sydow and Braun, 2017, p16). Some scholars take project management as a profession (e.g., Morris, 1994) to study, while others take project-based organization as a research focus to examine the organizational processes, behaviors, and social interactions that occur in these temporary organizational settings (Bakker, 2010). According to Dille and Söderlund's (2011) observation, the current dominating views build on either the role of universal tools, techniques, and designs for project success, or the critical factors for project design in terms of structure and processes.

In traditional project management research, the classic notion views a project as just a tool or a means for attaining ends at higher levels in the system. However, this notion has been criticized as being technocratic, normative, and rationalistic (Packendorff, 1995; Morris et al., 2011; Svejvig and Anderson, 2014). The metaphor taking the project as a tool, according to Packendorff (1995), implies the perspective of the user only (e.g., the owner and the manager of the project). It links naturally to the techniques and methods used for project planning and control to organize resources and activities. Until the beginning of the 1970s, the traditional perspective of research on project was very much orientated towards techniques for the management of time to enable the planning and scheduling of activities in a single project. The research, therefore, was largely project-centric

(see Levene, 1996; Lundin and Söderholm, 1995; Packendorff, 1995; Jugdev et al., 2001). This

stream intends to focus on the responsibilities of the single firm, as well as the factors determining project success (Morris, 1994; Pinto and Prescott, 1990). Concepts such as Work Breakdown Structure (WBS), the Cost and Schedule Control Systems Criteria (C/SCSC) or the earlier version of Earned Value Management (EVM), and the Program Evaluation and Review Technique (PERT) (Morris, 1997), and DuPont's Critical Path Method (CPM) (Turner et al., 2013) are often the focus of research interests. Söderlund (2004b) identified two major streams of literature within the traditional project management research, namely the "optimization school"

and the "critical success factor school". The primary of most studies was to investigate along the "project lifecycle in construction, automotive, power generation and transmission, aerospace, and defense industry" (Söderlund, 2004b, p5). However, this traditional project-centric stream of research was opposed by Packendorff (1995) in simply researching projects as goal-fulfilling subsystems rather than as temporary organizations in terms of culture, conceptions, relations to the environment, longitudinal processes, etc. It was also criticized by Shenhar (2001) as largely staying with the general aspects of project management without devoting much to contingency studies.

A trend to rethink project management, which is essentially taking the concept of "temporary organization" to examine the various aspects of projects raised by Svejvig and Andersen (2014), has indicated the shift of the project paradigm from a task perspective to an organizational perspective. The task perspective aims mainly at the execution of defined tasks, while the organizational perspective aims at the value creation as a desirable outcome. According to Gareis (1989) and Söderlund (2004b), the view of "management by projects" incorporated not only the management of a number of single projects, but also the network of projects performed simultaneously by a company and the management of relationships between the projects, the companies, and the wider context. In other words, the concept of "management by projects" broadened the span of traditional project management research and incorporated system aspects of the environment in which the project is embedded.

Scholars have acknowledged the importance of the interrelationships between projects and their environments in different aspects (see Grabher, 2001; Ekinsmyth, 2002; Sydow et al., 2004; Soda and Bizzi, 2012). At the general level of theorizing, the concept of "project ecology", according to

Söderlund (2004b), exemplified not only the interrelationships between projects and their environments but also the role and functioning of projects. The world has become a "projectified society" (Lundin and Söderholm, 1998). Projects and other time-limited organizational structures are not just used for handling complex and extraordinary undertakings but accounted for an increasingly larger share of the ordinary organizational operations (Hobday, 2000; Turner, 1999). At an operational level of theorizing, topics such as transaction costs, the relationship between actors and resources, the role of contracts, and opportunistic behavior became common in the research of inter-firm projects. Meyerson et al. (1996) noted the role of structures in creating swift trust in project-intensive environments. DeFillippi and Arthur (1998) saw a project as a learning episode for each participant, industry, and occupational community, based on which the relationships between projects can be sustained. For future research opportunities, Söderlund (2004b) specifically called for examination of the relationship between the permanent (firms, institutions, networks) and the temporary (projects), as well as where the key competencies of a single project reside (e.g., in networks, individuals, institutions). Söderlund (2013) recently further classified project management research by the distinction between task and organization, and the distinction between content and process. He noted that, so far, project research has paid much attention to task-oriented processes and "what-questions", but little attention has been paid to the organization-processes and "whenquestions" (Söderlund, 2013).

Table 2-1 A framework for the analysis of project research

(Adapted from Söderlund 2004b)

	Firm			
		Single	Multi	
	Single	Project Management	Inter-firm projects	
		(Focal issues: planning, organization and success factors)	Project carried out under several authority systems;	
			(Focal issues: transaction costs, contracts, and client relationships)	
Project		Development from project planning to temporary organizations	Development from contracts to relationships	
	Multi	Multi-project firms	Project ecologies	
		(Focal issues: coordination among projects, resource allocation between projects, portfolios and programs management; learning and innovation in project-based organizations)	(Focal issues: sociology and economic geography of projects)	
		Development from matrix organizations to innovation and learning in project- based firms	Development from projects to the interrelationships between projects and their environments	

2.2.2.2 The rise of the soft paradigm

Notably, much attention has been paid to the tools and techniques in procedures and administrative tasks. However, an increasing number of scholars have turned to the integration of social aspects in recent project research, such as soft skills of project managers, the reflective abilities of leaders to overcome the narrow and shallow aspects (Crawford et al., 2006). A shift from a dominating focus on tools and techniques towards the social and behavioral elements of the management of projects is notable (Leybourne, 2006).

Soft systems methodology (SSM) was nevertheless not new and initially proposed by Checkland (1972) to define and resolve problems that often have unclear or contradictory multi-objectives. It extends the ideas of hard systems' optimization to the modeling of messy real-world problems with sense-making as the focus (Turner et al., 2010). From Neal's (1995) study using a soft system approach in managing project change, Winter and Checkland's (2003) examination of the main difference between hard and soft systems, Crawford and Pollack's (2004) identification of harness and softness dimensions of projects, to the suggestion of Atkinson et al. (2006) to manage sources of uncertainty with sophisticated organizational capabilities such as organizational culture and learning, a growing role of the soft paradigm in project research is well acknowledged (Winter, 2006; Pollack, 2007).

Bennis and O'Toole (2005, p100) emphasized that "the things routinely ignored by academics on the grounds that they cannot be measured - most human factors and all matters relating to judgment, ethics, and morality- are what makes the difference between good business decisions and bad ones". As Small and Walker (2010) claimed, the project complexity is socially derived from differences that arise from human plurality. Williams (2007) stressed the need to integrate people's interactions with their relationships, communications, and power relationships. Moreover, Söderlund (2013, p123) mentioned the hard side of project management needs to be supplemented with the soft aspects, which deal with the associated human factors that "speak about expectations, feeling, emotions, optimism, biases, power conflicts, trust, and learning". Similar to the hard and soft paradigms, the distinction between task and social perspectives, which is often found in the team literature, has so far only been briefly touched upon in project research (Söderlund, 2013). Based on the work of Winter et al. (2006) and Maylor (2006), Svejvig and Andersen (2014, p279) identified six overarching paradigms, namely "contextualization, social and political aspects, rethinking practice, complexity, and uncertainty, the actuality of projects, and broader conceptualization" in project management research. Notably, most of the categorized paradigms encompass soft elements.

2.2.2.3 **Projects as temporary organizations**

Projects are considered to be a prevalent form of temporary organizing in the contemporary economy and society (Grabher, 2002; Kenis et al., 2009; Sydow, 2017). Some industries even have a long history of organizing through temporary organizational structures (Bakker, 2010) such as R&D (Katz, 1982), film production (DeFillippi and Arthur, 1998; Jones, 1996), theatre (Goodman and Goodman, 1976), construction (Eccles, 1981; Scarbrough el al. 2004b), sporting events (Lowendahl, 1995), and other industries such as software development, advertising, biotechnology. consulting, emergency response (Lanzara, 1983), fashion (Uzzi, 1996), television (Sydow and Stabler, 2002), and complex products and systems. In many cases, researchers tend to define and apply notions of temporary organizing broadly. Though there is considerable variation in the types of temporary organizational forms (Bakker, 2010) and labels such as temporary systems, temporary groups and, most notably, projects that have been studied in the current body of research, they are in essence investigations on temporary organizations (Janowicz-Panjaitan, 2009). Projects are deemed to be one of many "tangible manifestations of temporary organizations" (Kenis et al., 2009, p60). As Turner and Müller (2003, p7) defined, "a project is a temporary organization to which resources are assigned to undertake a unique, novel and transient endeavor managing the inherent uncertainty and need for integration in order to deliver beneficial objectives of change".

It is acknowledged that the first publication on temporary organizing was by Miles (1964) on "temporary organizational systems" and later promoted by Palisi's (1970) ground-laying work about the transitory-permanence dimension of organizing. Academic interest in "temporary organizational systems" was further popularized by Goodman (1972 and 1976). Goodman and Goodman (1976, p494) noted that, in traditional management view, "core technology starts with having a well-understood set of tasks before proceeding to allocate tasks for the most effective use of resources". However, these conditions are mostly missing in a temporary system. In the early stage, projects or temporary groups are often regarded as "temporary systems" in the literature (see Table 2-2) and they are later re-positioned as "temporary organizational form" (e.g., Lundin and Söderholm, 1995; Grabher, 2004) and "temporary organizations" (see Table 2-3). The use of the concept of "temporary organization", according to Söderlund (2004), has attracted increasing attention since 1994. While some scholars such as Kenis et al. (2009) applied the label of "temporary and non-temporary organizations", some others used the label of "temporary and permanent organizations" (e.g., Ekstedt et al., 1999). However, in project literature, there is no clear distinction between the concepts "temporary systems", "temporary organizational form/structure", or "temporary organizations". It is also common for scholars to apply these concepts interweavingly (e.g., Jones and Lichtenstein, 2008; Bakker, 2010). Though Ackoff and Emery (1972) once related "temporary systems" to "ideal-seeking organizations", and Lundin and Söderholm (1995) discussed temporary organizations as systems for implementation. Very recently DeFillippi and Sydow (2016) mentioned "project networks" as (more than) "temporary systems". Nevertheless, temporary organizations, as the social systems created from the process of temporary organizing, are designed to "disintegrate within a predetermined time frame" (Bakker

et al., 2016, p1705). The temporariness is the defining nature distinguishing a temporary organization from other forms of organizing.

Table 2-2 Definitions of temporary systems

Authors	Definitions		
Miles (1964,1977)	Temporary systems are time-limited systems, which are to be terminated by advance agreement when certain states, events, or points in time have been reached. Temporary systems also perform important compensatory/maintenance functions for permanent systems. Most of all, they appear to be the primary mechanism for inducing change in permanent systems, since they can focus and release energy ordinarily bound by existing structures.		
Bennis (1965)	Ad hoc or temporary groups are systems formed for a limited purpose, and they tend to include members who have never worked together before and who do not expect to work together again. Similarly, since they are complex, they represent either diversity of functions, such as finance, engineering, and marketing, or of skills, such as chemistry, electronics, and aerodynamics.		
Thompson (1967)	Temporary groups often work on tasks with a high degree of complexity, yet they lack the formal structures that facilitate coordination and control.		
Morley and Silver (1977)	Temporary systems are systems that are limited in duration and membership, in which people come together, interact, create something, and then disband.		
Keith (1978)	Temporary systems are structures of limited duration that operate within and between permanent organizations.		
Goodman and Goodman (1976)	A temporary system (or organization) is defined as a set of diversely skilled people working together on a complex task over a limited time period, and the focus is on the task problem. Temporary systems or organizations seem to be created in response to four concurrent problems: the task is complex with respect to the interdependence of detailed task accomplishment; the task is almost unique and no regularly specified procedure to cope with it; the task is usually of critical or significant importance to the organization; the task is defined in terms of specific goals thus setting a time limit to the task.		
Meyerson et al. (1996)	Temporary systems depend on an elaborate body of collective knowledge and diverse skills from participants, who have limited history working together and working again in the future, who are part of limited labour pools and overlapping networks and are assembled by a contractor to enact their expertise on the tasks, which have deadline and are nonroutine, complex, consequential and involve interdependent work. Temporary systems often entail high-risk and high-stake outcomes, yet they seem to lack the normative structures and institutional safeguards that minimize the likelihood of things going wrong.		

Table 2-3 Definitions of temporary organizations

Authors	Definitions
Packendorff (1995)	A temporary organization is an aggregate of individuals temporarily enacting a common cause. Temporary organizing processes, i.e., the deliberate social interaction occurring between people working together to accomplish a certain, inter-subjectively determined task, can be intra-organizational, occurring within an existing, non-temporary organization, or inter-organizational, a joint collaboration among a number of organizations.
Lundin and Söderholm (1995)	Temporary organizations are defined by tasks, time, team, and transition. They are normally created in order to fulfill a special purpose and almost always motivated by a need to perform specific actions. Action is the essence of temporary organizations. The team forms around the task as hand and the time available.
Grabher (2004)	Temporary organizational forms should be regarded as inextricably interwoven with an organizational and social context that provides key resources of expertise, reputation, and legitimization.
Bechky (2006)	Temporary organizations contrast with traditional hierarchical organizations as they are governed through networks of relationships rather than by lines of authority. Temporary organizations are organized around enduring, structured role systems whose nuances are negotiated in the situation.
Whitley (2006)	Temporary organizations are separate legal and financial entities set up for a specific project and dissolved upon its completion.
Kenis et al. (2009)	A temporary organization forms for the purpose of accomplishing an ex ante- determined task that has a predetermined termination point. Inter-organizational temporary organization is a group of two or more non-temporary organizations collaborating toward the accomplishment of a joint task with the duration of the collaboration explicitly and ex-ante fixed either by a specific date or by the attainment of a predefined task or condition. These actors had not known each other, they were expected to collaborate temporarily and work intensely to attain clear objectives, without a clear structure of hierarchical authority.
Bakker et al. (2016)	Temporary organizing captures the activities and practices associated with collectives of the interdependent individual or corporate actors who pursue exante agreed-upon task objectives within a predetermined time frame. Temporary organizations are the process of temporary organizing that creates, i.e., formal organizations or other types of social systems (e.g., temporary alliances) that are designed to disintegrate within a predetermined time frame.
Burke and Morley (2016)	Temporary organization is a temporally bounded group of interdependent organizational actors, formed to complete a complex task.
Sydow and Braun (2017)	Temporary organizations typically rely on teams of individuals that collaborate closely.

There is a common understanding that the finite duration and the awareness of termination among the temporary organization members will alter the behavior of the actors involved and, consequently, the functioning and outcomes of the entire temporary organization (Kenis et al., 2009). Scholars have started from different perspectives and explored various aspects of temporary organizations. Lundin and Söderholm (1995) took an action-oriented approach to introduce a framework built upon four basic concepts "time, task, team, and transition" as a demarcation to characterize the temporary organization and to understand why and how certain actions are undertaken at certain stages. They were one of the first to conceptualize a temporary organization. Similarly, Bakker (2010) presented another set of four themes which are "time, task, team, and context" with emphasis on the importance of the enduring or wider social environment of temporary organizational forms based on prior studies (e.g., Grabher 2004; Sydow et al. 2004; Booth et al. 2002; Engwall 2003; Bechky, 2006). According to Bakker (2010): time in temporary systems is envisioned as linear while as cyclical in an enduring organization; teams are more taskfocus and less interpersonal relationship-oriented; the complexity of finite tasks can vary between routines and one-off type of tasks, and the focus in the temporary system is often on action rather than decision making, and the embeddedness of temporary system in its firm-level or wider-social context will impact the according project-based learning and innovation. Kenis et al. (2009) focused on inter-organizational temporary organizations to analyze the impact of temporariness on the structural aspects of temporary organizations, namely the configuration of organizational actors with respect to the proximity (e.g., spatial, organizational, and technological) (Knoben and Gössling, 2009), the internal structure of the temporary organization (Raab et al., 2009) as well as resources dilemma (Bakker et al., 2009) and the relationship between complexity and effectiveness (Oerlemans and Meeus, 2009). Burke and Morley (2016, p1240) categorized five broad categories

relevant to the configuration, governance, and function of temporary organizations, namely "individual/team attributes and interior processes of temporary organizations, temporary organization task attributes, tensions between the temporary organizations and the permanent organizations, networks and organizational fields, and performance and outcomes of temporary organizations".

Despite a few attempts on creating typologies and taxonomies of temporary organizations (e.g., Raab et al., 2009; Whitley, 2006; Turner and Cochrane, 1993), a very recent typology proposed by Bakker et al. (2016, p1706) rests on the notion that "organizational forms differ not only in their degree of temporariness but also on whether temporariness is orchestrated dominantly by either agents or structures". In their framework (see Table 2-2), two types of outcomes of temporary organizing are "structure-centered" and "actor-centered" (Bakker et al., 2016, p1706): temporary, ephemeral or disposable organizations and semi-temporary organization are dominated by the temporariness of the structure thus "typically attributed to organizing practices, temporary employment, and contract work", while semi-permanent organization result from staffing practices that are usually considered as part of human resource management in permanent organizations.

(Adapted from Bakker et al. 2016)

Structure\Actor	Temporary	Permanent
Temporary	Temporary, ephemeral or disposable organizations	Semi-temporary organization
	Individuals or organizations come together for a limited time and confined task	Capture projects and events within more permanent organizations
	 Examples: inter-organizational project (Jones and Lichtenstein, 2008) temporary alliance (Bakker and Knoben, 2015) 	 Examples: Project-based organization (PBOs): Permanent organizations supported by temporary systems Project-supported organizations (PSOs): Organization's business is mainly carried out in projects Project networks (PNWs): created and sustained by a series of projects embedded in networks of relationships
Permanent	Semi-permanent organizations;	Permanent organization (not related to temporary organizing)
	Strongly depend on temporary employment or contract work	The classic permanent organizational form which is typically not related to temporary organizing efforts

In addition to seeing temporary organizing as form, Bakker et al. (2016) presented another two approaches that regard temporary organizing as "process" and "perspective". Understandably, the process of temporary organizing may create temporary organizations. Seeing temporary organizing as a "process" indicates the interplay of structure and agency. It suggests a process of reflexive structuration in which agents (individual or collective actors) are capable of monitoring the process, the practices and the outcomes, but at the meantime, the actions of actors are coordinated, enabled and restrained by rules, routines, and resources (Bakker et al., 2016). While

taking temporary organizing as a "perspective" means applying a different logic of organizing (Powell et al., 1996). So far, the logics of temporary organizing have used different theoretical lenses, from the process, institutional, practice perspectives (Bakker et al., 2016) to behavioral, systemic, or the critical perspectives (Burke and Morley, 2016). Svejvig and Andersen (2014, p283) especially suggested that "research should offer or suggest alternative methods, perspectives, and ways to rethink practice, e.g., through education or reflective practice". Their urge for rethinking practice may due to the rapid growth of education programs in project management during the last three decades to support the need for competences of project participants. However, the interest of investigating practices is often placed on the project managers (e.g., Turner et al., 2012) when bringing people into consideration. For example, there are many studies of leadership skills of project managers (Briner et al., 1996; Pinto and Trailer, 1998; Müller and Turner, 2005 and 2007) and studies that exam the development from project managers to reflective practitioners (e.g., Louw and Rwelamila, 2012). However, project managers as leaders have a long reputation for being highly task-oriented rather than people-focused (Bryman et al., 1987; Turner and Müller, 2005). As Morley and Silver (1977) noted, the determinant of the success of a temporary organization depends on the manager's ability to orchestrate between idea-generating and decisionmaking periods appropriately. A single focus on the practices related to project managers is very much narrow and biased since the outcome of projects relies on the collective value creation of all the participants in the same temporary setting.

The variety of theoretical lenses has generated a wide range of interpretations. Therefore, the research in temporary organizations remains highly fragmented (Burke and Morley, 2016), though there are a few endeavors to develop theories of temporary organizing to explain the existence of temporary organizations, in terms of in what respects they differ, and how they are produced,

reproduced and transformed (Bakker et al., 2016). Lundin and Söderholm (1995) attempted to develop a theory of temporary organization by stressing the difference in the role of time in a temporary organization and the permanent firm. Turner (2007, p1) tried to develop a theory of project management, and defined the project as "a temporary organization to which resources are assigned to do work to bring about beneficial change".

2.2.3 Schools of thought in project research

To systematically derive premises from different perspectives in project research, scholars have identified various schools of thought in project research (Turner et al., 2013; Anbari, 1985; Söderlund, 2002; Bredillet, 2004; Kwak and Anbari 2008). Comparing to the Anbari's (1985) five schools, Söderlund (2002) and Bredillet (2004) distinguished between seven schools. Turner et al. (2013, p10) proposed a comprehensive set of nine schools of thought, covering from "Optimization School, Modelling School, Governance School, Behaviour School, Process School, Contingency School, Success School, Decision School, to Marketing School" (see Table 2-5). Drawing on Turner et al. (2013), these schools will be introduced based on their similarities in this section.

According to Turner et al. (2013, p5), modern project management "started with the adoption of optimization tools, especially in the early days in the 1950s, and focuses on the tools or approaches for task arrangements and executions". In line with the Optimization School, the Success School of thought took projects as business objectives and emphasized the key role of planning and control, as well as the factors and criteria that could influence the likelihood of project success (e.g., Pinto and Slevin, 1987; Morris and Hough, 1987; Andersen et al., 2004; Cooke-Davies, 2002; Jagdev

and Müller, 2005). The Decision School considers the "ambiguity surrounding the decisionmaking" process and the information processing in projects (Turner et al., 2013, p19).

With a system thinking, the Modelling School saw the project management as a total system and study the interactions among project components (Williams, 2002). Different from the hard systems approach at an early stage focusing on optimization, the soft systems methodology originally proposed by Checkland (1972) aimed at clarification and sense-making of the project within its environment (Turner et al., 2013). The interactions among people and their relationships, communications, and power relationships were called to be further considered in Modelling School (Williams, 2007; Pollack, 2007; Winter, 2006; Alderman et al., 2005). Similarly, taking a dynamic view of projects, Contingency School acknowledged various project typologies and categorizations, and the uniqueness of every project. Therefore, Contingency School adapted approaches and processes according to different project settings.

Governance School, according to Turner et al. (2013, p14), took the project as "an interfacial legal entity between the parties", for example, a principal-agency relationship (Jensen, 2000) between the client and contractor. Therefore, contract-related topics have become the foci of studies for several decades. With scholars such as Lundin and Söderholm (1995), Midler (1995), Turner and Müller (2003) taking projects as a temporary organization, Governance School investigated more on the interaction between parties and the mechanism of governance of projects (Turner and Keegan, 2001; Rentz, 2007; Garland, 2009; Jamieson and Morris, 2007; Winch, 2006) as well as the roles and responsibilities in projects (Winch, 1989; Turner, 2004; Gerwin and Ferris, 2004; Turner et al., 2013). "Action" instead of "decision" being seen as the center in the temporary organization (Lundin and Söderholm, 1995), Behaviour School took Governance School's premise and regarded a project, being a temporary organization, as a social system. Themes such as organizational behavior, team building and dynamics (Eckes, 2002), project leadership (Briner et al., 1996; Pinto and Trailer, 1998; Müller and Turner, 2007), project capabilities (Davies and Brady 2000), power and politics (Pinto, 1996), communications (Turner, 2005), cross-functional cooperation (Pinto et al., 1993) and human resource management (Huemann et al., 2007; Turner et al., 2007) came under the radar of project research. Winch (2002) saw the project as a vehicle for processing information and reducing uncertainty in the process (Turner et al., 2013), which may lead to better decisions and ultimately better project performance. In the late 1980s, the perception of a project as a process or "an algorithm that leads from problems to the desired future state" (Turner et al., 2013, p19) emerged (see also Gareis, 2005; Meredith and Mante, 2006; Turner, 2009). Turner (2009 and 2013) further defined processes for managing scope, organization, quality, cost, time, risk, project lifecycle, and management lifecycle. The process approach suggested that different processes have to be considered for different project categories (e.g., Shenhar and Dvir, 2004; Crawford et al., 2006; Bendoly and Swink, 2007).

In the Marketing School, according to Turner et al. (2013), Söderlund (2002) and Bredillet (2004), a project is mostly regarded as a billboard, and project research focused narrowly on identifying stakeholders and client needs, as well as the multi-interaction among stakeholders both internally and externally (Foreman, 1996; Pinto and Rouhainen, 2001; Thomas et al., 2002; Cova and Sale, 2005). This stream of research is assumed to originate from the network aspects of projects or the industrial marketing relationships, especially in project-based industries (Söderlund, 2004). A group of scholars focused on the proactive approaches for large-scale project marketing activities (Söderlund, 2004; Cova and Holstius, 1993). However, the direction of Marketing School has relatively a disconnection with the tremendous growth in project management research, and the linkage between corporate strategic goals and project performance were undervalued by some academics (Turner et al., 2013).

Table 2-5 The nine schools of project management research

(Turner et al., 2013, p9)

School of Project Management	Field of Management Study	Anbari (1985)	Söderlund (2002)	Bredillet (2004a) (translated from French)	Kwak and Anbari (2008)
Optimization School	Operations Research	Management Science School	Optimization School	Optimization School	Operations Research
Modelling School	Management Science	(Management Science School)			Performance Mgt/ Quality Mgt
Governance School	Governance	Functional School	Transaction Cost School	Transaction Cost School	Engineering/Contracts/ Legal
Behaviour School	OB and HRM	Behaviour School	Behavioural School	Organizational School	OB and HRM
Process School	Operations Management	Systems School			Technology/Innovation
Contingency School	Contingency Theory	Contingency School	Contingency School	Contingency School	-
Success School	Strategy Management		Critical Success Factor School	Critical Success Factor School	Strategy
Decision School	Information Management	(Management Science School)	Decision School	Decision School	IT/IS
Marketing School	Marketing		Marketing School	Marketing School	-

From the summary of different schools of thought by Turner et al. (2013, p9), it is notable that the process school with soft system and social perspectives makes a difference among all the categorizations. Only Anbari (1985) and Kwak and Anbari (2008) recognized process views in their classification of "systems school" and "technology and innovation research". Interestingly, Turner et al. (2013) discussed much about the interaction among Governance School, Behaviour School, Success School, Decision School, Modelling School, while Process School was relatively less mentioned.

2.2.4 Level of analysis in project research

Project research has evolved from focusing on "operational optimization" and "critical success factors" to become increasingly contingent, behavioral, relational, processual, and multi-level (Söderlund, 2013; Bakker et al., 2016). As Söderlund (2004 and 2013) suggested, research should no longer only be about projects, but also about the context of projects, about the teams, the people in projects, and about the firms that govern and drive projects. Going beyond a single project as the research focus has driven the emergence of themes such as the personal network (Wittel, 2001), project network (Sydow, 2009), project ecology (Grabher,2002b), project capabilities (Davies and Brady, 2000), epistemic community (Grabher, 2004), projectified society (Lundin and Söderholm, 1998), etc. With the pluralism of themes and concepts, the levels of analysis were called to be made more explicit (Sydow et al., 2004).

Many different ways have been developed by scholars to elaborate on the levels of project analysis. Bakker (2010, p468) identified the study of the organizational and social context of temporary organizations as two levels: "the firm level (i.e. the organizations in which the temporary system is to a more or lesser extent embedded) and the wider social context (including industry, epistemic community, and enduring personal networks)". Söderlund (2013, p121) classified more specifically, from "the individual level, team level, the project level, the program/portfolio level, the firm level, to the sector level", which may refer to the collaborations across industries, project ecologies, and even nations. Söderlund (2013) also provided a simple distinction between macrooriented issues (e.g., societal aspects of projects, antecedents, consequences of projectification, and firm-level issues) and micro-oriented issues (e.g., various activities, rituals, the everyday routines, the individuals, the relationship between people, personal chemistry, and meetings in projects). Danwitz (2018, p529) recently differentiated the inter-firm project researches by the "contextual sphere (e.g., issues regarded external to a project, such as its institutional, environmental or inter-organizational context), project sphere (e.g., issues concerning organizational and operational aspects), and individual sphere (e.g., issues that individual project
participants are concerned)". The focal stages may range from "project antecedents (aspects and activities which precede the execution of a specific project), project management (subdivided into planning, governance, and interactions) and project outcomes (after completion of project work)" (Danwitz, 2018, p529).

However, it is far from sufficient to focus on only one level. Very often, the activities at the project level go beyond the normal scope of the single project team. Since projects are usually embedded in permanent organizations, and organizations and inter-organizational networks are embedded in wider organizational fields, the layers that support the embeddedness may "offer additional rules (e.g., industry standards) and resources (e.g., regional knowledge)" that members of projects can draw on (Sydow and Braun, 2017, p12). This nature of multiple embeddedness of projects determines that the project research approach has to consider multi-level effects in the project process. More multi-level studies, either below till the individual organizations co-working in the project or above till organizational field, industry, and wider institutional environment (e.g., Lundin et al., 2015; Sydow and Braun, 2017), as well as the interactions across levels, are expected. The importance of cross-level interaction between the temporary organizational form and its firm-level context, and wider social context has been emphasized in many prior studies (e.g., Grabher, 2004; Sydow et al., 2004; Booth et al., 2002; Engwall, 2003; Bechky, 2006; Alderman and Ivory, 2010).

2.2.5 An integrated framework of project research

Despite the heterogeneous ontologies and interweaving paradigms on projects in current literature, it has been common to assume that topics related to projects, project management, and temporary organizing are fairly homogeneous (Turner et al., 2010; Turner et al., 2013). By integrating the works from the recent publications of leading scholars in project research (e.g., Söderlund, 2004 and 2013; Packendorff, 1995; Sydow et al., 2004; Turner et al., 2013; Bakker, 2010; Bakker et al., 2016; Sydow and Braun, 2017), this research first attempts to present an integrated framework of the current project research (see Figure 2-1).





It is notable that, in general, traditional project studies are more project-centric and techniqueoriented therefore focusing on implementation and management issues such as planning, scheduling and controlling (Turner et al., 2013; Söderlund, 2004; Levene, 1996; Bakker, 2010; Bakker et al., 2016). While modern project research incorporates more social perspective and systems viewpoint of project organizing, which encompasses more human factors. This shifting away from the mechanistic model (Burns and Stalker, 1961) and task-oriented models may due to the rapid changes of the environment and the societal needs nowadays served by organizations. The rapid changing of societal requirements creates unstable conditions and operational environment for temporary systems. The prior strategy with careful planning of both the structure and the processes might only be efficient in the traditional stable view of the environment.

An increasing consideration of social dimensions and human-related factors with contingent perspective is notable. The dynamic process in projects, therefore, becomes more behavioral and processual. The project is gradually viewed towards a process of solving problems rather than as complex tasks to be implemented. An increasing strong process view (Langley, 2009) of temporary organizations may drive the "being" ontology of projects further to the "becoming" ontology. For process theorists, the process thinking is sensitive to "the context, interactivity, experience, and time, and it acknowledges non-linearity, emergence, and recursivity" (Langley and Tsoukas, 2010, p6). Everything that is becoming "has no existence apart from its relation to other things", therefore, the attention of the becoming ontology is often paid to "verbs, activity, change, novelty, and expression" in the project process (Söderlund, 2013, p125). Söderlund (2013, p126) further suggested a need for process theorizing to examine "how managing happens in time and how managers transcend the past to create the future" instead of seeing projects running in clock-time as a core issue for project research.

Studies often focus on actors establishing, maintaining, and discontinuing temporary structures such as projects or events in more permanent systems like organizations, inter-organizational networks, or fields (Bakker et al., 2016). In this research, it is proposed that the multi-level embeddedness of projects is reflected in the interior process of the project and exemplified in the behaviors of project actors. Though often, members in temporary organizational forms are assumed to have never worked together before and do not expect to work together again (Bennis, 1965; Bakker, 2010), it is not deniable of the existence of also repetitive temporary formation

(Schwab and Miner, 2008; Davies and Brady, 2000). The vital issue so far is that, despite diversified typologies and paradigms in project research, very little is known about the "actuality" of project-based working and management (Cicmil et al., 2006) and how the interactions are shaped in the temporary organizational form (Bakker, 2010). A substantiality of understanding what occurs in projects is still missing (Blomquist et al., 2010).

2.3 Coordination mechanisms in temporary organizing

2.3.1 Forms of coordination

2.3.1.1 Project-based coordination

Notably, a few studies have seen the project itself as a form of coordination between organizations. For example, from a contingent perspective, Galbraith (1973 and 1977) encouraged organizations to make sure of more lateral and flexible coordination strategies, for example, offered by teams and projects, especially under conditions of great complexity and high uncertainty. Jones and Lichtenstein (2008) posited that inter-organizational temporary organizations under conditions of uncertainty, and schedules, routines, mutual adjustment, and deadlines had been the techniques for coordinating interdependent activities. More generally, as Söderlund (2013, p119) stated, projects exist because "the coordination or the linkages between activities needed to complete, and a certain task is so complex that it requires a particular kind of temporary organizational mechanism". Projects have also been taken as tools to enable cross-functional integration (Ford and Randolph, 1992). Projects as "events" may even shape the network of collaborative activities among organizations in a field (Kenis and Knoke, 2002) and influence how this network evolves (Doreian, 2002).

2.3.1.2 Interaction-based coordination

Coordination is "managing dependencies between activities" (Malone and Crowston, 1994, p90). It is about who is going to do what, when, and with whom (Berkel et al., 2016). If a project is regarded as a coordinating tool, the various motives of the individuals participating in the project, and the individuals outside the project are neglected (Packendorff, 1995). As discussed in the prior section, temporariness as the finite time limit on the existence (Janowicz-Panjaitan et al., 2009) is the common characteristic of temporary organizations. Temporariness causes time pressure for aspects such as resourcing, information processing, coordinating decision-making, etc. among project members and even with stakeholders that are both directly and indirectly involved in the project. Because of the short duration, Lindkvist (2005) argued that project members have not enough time to develop a high level of shared knowledge and understanding, and are forced to cut to the chase, reduce the extent of socializing and quickly engage in cooperation based on "swift trust" (Meyerson et al., 1996). This situation has important implications for project planning, coordination, and decision-making. According to Goodman and Goodman (1976), in traditional organizational theory that focusing on the "mechanistic model" in a reasonably stable environment, coordination is accomplished by planning rather than interaction (Perrow, 1970), and the organizational interdependence is sequential rather than reciprocal (Thompson, 1969). A temporary setting is a relatively unstable and changing environment with a high level of uncertainty in tasks, teams, resources, goals, and wilder social context. Therefore, the coordination issues among temporary organizational members, who are experiencing more interaction and reciprocal interdependence, become crucial for the whole organizational processes.

Temporary organizations are posited to be less hierarchical, less bureaucratic, and less mechanistic than non-temporary organizations (Bryman et al., 1987; Meyerson et al., 1996). It requires more interpersonal and less formal processes of coordination (Bechky, 2006; Kenis et al., 2009). Due to the more interpersonal-based coordination requirement in temporary settings, even different types of projects and project partner relationships may require different coordination approaches to ensure project implementations. For example, Sabherwal's (2003) study shows that in the buy-supplier project relationship, buyers attempt to move coordination modes to more informal mode, while suppliers tend to move towards formal modes of coordination. The research from Lavikka et al. (2015) reveals that jointly contracted projects might face lower coordination requirements among the parties compared to other types of projects.

2.3.2 Contextual perspective of coordination

As temporary organizations like projects are often embedded in permanent organizations and admittedly also a wider environment, the contextual factors have a significant impact on the functions and internal processes of projects. According to Danwitz (2018, p533), contextual factors can be "environmental uncertainties, institutional forces, and cultural aspects". Some contributions are notable in the existing literature in identifying the structural, institutional, social and temporal embeddedness of temporary organizations that affect the temporary organizational interior processes (e.g., Engwall, 2003; Grabher, 2002b, 2004a; Schwab and Miner, 2008; Jones and Lichtenstein, 2008; Windeler and Sydow, 2001; Sydow and Staber, 2002; Bakker, 2010; Husmann et al., 2020).

2.3.2.1 Social perspective of coordination

Jones and Lichtenstein (2008) examined inter-organizational projects and believed that projects as socially embedded, which comprises structural embeddedness and relational embeddedness. Social embeddedness, according to Granovetter (1985), refers to the frequency, duration, and pattern of dyadic interactions for an individual or organization.

Structural embeddedness is understood as "the extent to which a dyad's mutual contacts are connected to one another" (Granovetter, 1992, p35). In other words, structural embeddedness reveals the pattern of interactions. Whitley (2006) and Burke and Morley (2016, p1240) raised that it is the "separation, clarity, stability, repeated enactment, and reproduction of role structures that drive coordination" in temporary organizations. From a structural perspective, a role is a bundle of tasks and norms and the behaviors of expectations (Bechky, 2006, p6). This role-prescribed interaction not only coordinates the activities of a temporary organization but also sustains the role structures across temporary organizations (Bechky, 2006; Whitley, 2006). In line with this understanding, Jones and Lichtenstein (2008) claimed that organizational actors must have clarity about their roles as a prerequisite to create shared understandings. Though for inter-organizational projects, when organizational boundaries are crossed, the roles may be co-defined by the organizations and remain at least contradictory in the project (DeFillippi and Sydow, 2016). Since the coordination in inter-organizational projects cannot rely only on hierarchy (Sydow and Braun, 2017), typological roles emerge to ensure a mutual understanding (Bechky, 2006) in temporary organizing. Bechky (2006) further clarified that temporary organizations, though lack permanent structures such as stable rules and hierarchies that are often associated with bureaucratic mechanisms for coordination, but still have both industry structures and new practices that coordinate and control activity. Burke and Morley (2016)

recently also recognized the role structures-based (rather than person-based) interaction as one of the prominent coordination mechanisms and team attributes in the interior processes in temporary organizations.

Relational embeddedness is based on shared understanding and relations (Jones and Lichtenstein, 2008). According to Granovetter (1992), relational embeddedness reveals the degree of dyadic exchanges when the exchange parties show their certain level of trust, confiding, and informationsharing (Uzzi, 1997). Seeing temporary organizations as unstructured and unstable, Meyerson et al. (1996) introduced a theory of "swift trust", which proposes that in temporary systems, groups work on a kind of trust that swiftly emerges presumptively, rather than on the traditional view of trust that built slowly and gradually over prior experiences and relations. According to Meyerson et al. (1996, p166-192), swift trust has both "cognitive and normative components": the cognitive components of swift trust involve "early trusting beliefs", while the normative components as providing "social proofs" and "fail-safe mechanisms" that can regulate and reinforce this trust and "avoid exaggerated confidence". This concept was supported by, for example, Bakker (2010) who stated that issues of vulnerability, uncertainty, and risk can be resolved through swift trust rather than the regular trust in enduring organizations. However, Jones and Lichtenstein (2008) doubted the swift aspect of trust and questioned that, given such trust is evolved from prior relations, how it can be regarded as swift? They (2008, p250) suggested instead that, since "interdependence and collaboration are central to inter-organizational projects, trust may not be based on interpersonal attraction (e.g., swift trust) but rather on Zucker's (1986) institutionalized trust". There are other studies having identified trust as being helpful for coordination, such as the "self-interested trust" and the "socially orientated trust" as introduced by Lyons and Mehta (1997, p243). They distinguished the two types of trust: "self-interested trust" is essentially

future-orientated in terms of the expectation of one's trustworthy transaction partner without opportunistic behavior in also future transactions, while "socially orientated trust" is past-oriented and is generated through obligations, social and family networks.

However, according to Grabher (2002a, p210), "swift trust" is emerging as "stabilizing category-driven trust" that actors can deal with one another "more as roles than as individuals", and it unfolds only in contexts in which "categories have clear boundaries". Trust among project members, in this case, is mostly built on either the skills codified in certificates or the codes of conduct of a particular profession or community. In this sense, it can be argued that structure and relational embeddedness are explaining the same coordinating mechanism but from different perspectives.

2.3.2.2 Institutional perspective of coordination

2.3.2.2.1 The multi-level institutional embeddedness of projects

With a broader contextual perspective, institutional embeddedness refers to the interconnections between a population and its institutional environment (Baum and Shipilov, 2006). In a Project Society (Lundin et al., 2015), the importance of institutional implications of managing and working in temporary organizations are usually revealed via forms of projects. Engwall (2003, p803) claimed that "no project neither takes off from nor is executed in an organizational vacuum, though the impact from history and context might be of different kinds, of different magnitudes and in different project situations". Grabher (2002a, p206) explored the interdependencies between projects and the firms, the interrelation between projects, networks, localities, and institutions that "feed vital sources of information, legitimization, reputation, and trust" for project-based organizing. He found that projects are intensely affected by institutional regimes they are operating in. Morris and

Geraldi (2011) advocated that project management needs to go beyond thinking at only technical level and strategic level, to further understand what happens within the project, and to think at the institutional level about the broader environment that the project is situated in. Miller and Lessard (2000, p115) researched large engineering projects and revealed that "the presence of coherent and well-developed institutional arrangements is the most important determinant of project performance". Very often, adjustments have to be made due to the shifting expectations of institutional actors.

Scholars from network perspectives (e.g., Windeler and Sydow, 2001; Sydow and Staber, 2002) emphasized dynamics and ambiguities of institutional processes and the role of "institutional thickness" (Sydow and Staber, 2002) in project networks. Project networks, which is constituted by project relations connecting individuals and organizations that cut across projects (Sydow, 2009), depending on the "general provision of institutional resources, in particular the collective structures of signification and legitimation that support the coordination of project activities" (Sydow and Staber, 2002, p225). According to Danwitz (2018, p529), project networks or project business networks (Artto and Kujala, 2008), are "latent inter-firm networks between independent firms to carry out a temporary task, in which coordination and behaviors are influenced and facilitated by prior experiences and future expectations beyond an individual project". Participants who do not know each other working in the temporary settings are most likely operating according to shared collaborative rules contained in industry macro-culture (Jones and Lichtenstein, 2008). Similarly, the project network routines (Sydow, 2009) could represent the repetitive patterns and practices surviving beyond single projects. If taking a broader concept beyond the notion of the network, it will be the project ecologies that involved inter-firm linkages, complex

latent geographical, and inter-personal ties (Grabher, 2004). Different stages in the projects may be governed by different types of network relations (Soda and Bizzi, 2012).

Burke and Morley (2016, p1247) suggested that the temporary organization needs to be viewed as "embedded simultaneously within multiple contexts, each of which recursively interrelates". This multi-level embeddedness perspective was also explicated earlier by Grabher and Ibert (2006, p253) that project members are "simultaneously embedded in the webs of obligation and loyalty to the temporary team, the firm and even to their own". Furthermore, projects are likely to be at least loosely coupled to a multitude of organizational and trans-organizational contexts (Sydow et al., 2004; Dille and Söderlund, 2011). Due to this multiple embeddedness of inter-organizational projects from their parental or focal organization up to the broader fields, Sydow and Braun (2017) explicitly called for a complete analysis of such a system with a multi-level approach, in particular when focusing on inter-organizational project dynamics.

Though the temporal embeddedness (Jones and Lichtenstein, 2008) across horizontal periods (past, present, future) of projects was mostly taken-for-granted in temporary organizations and projects research, its interplay with the social embeddedness across vertical levels (project, firm, network, field, and wider systems) can be viewed as exemplified in the temporary organizations' multi-level institutional embeddedness, because the past experience can be ingrained in knowledge, habit, and value, while the future can also be largely predicted from the currently established rules, norms, and cultural cognition. Lundin and Söderholm's (1995) understanding of the institutionalized termination of projects reveals the distinction between permanent and temporal organization. They argued that "if a temporary organizational does not have to be dissolved at some point, the organization has ceased to be a temporary organization and becomes

institutionalized to continue in a more permanent form" (Lundin and Söderholm, 1995, p449). So far, some studies have examined temporal embeddedness, such as Söderlund's (2002) "temporal coordination" and Burke and Morley's (2016) "time-based controls". Some focus particular on actor's response to different timing, duration, rhythm and pace (Perez-Nordtvedt et al., 2018), and pacing techniques (Clark, 1985; Gersick, 1994) such as "chronological pacing, event-based pacing, and entrainment-based pacing" (Jones and Lichtenstein, 2008, p236). Schultz and Hernes (2013) recently also suggested a set of relevant capabilities in need to be able to weave the past, present, and future.

2.3.2.2.2 Institutional differences and tensions in coordination

As Scott (2001) stated, the existence of multiple and conflicting institutional requirements is part of the very foundation for managing and organizing. Temporary organizations span across institutional fields and "draw deliberately or unconsciously on a range of institutional sources" (Grabher, 2002a). Dille and Söderlund's (2011) concept of "inter-institutional project" highlights the institutional complexity in projects, and project participants usually need to respond to multiple institutional affiliations they belong to. The project's inner life is dependent on the level of deviation between the practices applied within the project and the knowledge base, as well as the institutional structure of its organizational context (Engwall, 2003).

On the one hand, institutions guide the organizing in projects. "Every action must be undertaken with respect to eternity" (Weick, 1974, p499), and the focus on " eternity is the basis of the durability of institutions" (Kenis et al., 2009, p3). Bechky (2006) noted that coordination of inter-firm projects in creative industries is guided and enforced by institutional logics in shared work practices. Even the critical ingredients for the emergence of "swift trust" were provided by institutions in terms of conventions, norms, and regulations (Meyerson et al., 1996). It can be understood that, once the shared understanding and rules for collaboration become institutionalized, trust will be created and the interdependent activities will be carried out as expected based on the institutional mechanisms (Zucker, 1986; Bachmann and Zaheer, 2008; Jones and Lichtenstein, 2008). On the other hand, institutions constraint the organizing in projects. The notion of the durability of institutions also explains why organizations did not always reach the intended purpose. Strong institutional forces such as regulations or industry standards are regarded as impeding flexibility in organizing inter-firm projects (Kadefors, 1995; Weck, 2005).

From many prior inter-organizational project studies, it is noted that some of the cooperation and coordination difficulties are "not necessarily due to their inter-organizational character but rather their institutional differences" (Dille and Söderlund, 2011, p483). Dille and Söderlund (2011) suggested the notion inter-institutional project encompassing "multiple logics with conflicting, or at least diverging, prescriptions for behavior" (Martin et al. 2017, p104), and the diverse time norms that organizations engage simultaneously will also produce a variety of contradictory temporal expectations and diverging agency. Husmann et al. (2020) noted that, different organizational identities that provide institutional frames of reference may also lead to institutional misalignments among project partners. In addition, projects may be operating under varying rules and requirements on different levels (Lundin and Söderholm, 1998). Maaninen-Olsson and Müllern (2009, p329) noted that "institutional distance in space could arise due to cultural and institutional features inherent in both physical and functional spaces". The temporary organization "transverses as it strives continuously towards settlement and truce among diverging institutional requirements," described by Dille et al. (2018, p674). The institutional differences in certain kinds of projects might also create institutional transaction costs such as money and time costs, relational friction, reputation damage (Orr and Scott, 2008), and substantial coordination costs (Dille et al., 2018).

It is evident that projects in many cases involve different organizational actors with disparate goals, overlapping areas of responsibility, and differing levels of expertise (Jones and Lichtenstein, 2008). In the very recent publications, tensions, or misfits resulting from the diverging institutional difference has started to attract attention in project research. Dille and Söderlund (2011) used the concept of temporal fit/misfit to analyze the conflicting time norms among organizations within the same project. Sydow and Braun (2017, p6) conceptually noted that the "organizational underpinning of projects accounts for conflicts of interest between various stakeholders, different roles, and the need for information and communication systems in order to prevent opportunism". Dille et al. (2018) examined a large infrastructure innovation project that facing temporal requirements induced by the conflicting temporal institutional

2.3.3 Diverse analytical units of coordination

Regardless whether the pace of the coordination mechanism is set by role structures or institutions, the units that realize the function or the purpose of coordination tend to be actor-centered. Scholars so far have focussed on various analytical units on coordination in temporary organizations, mainly projects.

2.3.3.1 Action

Some scholars regarded "actions" as the results of decisions (e.g., Thompson, 1967; Kreiner, 1992), while some others stressed that the surrounding conditions such as organizational culture, institutional norms and the like influence actions in ways that are not only due to the decision-makings (Meyer and Scott, 1992; Lundin and Söderholm, 1995). According to Lundin and Söderholm (1995), "action," as opposed to "decision", is the element that is central to a theory of the temporary organization. Packendorff (1995) noted the role of actions, which are based on previous experiences of a similar kind, in incessantly reproducing projects as institutions. Schildt and Perkmann (2017) took the concept of "temporal institutional work" (Granqvist and Gustafsson, 2016) to examine the project as it continuously (re-)creating institutional requirements from the diverse field.

2.3.3.2 Actor

Grabher (2002a, p208) demonstrated that, as projects are embedded in "layers of networks, localities, and institutions", and individuals often have other "homes", the multiple layers may "imply the multiple perceptions and loyalties of the project members". Scott and Meyer (1991) paid attention to how a project team is affected by both technical and institutional aspects of its environment. Windeler and Sydow (2001, p8) drew on structuration theory (Giddens, 1984) to highlight the importance of reflexive agents and the "knowledgeable activities of situated actors, who draw upon rules and resources in the diversity of action contexts", and examined the recursive interplay of social interactions and social systems (e.g., organizations, networks, and industries). Danwitz (2018, p531) believed that "inter-firm projects are inherently characterized by a variety of interaction processes among involved individuals", and the interaction processes include "communication, collaboration, trust, conflict

knowledge sharing, and learning". In these interaction processes, the agencies or the choices of the actors play a critical role.

2.3.3.3 Practice

Projects are not stable entities but rather evolving over time (Engwall, 2003), which indicates that the time from start to termination should be viewed as a process of change, or a set of activities evolving with a number of complex time- and space-related features (Lundin and Söderholm, 1995). With a focus on the interplay between network structure, project activities, and the institutional framework, Sydow and Staber (2002, p225) emphasized the network practices as both responding to the existing institutions and shaping these institutions (un)intentionally, and they noted "project enterprises are embedded in cooperative networks", which are more enduring and "support the speedy flow of resources, information, and knowledge". Later Blomquist et al. (2010, p11 and p13) called for a projects-as-practice approach by focusing on "praxis, practices and practitioners and the episodes where they meet", to explore how "a shared repertoire is applied, what learning and power mechanisms are at hand and how the interaction is organized and coordinated across organizational units" in projects. Recently, given the contextual embeddedness of communication practices, Braun et al. (2012) took a similar perspective and proposed "Project Citizenship Behavior" as a new concept. Some other studies focusing on such as the link between practice and education (Berggern and Söderlund, 2008), education of reflective practitioners (Crawford et al., 2006), and reflective practice in general (Kreiner, 2012) also took practice as analytical units.

3 Research Questions

3.1 Research Gap

Compared to the mainstream organizational theories that assume organizations are supposed to be permanent, theories on temporary organizations such as projects are much less prevalent. Different from permanent organizations, temporary organizations are more naturally defined by "tasks (rather than goals), time (rather than survival), team (rather than working organization), and transition (rather than production processes and continual development)" (Lundin and Söderholm, 1995, p439). With temporariness being the nature of temporary organizations, it requires advanced coordination mechanisms for accomplishing non-routine or contingent tasks (Perrow, 1970), which needs to rely on more reciprocal interaction. According to the discussions in prior chapters, it is notable that different theoretical lenses have been applied to projects as temporary organizations, from the traditional and project-centered approach focusing on project tools and techniques to a much more contingent and contextual perspectives. The empirical focus has also evolved from a single project level, firm-level, network level, and fields, to wider social levels. According to Bakker (2010, p481), the contextual perspective "highlighting the importance of the exterior environment of temporary organizational forms for interior processes, is one of the major accomplishments in temporary systems research in recent years". However, what constitutes the exact context in different situations, and what may be the fundamental principles that help to cope with the changing nature of temporary organizations, are yet to be empirically discovered.

In addition, temporary organizations are known to provide flexibility for industries, but little is known about their implications for how work is accomplished and coordinated (Bechky, 2006)

both internally and externally. Cicmil et al. (2006) plead for more research on the "actuality" of projects claiming that the scholarly literature somewhat disconnects from the actual practice of project managing. Powell (1990, p327) already raised in 1990 that the actual practices of coordination in temporary organizations regarding "how people cope with circumstances in which control is not direct and immediate, and conformity to well-established administrative routines not guaranteed" is not known. Berkel et al. (2016) pointed out that prior studies have explored time pressure affecting the coordination between temporary projects and permanent organizations, but it remains unclear how this actually occurs. Though it is well acknowledged that the actuality of temporary organizations, mostly projects, needs further examination, the critical aspects of the actuality that are missing have to be identified.

3.1.1 Absent actuality of projects' multilevel-embedded coordination

Despite the increasing attention drawn to the multilevel embeddedness of projects, "the understanding of the embeddedness of projects into organizational, inter-organizational or wider institutional context is still quite limited" (Söderlund and Sydow, 2019, p2). The interplay of different levels of project embeddedness is hardly explored. A multilevel approach has been promoted by scholars (e.g., Sydow and Braun, 2017), and empirical inputs across levels of projects, organizations, networks, and fields has been called for further consideration. The arrows in Figure 3-1 highlight the missing interplay of institutional forces across levels in current project research.

The multilevel embeddedness can be exemplified in the interior project processes. However, most of the project researchers focus either on the firm or the network level (Powell et al., 1996; Sydow and Staber, 2002; Sydow, 2009) rather than the project itself to systematically examine the internal

functioning of temporary organizations (Meyerson et al., 1996). Only few studies of project organizing address how interior project processes are influenced by their institutional context (Engwall, 2003), how multi-level institutional forces manifest themselves in projects, and how project processes interact with wider institutional issues, and these continue to be a major weakness of current theorizing (Söderlund and Sydow, 2019). Although actors are often exposed to multiple institutional forces, so far, little is known about how actors respond to the dynamic forces in project processes, and it is rarely addressed how multiple actors coordinate their collaborative efforts. This may also be due to the fact that "few studies' primary foci are on coordination within temporary organizations" (Kenis et al. 2009, p69). Although there are some conceptions of different coordination types such as supervision, mutual adjustment, standardization (Minzberg, 1980), role-based interaction, swift trust and time-based control (Burke and Morley, 2016), the "coordination degree and characteristic mix in projects has rarely been systematically described or analyzed" (Danwitz, 2018, p535).



(Adapted from Figure 2-1)



3.1.2 Absent actuality of institutional tensions in project coordination

According to Grabher (2002a, p208), there is an inherent tension between projects and institutions, and the nature of multilevel "embeddedness of projects from personal ties to the social structure is as much a source of vital ingredients as it is a persisting cause of tension and conflict". Institutions normally associate with "the stabilization of social exchanges and ongoing patterns of behavior in norms, regulations, and values, while projects are in principle about change, exploring and bringing novelty to society" (Söderlund and Sydow, 2019, p6). The fundamental tension between flexibility and stability lies in the fact that flexibility is necessary to support the objectives-driven combination of competencies of project actors given time and resource constraints, while a certain degree of stability facilitates coordination and develop community practice (Sydow and Staber, 2002). Baum and Oliver (1992, p540) suggested from

a relational perspective that institutional embeddedness is operationalized as "relational density", which is defined as "the number of formal relations between the members of a population and key institutions in the environment". However, the relational overlap, especially in interorganizational projects (e.g., individuals' relationship to the firm versus their relational embeddedness within the field of industry), can generate conflicts (Jones and Lichtenstein, 2008).

So far, it is not well-known which activities or linking mechanisms are required for projects in particular when facing tensions due to resource dependence between the temporary organization and the permanent organization, and how the dependencies may affect team dynamics (Burke and Morley, 2016). The intra-ecology of projects, in fact, exemplifies factors from both temporary and permanent systems. A project is temporary because the resources and tasks are temporarily and partially allocated to the project. And a significant portion of ongoing and repetitive activities in a project can also be part of the routines of the permanent systems that project embedded in. Bakker (2010), in this regard, called for future research working on the dialectic relation between temporary organizational form and its permanent environment.

Current theories rarely address the fundamental tensions or conflicts inherent in the interdependence of temporary and permanent organizations. Moreover, with few very recent exception (e.g., Husmann et al., 2020), tensions arising from divergent objectives and approaches of the involved actors have been hardly investigated. Since differing logics-of-action from the various types and levels of embeddedness may lead to distinct expectations (Thornton et al., 2012), no research has explicitly examined this issue (Jones and Lichtenstein, 2008). Some scholars (e.g., Bechky, 2003; Engwall, 2003) noted the importance of knowing how organizations continuously evolve and respond to the conflicting institutional requirements which is labeled as "temporal

institutional complexity" (Dille et al. 2018, p674). However, "research on empirical insights and systematic approaches to handle major conflicts is still missing" (Danwitz, 2018, p535), though resolving such conflicts is acknowledged as being very important (Patzak and Rattay,2004; Maurer, 2010; Ruuska et al., 2009). Therefore, the daily organizational activities (Greenwood et al., 2014) at the micro-level are called to be further examined.

3.1.3 Absent actuality of interpersonal coordination

Neo-institutionalists, when explaining organizational actions, are mostly oriented by wider belief systems and bundles of rules of legitimation such as the systems of norms, values, and conceptions surrounding the individual organizations, and they believe that the organizations reflect the cognitive and normative structures of an industry (Meyer and Rowan, 1977; Packendorff, 1995). In the "economic sphere" (Giddens, 1988), the organizational actions are mainly guided by the allocation of resources, i.e., practices of resource utilization to create and market products and services (Windeler and Sydow, 2001). However, neither the belief systems, bundles of rules, nor allocation of resources can work alone.

The outcomes of institutional influences on organizations has received much academic attention so far. But to understand the institutional meaning system, an internal perspective, viewing organizations as "interpretive mechanisms that filter, decode and translate the semiotics of broader systems", has to be applied (Suddaby, 2010, p18). An internal perspective also assists in addressing the changes created by organizational actors during the process. Granqvist and Gustafsson (2016, p3) raised the concept of "temporal institutional work" and claimed that research failed to address "how actors enact and manipulate understandings about temporality" in organizations, and failed to acknowledge the temporality of institutional work in managing and organizing. The dynamics of institutional work or institutional entrepreneurship in regarding institutional conflict resolution in temporary organizations have also not been paid much attention to.

According to Packendorff (1995, p325), action has to be understood as an "enactment of the subjective and inter-subjective realities of individuals and groups of individuals", and the primary source of information about the course of action should be the individuals forming the project. He further urged that in the study of temporary organizing processes, though "planning and structure are important inputs into a process, it is the inter-subjective meaning attributed to project plans or structural arrangements by project members that explain whatever action is taken" (Packendroff, 1995, p325). Lundin and Söderholm (1995) also called for an action-based theory, claiming that few aspects of temporary organizations are well understood in theoretical terms, which is true both regarding the internal operations and their external control.

As increasing attention has been redirected from inter-firm level to the inter-personal level (Grabher, 2002a), the interactions between project individuals perceiving as inherently dynamic processes, therefore, should be analyzed (Danwitz, 2018). Sanderson (2012) also noted the most current attention paid on the approach towards forms of organization designed exante, which neglects the potential governing and spontaneous micro-processes of organizing. So far, not many processes of coordination that operate in the absence of permanent organizational structures are examined, as well as the corresponding specified practices (Bechky, 2006).

3.1.4 Absent interdisciplinary theoretical integration

The fragmentation of the theoretical lenses applied to temporary organizations is notable. However, as Bresnen and Marshall (2001, p343) believed, "fragmentation itself is not necessarily a problem if there are appropriate and effective means of achieving theoretical integration".

Some empirical studies have been focusing on mega-projects with an institutional perspective (e.g., Miller and Lessard, 2000; Engwall, 2003; Miller and Hobbs, 2005; Bechky, 2006; Chi and Javernick-Will, 2011; Javenick-Will and Scott, 2011; Lundin et al. 2015; Dille et al., 2018). However, the researchers have so far put much emphasis on formal mechanisms rather than social dynamics in project governance (Bresnen and Marshall, 2002). Although neo-institutional theory adds cognitive and normative dimensions to the analysis of industries, it somewhat downplays the importance of resources and power, especially when analyzing changes in an industry (Hirsch 1997; Windeler and Sydow, 2001), as well as the various ways that organizations shape the institutional environment in which they operate (Powell, 1990). Windeler and Sydow (2001, p1039) suggested, "a true co-evolutionary perspective should consider the relevance of rules and resources, but also the quite active role of reflexive agents in the social interaction in which these rules and resources on the different levels are (re-)produced".

Besides a disconnection between marketing research and project research, there is also a disconnection between academic and practical use of the perspective from the institution, since practitioner-oriented literature made of few from papers use institutional theory and institutional concepts (David and Bitektine, 2009). Blomquist et al. (2010) argued for a practice perspective that begins with the individual actions, instead of those in traditional project research departing from some overall concepts and models

from which action is derived. A recently published conceptual paper from Sydow and Braun (2017, p14) further emphasized that, practice perspective focuses on "how actors actually behave in a real-life situation, instead of describing how they ought to behave as suggested by normative project management approaches". However, so far, despite very few emerging conceptual works suggesting a practice-oriented approach with an institutional perspective, such as practice-driven institutionalism (Smet et al., 2017), no empirical studies have been noted yet.

3.2 Research Questions

Based on an overview of the relevant literature, the inadequacy in four aspects identified in the prior discussion sets the base of this research. This research aims to focus on the research gaps and seeks to answer the following research questions:

- 1. What are the institutional misalignments in temporary organizations such as projects?
- 2. How can institutional misalignments in projects be reconciled?

Thus, the goal of this research is to identify the institutional misalignments that occur during the temporary organizing processes and may hinder successful business deliveries. Moreover, this research intends to develop a set of tools to tackle those institutional misalignments. A qualitative methodology has been adopted to answer these research questions.

4 Development of the conceptual framework

Projects as manifestations of temporary organizations (Kenis et al., 2009) is designed to foster joint actions for a limited period of time, and they often operate in inter-institutional settings. Dille and Söderlund (2011) introduced the concept "inter-institutional projects" which highlights the institutional complexity that project actors need to respond to. Projects are characterized by "flexible resource commitments" and have the capacity to trigger action and produce results that otherwise would not be achievable" (Dille and Söderlund, 2011, p487). Based on the prior discussions, this research applies an institutional lens aiming to reveal the missing "actuality" (Cicmil et al., 2006) of the projects' multilevel embeddedness and the reconciliation of the institutional misalignments resulting from the simultaneous multi-institutional requirements.

4.1 Institutional theory

4.1.1 Understanding of "institutions" across disciplines

Though there is no single and universally agreed definition of institutions (Scott, 1995), institutions are known as "multifaceted, durable social structures" comprising sets of formal and informal norms, rules, and beliefs that guide human behavior (Scott, 2014, p57). Together with associated activities and resources, institutions "provide stability and meaning to social life" (Scott, 2008, p48). Institutions are also perceived as the "prescriptions that humans apply to organize all forms of repetitive and structured interactions," such as those within families, markets, firms, private associations, and governments, etc. (Ostrom, 2005, p3).

The concept of "institution" has been used in a variety of ways (Jepperson, 1991) and is widely studied across social sciences. Still, the dialogue between the different disciplines is somewhat scarce (Scott, 2014). The understanding of institution and its impact are interpreted differently by scholars both within and across the disciplines (Nelson and Sampat, 2001). Scott (2008, p31-36) identified three schools of thoughts: Rational Choice Institutionalism sees institutions "as the site for individual strategies from transaction costs perspective" (e.g. Williamson, 1981; North, 1990; Aoki, 1994); Sociological Institutionalism is based on "norms, cognitive schema, established conventions or paradigms and exam what is appropriate" (e.g., DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Meyer, 2000) in order to seek legitimacy among peers (e.g., Meyer et al., 1997; Weyland, 2005; Dobbin et al., 2007); Historical Institutionalism is sensitive to "time-order when explaining the key decisions or actions at critical junctures", and it applies either a strong historical perspective as "lock-in" or a weak perspective as "contingency matters" (Leicht and Jenkins, 2010, p26). In general, institutions are identified at a higher level that is used to explain process and outcome at a lower level of analysis. In other words, institutions structure action, since they are not about the aggregation of individual actions or patterned interactions between individuals, but the higher-order factors above the individual level that make influence (Clemens and Cook, 1999).

4.1.2 Functions of institutions in organizational studies

Organization studies used to focus primarily on institutions as sources of stability and uniformity (e.g., Selznick, 1948 and 1949 and 1957; Parson, 1956; Meyer and Rowan, 1977; Zucker, 1977; DiMaggio and Powell, 1983), later as sources and consequences of institutional change (e.g., Alford and Friedland, 1985 and 1991; Thornton and Ocasio, 1999; Thornton, 2004; Zuckerman, 1999; Scott et al., 2000; Zajac and Westphal, 2004), and recently on the responses to institutional

processes (e.g., Galbraith, 1973 and 1977; Lounsbury, 2007; Luo, 2008; Greenwood et al., 2010). The research attention has gradually shifted from behavioral conformity and structural isomorphism (e.g., DiMaggio and Powell, 1983) to the divergency and convergency variance of elements and carriers (Scott, 2003).

Early conceptualizations of institutions suggested a constraining and relative static view of how institutional forces may influence human behavior to achieve conformity in different social settings. Institutions were described as cultural rules and resources that shape actors' experience and perception of the environment, and actor's representation of the legitimate patterns of behavior (Phillips et al., 2000). Institutional environments are, according to Scott and Meyer (1991, p123), characterized by the "elaboration of rules and requirements", stemming from "regulatory agencies authorized by the nation-state, professional or trade associations or generalized belief systems", to which the organizations must conform to gain support and legitimacy. A typical exemplar would be DiMaggio and Powell's (1983) study on coercive, normative, and mimetic forces that pressure organizations within a field to take on similar forms to survive competitively in their environment a phenomenon termed "isomorphism". In a nutshell, rules and norms were mainly taken by old institutional thinkings as the driving forces of economic activity, while the rational choices of individuals were often ignored.

However, Oliver (1991, p159 and p175) later noted that organizations "do not invariably conform to the rules, myths, or expectations of their institutional environment" but use various ways to resist institutional pressures through strategic responses such as "avoidance, defiance, or manipulation". The concept of "Institutional entrepreneurs" (DiMaggio, 1988) was brought in the literature as a means to understand how organizations respond to institutional complexity and how institutions arise. It focused on how interested actors work to influence their institutional contexts through such strategies as "technical and market leadership or lobbying for regulatory change and discursive action" (Lawrence and Suddaby, 2006, p215). As institutional entrepreneurs are actors who leverage resources to realize interests they value, they create whole new systems or transform the existing systems of meaning that ties the functioning of disparate sets of institutions together (DiMaggio, 1988; Maguire, Hardy and Lawrence, 2004; Garud et al., 2007). This concept reintroduced agencies and interests into the institutional analysis of organizations, therefore, bridge the "old" and "new" institutionalism (Powell and DiMaggio, 1991; Greenwood and Hinings, 1996; Garud et al., 2007). Later, Lawrence and Suddaby (2006, p215) created broader "institutional work" which refers to "the purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions". They argued that DiMaggio's (1988) concept of institutional entrepreneurship includes the influence of strategy and power, but not many detailed descriptions of what institutional entrepreneurs do (Lawrence and Suddaby, 2006). With the increasing recognition of agencies and institutional dissonance, scholars such as Scott (2008) posited that institutional systems do change due to both exogenous factors (e.g., macro factors imposed by the external environment) and endogenous factors (e.g., micro activities performed in local situations).

4.2 Implication from S-D logic

4.2.1 Service ecosystem perspective

In S-D logic literature, interaction in society is based on service-for-service exchange, and social actors are binded towards common goals such as benefits or status of well-being. It is the value (co)creation as the glue that holds social units (including economic units) and society in general

together (Vargo and Lusch, 2011). Vargo and Lusch (2004, p2) drew on Penrose's understanding of "collection of production resources" as "it is never the resources themselves that are the inputs to the production process, but only the services that the resources can render". Service was understood as "the application of resources for the benefit of another party" (Vargo and Lusch, 2008a, p256), and every social and economic actor is seen as a resource integrator. The service exchange context is the networks of resources and resource-providing actors (Vargo and Lusch, 2008b). The role of resources (operand and operant) was placed as central in these service-for-service exchange systems. The most prominent view from S-D logic is that it has gone beyond the "producer-consumer" differential roles in business relationships, to an "Actor-to-Actor" (Lusch and Vargo, 2014, p9) perspective. S-D logic views all social and economic actors engaged "in the exchange (e.g., firms, customers, suppliers, distributors, stakeholders, etc.) are service-integrating, service-providing", and value-creating enterprises (Vargo and Lusch, 2011, p184).

Seeing all social and economic actors as bundles of resources (Lusch and Vargo, 2014; Koskela-Huotari et al., 2016), S-D logic pointed toward a wider and dynamic networked and systemoriented understanding of value creation. The concept of the "service ecosystem" (Vargo and Lusch, 2011) conceives society as a web of interrelated resource-integrating and serviceexchanging actors co-creating value in systems, ranging from small systems such as households to large systems such as societies. According to Lusch et al. (2016, p2958), the concept of ecosystems in the biological literature as "communities of the organism interacting over time and space, with other organisms and other elements in the system; the interactions result in interdependence, necessary for joint adaptability and also serve a source of the dynamism and emergence in the system". Taking a more general definition from Cambridge Dictionary, the ecosystem is "all the living things in an area and the way they affect each other and the environment". As the service ecosystems being nested and loosely coupled, Chandler and Vargo (2011) further conceptualized that service ecosystems have micro-, meso- and macro-levels of context that frame resource integration, service exchange, and value co-creation. Micro-levels refer to household or organizations that are formed and constituted by individuals, meso-levels indicates the level of industries or communities, and macro levels cover the issues concerning nations and global markets (Chandler and Vargo, 2011).

Resource integration is considered a central practice in the service ecosystem for value co-creation (Vargo and Akaka, 2012). In this case, resources are not only static and fixed "stuff" but also as intangible and dynamic functions of human ingenuity, such as skills and knowledge (Vargo and Lusch, 2004). As "resources are not, they become", Zimmermann (1951, p14) also implied a contextual nature of resource value as "uniquely and phenomenologically determined by the beneficiary" (Vargo and Lusch, 2008a, p7). There has been no clear and explicit definition of resource integration in literature. Recently, Peters (2016, p2999) identified resource integration as "a process that results in either emergent or summative relations between resources". Through sharing, applying, or integrating the resources, the service ecosystem is capable of not only improving its state by acquiring external resources but also improving the state of other systems (Spohrer et al., 2008; Vargo and Lusch, 2011).

4.2.2 Institutions as coordinating mechanisms in resource integration

Drawing on the earlier institutional thinking in the marketing field (e.g., Alderson, 1957 and 1965; Arndt, 1981), Kleinaltenkamp (2018) emphasized that institutions are important elements that determine the roles of the various market actors and influence the interactions and relationships between them. From the service ecosystem perspective, institutions guide how resources are integrated (Vargo and Akaka, 2012), and the assemblages of institutional elements coordinate resource integration activities (Edvardsson et al., 2014; Vargo and Lusch, 2016). Institutions provide the context in which resources become (Koskela-Huotari and Vargo, 2016).

Service ecosystems, according to Koskela-Huoari and Vargo (2016, p164), can be seen as "interinstitutional systems in which multiple institutional arrangements coexist and become shared through resource integration and service exchange practices". Service ecosystems need shared institutions to coordinate activities among actors and to function effectively. However, the "complexity of institutional arrangements becomes very evident when insights from the institutional theory are combined with the service ecosystems perspective"(Koskela-Huotari and Vargo, 2016, p171), since actors from the nested and overlapping networks (Vargo et al., 2015) can be simultaneously embedded in the multilevel of institutional arrangement. Moreover, the concept of embeddedness indicates that the environment is not exclusively on the outside of the organization, but that organizational actions always take place within a complex societal web of structures, resources, values, and players (Engwall, 2003).

Taking a micro-level and phenomenological perspective, Karpen and Kleinaltenkamp (2018, p3) stressed that, cases of "partial and full institutional (mis-)alignment both within nested (e.g., micro, meso, and macro) ecosystem and across service ecosystems will impact the focal actor and multitude of actors". To understand how institutions, through their underlying logics of action, shape heterogeneity, stability, and change in actors and service systems (Scott, 2003), the concept "institutional logic" was first introduced by Alford and Friedland (1985). Institutional logics are defined as "systems of cultural elements (values, beliefs, and normative expectations) by which

people, groups, and organizations make sense of and evaluate their everyday activities and organize those activities in time and space" (Haveman and Gualtieri, 2007, p2). Each of the societal sectors, such as the market, corporation, professions, state, family, and religions, is held together by a common central logic (Thornton, 2004). Institutional logics provide the taken-for-granted rules that guide the behavior of the specific actors and the practices that predominate in an organization field (Scott, 2014), but also provides a new perspective to explore the interplay between the embedded agency and institutional structure. Later, a more flexible concept "institutional arrangement" emerged as "sets of interrelated institutions, comprises a relatively coherent assemblage of multiple and interrelated institutions that facilitates coordination of activity in value co-creating service ecosystems" (Vargo and Lusch, 2016, p18). Both of the two concepts capture the institutional complexity to which resource integrators in a multilevel embedded service ecosystem have to respond. In a nutshell, shared institutions act as a coordinating mechanism within service ecosystems, and they both enable and constrain value co-creation by guiding resource integration and service exchange among actors (Edvardsson et al., 2014; Lusch and Vargo, 2014; Vargo and Akaka, 2012; Vargo and Lusch, 2016).

4.3 Conceptual framework

4.3.1 New ontology of temporary organization

In response to Engwall's (2003) call for a changed ontology from a lonely and closed systems approach to a more contextually-embedded open system approach, this research takes the opensystem conceptualization of the "service ecosystem" as a base to develop an alternative ontology for temporary organizations. Temporary organization is a conceptual category that encompasses projects as well as other forms of temporary organizing (Kenis et al., 2009). A temporary organization, on the one hand, is temporally composed of multiple actors who may be embedded in or come from different families and cultures, firms, industries, or even nations. On the other hand, a temporary organization itself is also a part of still larger systems, such as their parent organizations, industries, and nations. Therefore, from a service ecosystems perspective, the multidimensionality and multilevel-embeddedness of temporary organizations are emphasized, and the micro-level dyadic actions as well as their interactions within more complex meso- and macrolevel systems and structures (Akaka et al., 2013; Kadefors, 1995) are also highlighted.

An open-system approach draws attention to the significance of exploring interior system dynamics and the connections of the temporary systems with its parent and broader systems. Actors in temporary organizations may often encounter institutional complexity reflecting incompatible prescriptions or demands from parallel institutions across service ecosystem context (Siltaloppi et al., 2016) or the "subjective experience of logic contradictions by organizations" (Micoletta et al., 2017, p1895). The actions they take in the face of institutional misalignments, can both positively lead to fresh ideas for problem-solving as innovation and new institutions creation (e.g., Siltaloppi et al., 2016), and negatively shape the outcomes such as hindering the improvement in well-being, value co-destruction (Plé and Cáceres, 2010), resource loss or negative emotional states (Smith, 2013).

In this research, a temporary organization is considered as an "episode" of a broader service ecosystem. Based on the definition of the service ecosystems, which is "relatively self-contained, self-adjusting systems of resource-integrating actors connected by shared institutional logics and mutual value creation through service exchange" (Vargo and Akaka, 2012, p207), and the

characteristics of temporary organizations discussed in previous chapters, a temporary organization, which is typically manifested by a project, in this research is defined as

an episode of a service ecosystem, in which actors as bundles of resources are simultaneously embedded in multilevel institutional settings and engage in continuous reconciliation of institutional misalignments and resource integration through service exchanges for a specific novel purpose within a limited time period.

Two diverging streams exist and see temporary organizations as recurrent collaboration thus repetitive temporary systems (e.g., Gabher, 2002; Schwab and Miner, 2008; Manning and Sydow, 2011) and as one-off collaboration hence non-repetitive business and highly unique one-off organizations (e.g., Lundin and Söderholm, 1995; Dille and Söderlund, 2011). Nevertheless, an "institutionalized termination" (Lundin and Söderholm, 1995) of projects is commonly acknowledged, since neither an identical team nor a set of tasks will occur exactly in the same context and in the same way as before again.

4.3.2 Conceptual model

The nature of the service ecosystem determines "the numerous dyadic interactions are nested within broader, meso and macro contexts, which in turn influence and are influenced by the microlevel interactions" (Koskela-Huotari and Vargo, 2016, p168). This research takes projects, the most tangible manifestation and representation of temporary organizations, as an empirical focus to understand the interactions between actors and how they respond to the multilevel-embedded institutional complexity in project processes. The conceptual model (see Figure 4-1) is a simplification of numerous dyadic interactions that usually happen in a temporary organization. A temporary organization, as suggested above, is an episode of a service ecosystem. All actors in the service ecosystem, being bundles of resources, are doing resource integration, service exchanges, and value co-creation. Actors are usually coming from varying institutional affiliations and are very likely embedded simultaneously in multilevel institutional arrangements. Every institutional arrangement has its constitution of regulative, normative, and cognitive elements (Scott, 2003). When actors come together from different institutional arrangements for a specific purpose and for a limited time, such as for a project, each actor is very likely dominated by a set of its own institutional prescriptions. The institutional prescriptions can be knowledge, perceptions, world-view, value, interpretations, habit and etc.

According to prior discussion, institutions not only constrain and impose restrictions by defining legal, moral, and cultural boundaries but also support and empower activities and actors to influence or ultimately change institutions (Giddens, 1984; Scott, 2014; Thornton and Ocasio, 2008). When actors unconsciously bring into the project their ingrained set of institutional prescriptions drawing from their prior or parent institutional arrangements, actors may prioritize different sets of goals, or simply apply various labels for the same objects based on their different institutional prescriptions. However, due to the nature of the temporariness of temporary organizations, actors do not have enough time to socialize, develop trust, and fully adapt to each other. Therefore, it is common to see that sometime even when actors share the same goal or have aligned incentive systems (Morris et al., 2011), they still might have very different views on what to do, when to do it, and how to do it. In addition, each project often has its own set of rules or principles agreed between the project stakeholders in terms of how to organize, control,
and govern the collective efforts in projects. Actors, in that regard, may rely on diverse practices or respond differently to the same schedule or plan to fulfill their obligations. Therefore, this conceptual model is a manifestation of the interactions between at least two resource integrators in a project under the influence of their different institutional interpretations.

All these differences in institutional (aware or unaware) interpretations that are manifested in misaligned (competing or conflicting) behavior are "institutional misalignments" (Karpen and Kleinaltenkamp, 2018). In projects, the institutional misalignments among actors are assumed to be significant. All of the misalignments may lead to considerable challenges in terms of creating the necessary foundation for cooperation and coordination among the actors (Dille and Söderlund, 2011). Often, within the context of organizations, many "dialectical forces compete for scarce resources and managerial attention" (de Round and Bouchikhi, 2004, p58). Therefore, actors are very likely involved in the continuous reconciliation of institutional misalignments during the resource integration process in projects. A considerable amount of reciprocal and interactive coordination work will be required to ensure the successful completion of the project tasks.

Figure 4-1 Conceptual model



4.3.3 Scott's institutional matrix

In general, institutions consist of formal constraints (rules, laws, constitutions) and informal constraints (norms, traditions, self-imposed codes of conduct, values) (North, 1990) that define appropriate behaviors, as well as cultural and "cognitive models, frames and schemas that encapsulate the taken-for-granted assumptions and beliefs that guide social actions in different situations" (Koskela-Huotari et al., 2016, p2965).

According to Scott (2003, p880), institutions are composed of "regulative, normative, and culturalcognitive institutional elements: regulative elements involve the capacity to establish rules, surveillance mechanisms and sanctions to influence behavior; normative elements stress norms and roles which provide prescriptive expectations as the basis of social order; cultural-cognitive elements involve the creation of taken-for-granted beliefs, shared conceptions and logics of action that underlie social order and the frames through which meaning is made; and each pillar is associated with a different basis of order, the motive for compliance, the logic of action, indicators of presence, and source of legitimacy" (see Table 4-1). Three institutional elements at different levels of institutions work as a whole thus shape and influence actor behaviors in the resource integration process. An actor's cognitive construction and behavior is based on the interpretation of normative and regulative framing of institutions, and the regulative or normative elements must "pass through the filter of human knowledge and experience" (Anderson and Leighton, 2006, p10).

Table 4-1 Conception of institutional pillars

(Scott, 2008, p51)

	Regulative	Normative	Cognitive
Basis of compliance	Expedience	Social obligation	Taken-for-grantedness, shared understanding
Basis of order	Regulative rules	Binding expectations	Constitutive schema
Mechanism	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicator	Rules, laws, sanctions	Certification, accreditation	Common beliefs, shared logics of action
Basis of legitimacy	Legally sanctioned	Morally governed	Comprehensible, recognizable, culturally supported

Institutional ideas are invisible frames for organizing. They are not only made up of various elements but also carried and conveyed by "institutional carriers" (Jepperson, 1991) that transport

and deliver the content of various elements (see Table 4-2). Scott (2008, p79-85) identified four types of such institutional carriers: "symbolic systems, relational systems, routines, and artifacts", which are also interdependent with each other:

Symbolic systems are "various types of symbolic schemata into which meaningful information is coded and conveyed" (Scott, 2003, p882). They include "models, classifications, representations, and depictions" (Jepperson and Swidler, 1994, p361) and logics. The role of "interpretation, theorization, framing, and bricolage mechanisms that operate through alterations of individual and collective perceptions" are emphasized (McAdam et al., 2001, p26). For example, ideas must be encoded into a more generalized form, which is known as "theorizing". Theorization means abstract categories are developed and specified, and "the patterned relationships such as chains of cause and effect are formulated" (Strang and Meyer, 1994, p104) and in the end decoded by interpretation. While laws and regulations are among the widely recognized forms of symbolic systems, normative instructions concerning values and norms and cultural-cognitive representations of mental models or frameworks are also key symbolic systems (Scott, 2003). The role of symbolic systems has attracted some research interests, such as forms of media for communication by stone, clay, paper, phone, computer, etc. (e.g., Innis, 1995).

Relational systems include both interpersonal and inter-organizational linkages (Scott, 2003). It is based on the connection among both individual and collective actors. Studies have focused on the diffusion aspects of relational systems in forms of various models and networks (e.g., Strang and Soule, 1998; Brunsson et al., 2000; Knoke, 2001). More recently, research investigates the importance of intermediaries and boundary-spanning roles at the interface of organizations and inter-organizational relational ties, which have been shifted from competitive to cooperative patterns (Scott, 2003). From the perspective of the regulative and normative element, relational systems mostly relate to as the power and authority aspects of the governance structure, while from the perspective of the cognitive element, it is believed that cognitive "classifications and typifications are often coded into organizational structures", such as different departments and roles may be presented as structural isomorphism (Scott, 2008, p82).

Routines, according to Scott (2008, p82), are structured activities in the form of habitualized behavior and patterned actions that "reflect tacit knowledge held and conveyed by actors, and they are deeply ingrained habits of actors and procedures that based on unarticulated knowledge and beliefs". Specifically, they are related procedures, roles, and scrips. Scripts, according to Gioia and Poole (1984), are further classified into three types: cognitive scripts (a known course of action to choose in certain situations); behavioral scripts (either performative by following colleagues or inferred through observation); protoscripts (behavioral patterns characteristic for more than one person in more than one setting). From scripts, an individual can choose which track or direction to follow in which situation, and the goal of the action determines the script (Gioia and Poole,1984). Routines, in general, are usually learned and sustained by the community, which means routines are not easily transportable to other settings with other actors but have to be enacted by actors in a recursive and repetitive way. As Tranfield et al. (2000, p253) stated, organizational routines consist of "cognitive aspects (thinking), structural aspects (configuring), and behavioral aspects (doing)". They refer respectively to the way people understand the routine, how an organization is shaped to meet routine, and what is done by people (Tranfield et al., 2000).

Artifacts are material culture created by human ingenuity to assist in the performance of tasks (Scott, 1995 and 2001). For Suchman (2003, p98), the artifact is a "discrete material object,

consciously produced or transformed by human activity, under the influence of the physical or cultural environment". Artifacts can present particular constellations of ideas, and they embody both technical and symbolic elements (Orlikowski, 1992) and cover both hard and software (Scott, 2013). For example, industrial technical standards for certain products are regarded as normative elements of institutions carried by artifacts, and goal posts in a football match or an award cup for in competitions are taken cognitively as objects possessing value carried by artifacts (Scott, 2008).

Table 4-2 Institutional pillars and carriers

(Scott, 2008, p79)

Carriers	Pillars			
	Regulative	Normative	Cultural-cognitive	
Symbolic systems	Rules/Laws	Values/Expectations	Categories/Schema	
Relational systems	Governance systems/Power systems	Regimes/Authority systems	Structural isomorphism/Identity	
Routines	Protocols/Standard operating procedures	Jobs/Roles/Obedience to duty	Scripts	
Artifacts	Objects complying with mandated specifications	Objects meeting conventions, standards	Objects possessing symbolic value	

5 Research Methodology

5.1 Qualitative research methodology

5.1.1 Rationale of qualitative methodology

Qualitative and quantitative are the two major categories of research methodologies, and they used to answer different types of research questions. Qualitative methodology is used to explain "what", "why", and "how" questions and to better understand the empirical situation. This research aims to reveal the institutional misalignments resulting from the institutional complexity in temporary organizations and explore the actions that have been taken to respond to the misalignments according to actors' lived experiences. Therefore, this research is less interested in examining and controlling variance, but more interested in capturing the variability and the essence to the shared lived experience. Qualitative research maintains the context of the research topic, meaning "the phenomenon being studied is not reduced to the smallest variable, but in its entirety" without control (Walker, 1987, p55). The objects of this research interests are mainly exemplified in the micro-processes of projects. Therefore, starting with a phenomenological design, this research is driven by the data from individual actors' lived project experiences.

Qualitative research encompasses a multiplicity set of methods. The qualitative interview is one of the major approaches in collecting data in qualitative research. It is mainly useful for obtaining the perspectives of participants (Maxwell, 2012) and facilitates in exploring constructs in-depth (Walker, 1987). In this research, semi-structured interviews with open-ended questions were conducted in-depth with professionals with intensive project experiences, to learn about their past or current different internal or external project experiences. The approach applied gives valid and

rich empirical information related to the research topic. It not only allows very much flexibility in subjects' responses within the limited range of content but also the interviewers' considerable freedom in how and when the questions are asked without affecting the flow of the interview conversations.

5.1.2 Sampling of interviewees

The sampling is based on a careful selection of professionals with profound project experiences and international background. The heterogeneity of the type of industry and the size of the company are also well-considered. The first round of interviews was conducted with two worldleading large manufacturing companies A and B, headquartered in Europe with a global business footprint. In total, eleven interviews have been done in the first round of interviews. In order to ensure representation of population and industries, the second round of interviews extended the scope of industries from manufacture to telecommunication technology, acquisition consulting, pharmacy, procurement, international trade fair and convention. New interviews were conducted until a point of saturation where further interviews yield little new knowledge (Kvale, 2007). In total additional seven interviews have been done. Altogether, 18 professionals with average around 15 years of working experience shared their current or prior project experiences. All of the interviewees are approached through personal connections, and they remain anonymous in the research.

5.1.3 Thematic analysis

Methods are the means of answering research questions. As this research aims to capture the organizational experience of the people living that experience, a combination of descriptive and hermeneutic methods is applied for the analysis of qualitative data. With thematic analysis, one of the hermeneutic methods, both manifest and latent themes are elaborated with relatively full coverage of the available data (Goodrick and Rogers, 2015). The first phase of data analysis is used to inform the second round of data collection and analysis. Descriptive methods such as using a matrix (table), or network and relational diagrams (Miles et al., 2014) are selectively applied to describe and display the analytical results.

Any research starting without any prior theory is largely illusory (Gehman et al., 2018). Facts are unreliable without the theory, which guides the facts collection and the distinguishing between the superficial facts and significant facts (Walker, 1987). Therefore, in this research, a prior theoretical understanding of the institutional framework is brought along to explore the concerning theoretical elements in the variability of people's experiences abductively, to understand more in detail and discover the phenomenon in situations. However, the theory was not prioritized over the empirical facts.

5.1.4 Validity and reliability of qualitative research findings

Over the past two decades, the reliability and validity have been "subtly replaced by criteria and standards for evaluation of the overall significance, relevance, impact and utility of completed research" (Morse et al., 2002, p14), after Lincoln and Guba's (1985) concept of trustworthiness covering credibility, transferability, dependability and confirmability. Kvale (2007, p122) defined

validity in ordinary language as "truth, the correctness and the strength of a statement" and liability as "the consistency and trustworthiness of research findings; whether a finding is reproducible at other times and by other researchers".

Based on the series of strategies proposed by Morse et al. (2002), to ensure a high level of validity and reliability in this research: 1) the content and purpose of the study precede the question of method, thus a substantial familiarity with the theme (i.e., institutional concepts) and context (i.e. projects as temporary organizational form) of an inquiry is fully noted; 2) the research question and the components of the method are congruent, i.e. the qualitative research question matches the data and analytical procedures (e.g., thematic analysis) in investigating, capturing and understanding the project experiences of project participants in details, and indeed reflects the phenomena of research interest; 3) samples are appropriate and sufficient, as interviewers are all working professionals with intensive project experiences in different industries, and new interviewers are approached until little new knowledge about the research topic yield from interviews; 4), data collecting and analyzing are concurrent, and the iterative interaction between theory, data and analysis is realized in an abductive way; 5) the first phase of analysis is used to inform the second round of data collection (i.e. extend the coverage of types of industry) and analysis (i.e. constructs cross-verification between two phrases); 6) more than 80% of themes and codes are peer reviewed.

5.1.5 Ethical considerations

Ethical issues are carefully considered at every research stage. All the interviewees are clearly communicated for consent in participating in this research and the security of confidentiality in

advance. Interviewees are informed that they had the choice to withdraw from the interview at any time. Before each interview started, a brief introduction of the research topic and the purpose of the interview, and the use of a recorder was given without revealing full information about the research design. The interviewer clarified questions from the interviewees regarding the interview process if there is any. After the interviews with company A, the interviewer signed a confidentiality agreement due to corporate regulations. During the interactions with the interviewees, the interviewer tried to present as a caring researcher and to avoid a professional distance, to maintain an easy-going conversation, and encourage interviewees to open up. The interviewer let interviewes proceed at their rate of thinking and speaking. The interviews were recorded and transcribed loyally as Word files by the interviewer. The opportunity of reviewing the transcribed text was offered to the interviewees for content proof. The data analysis was conducted with honesty and fairness.

5.2 Qualitative data collection

5.2.1 Collection of qualitative data

The data collection of this research is based on a semi-structured interview to obtain both retrospective and real-time accounts by working professionals who have experienced the phenomenon of theoretical interest. In the first round of data collection, the interviews with company A was conducted onsite face-to-face in two days. The interviews with company B was done by phone calls across several weeks with dedicated time slots according to the interviewees' schedules. In the second round of data collection, as the interviewees are internationally located, "phone interviews" were taken as a more convenient and cost-efficient way of collecting data.

The quality of the interviews was ensured by considerably taking detailed issues in interview processes into consideration: 1) the researcher was fully aware about the important issues to pursue; 2) question are posed clearly in an understandable way without using academic language to avoid ambiguity; 3) the researcher steered the course of the interview and was not afraid of interrupting any digression or misunderstanding from the interviewees; 4) questions were raised critically to affirm or cross-check the reliability and validity of what the interviewees had told, as well as the logical consistency; 5) the researcher could recall earlier statement and asked interviewees to elaborate what had been said; 6) an ongoing "on-the-line interpretation" and "on-the-spot confirmation" (Kvale, 2007, p102) approach was conducted throughout the interviewee;7) the researcher maintained sensitive, which means the researcher listened actively to not only what is said and not said, but also how it was said. Whenever new aspects were emerging from the conversation, the aspects are followed up with furthers questions.

5.2.2 Description of interviewees

To ensure profound project experiences sharing, the average working experience of all interviewees is around 15 years. To decrease the possibility of bias from single cultural perspectives, the original nationalities of all interviewees range from Germany, France, Poland, Africa, Korea to China. Their working locations cover Germany, France, the United Kingdom, the United States, and China. The average interview duration was 62 minutes.

Table 5-1 Description of interviewees

No.	Interviewee	Gender	Years	Job nature	Project type	Number
			of exp.			of employees
Interv	viewees-Round	One				
1	AP	Male	+ 15	Project Consulting	Inter-organizational	+130,000
2	MS	Male	+ 25	Customer Services	Intra-organizational	+130,000
3	XZ	Female	+10	Human Resources	Intra-organizational	+130,000
4	CG	Female	+ 12	Digitalization Project	Inter-organizational	+130,000
5	JL	Female	+ 10	Information Technology	Intra-organizational	+130,000
6	DS	Female	+20	Sales Management	Inter-organizational	+17,000
7	FS	Male	+30	Project Manager	Inter-organizational	+17,000
8	RK	Male	+25	Project Coach (freelancer)	Inter-organizational	+10
9	UQ	Female	+3	Junior Project Manager	Inter-organizational	+17,000
10	VW	Female	+20	Project Management Office	Inter-organizational	+17,000
11	UG	Female	+35	Project Management Office	Intra-organizational	+17,000
Interv	viewees-Round	Two				
12	EH	Female	+10	Merger and Acquisition Consulting	Inter-organizational	+7200
13	ZM	Male	+10	Technical Lead	Inter-organizational	+50,000
14	PK	Male	+12	Pharmacy	Intra-organizational	+110,000
15	PO	Male	+15	Telecommunication	Intra-organizational	+2200
16	IM	Female	+10	Exhibition and Fair	Inter-organizational	+800
17	MY	Female	+10	Pharmacy	Intra-organizational	+56,000
18	CZ	Male	+10	Corporate Procurement	Intra-organizational	+190,000

5.2.3 Interview questions and relevance to the research questions

The interview questions are developed based on Scott's (2008) institutional matrix composing of three institutional pillars (regulative, normative, and cognitive) and four carriers (symbolic systems, relational systems, routines, and artifacts). For the preparation of interview questions, the research is well noted that a good interview question should contribute thematically to knowledge production and dynamically to promoting a good interview interaction (Kvale, 2007). Therefore, extraordinary attention was paid to anticipated issues of concern. In addition to a list of warm-up questions, a set of twelve thematic questions in accordance with the institutional matrix (see Table

5-2) were the main questions to be raised, and they functioned as more or less an outline of topics to be covered. These twelve questions are, in some cases, necessarily translated into several easy-going questions, which may assist interviewees in generating spontaneous and rich descriptions. When new interesting aspects emerged, they are immediately followed up. Therefore, many other interview questions evolving around the themes were added and modified as the interview progressed.

All questions are made relatively short and easy to understand without using much academic language. There is no strict, predetermined sequence of the questions. The extraordinary voice was given to interviewees. But the researcher stimulated or created a permissive atmosphere for interviewees (to describe their points of view) for a free and open conversation to what they had experienced, felt, and done in relation to the topics. The researcher stayed flexible to adjust interview protocol based on informant responses and tried to keep the flow of the conversation, follow new directions the interviewees opened up, pause when necessary, probe and verify the answers given by the interviewees, in order to look for more detailed elaboration on certain interesting points. Taking a "miner" approach (Kvale, 2007), the interviewer explored knowledge from subjects' experiences, therefore, took interviews as only a site of data collection that is separated from the interpretation of data or data analysis.

Table 5-2	Thematic	questions	for	interviews
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Carriers	Pillars			
	Regulative	Normative	Cognitive	
Symbolic systems	Rules, laws	Values, expectations, standards	Categories, typifications, schema	
	Q1. Do you have rules that impact the project?	Q2. Which are your expectations about the main changes in this project?	Q3. How would you describe the state of the system?	
Relational systems	Governance systems, power, systems	Regimes, authority systems	Structural isomorphism, identities	
	Q4. Who is taking the lead or interfere with the project?	Q5. Apart from the leader, are there any other department organization that influence changes within the project?	Q6. Do you think there is a shared understanding of the roles and responsibilities of the different players in the process?	
Routines	Protocols, standard operating systems	Jobs, roles, obedience to duty	Scripts	
	Q7. Have there been developed any protocol, procedure, or process-related description that specify how actors should operate?	Q8. What were the major changes in your daily activities that occurred because of the project?	Q9. Have you developed your scripts or schedule of the activities to be pursued?	
Artifacts	Objects Complying with mandated specifications	Objects meeting conventions, standards	Objects possessing symbolic value	
	Q10.Which solutions or technologies have been developed to meet the requirement of any regulation?	Q11.Which solutions or technologies have been developed according to the general industry standards for the project?	Q12. How do you communicate the project to inform the general public about the transformation occurred?	

5.2.3.1 Versus coding

Coding is only the initial step toward an even more rigorous and evocative analysis interpretation, and it is linking, not labeling (Saldana, 2009). "Versus coding", manifesting itself as an X VS. Y code, acknowledges human's frequent exposure to tension and conflict within, among, and between participants (Saldana, 2009). Therefore, it was taken as the most appropriate for this

particular study to present the institutional misalignments among project participants. It is also similar to Wolcott's (2003) "moiety" or duality as generally "an asymmetrical power balance" between two "mutually exclusive divisions within a group" (Saldana, 2009, p94).

Duality exists in many aspects of social life. In this research, Clarke's (2005, p197) reinforcement of "not only two sides but rather N sides or multiple perspectives in any discourse" is taken consideration for versus coding, to fully reveal the various aspects of a misaligned phenomenon. A set of examples of versus codes are provided in Table 5-3. The versus codes can be used to identify all possible misalignments among individuals, groups, organizations, systems, phenomena, processes, concepts, etc. that are struggling for powers and resources. Not all misalignments are visible and easily trackable. In the first round of the coding process, versus coding is applied for any description of misalignments in terms of tensions, conflicts, complaints, and challenges in forms of single words, full sentences, or even an entire paragraph.

Sample scripts	Versus codes
This business wants to go outside to work with external customers. For this, they started with the project, but the knowledge in logistics was not complete.	Knowledge required for business expansion (complete vs. incomplete)
Some people just don't care. Some just do their jobs. If he likes you, he might be willing to help to do something more even it's out of his scope. For others, no matter who you are, they just do their jobs.	Impact of inter-personal attraction on project work (positive vs. negative)
It actually did not really fit our consulting project, as it's the first time we are doing this.	Project tool (fit vs. unfit)
As a project manager, when I try to figure out, because I have most of the information, I know exactly the root cause of this project which is very difficult. But I do not think they would think the same as I do.	Team's knowledge about project (superficial vs. deep)

Table 5-3 Examples of versus coding

They have a good design. They clearly know what they
want to have. But they don't have enough money.Budget for good design
(sufficient vs. insufficient)

5.2.3.2 Process coding

In investigating the actions taken by actors in the face of difficulties and challenges during the project process, "process coding" (Saldana, 2009), using gerunds, i.e. "-ing" words, is applied in qualitative data. Process coding exclusively connotes action in the data (Charmaz, 2003) from simple observable activity such as reading and playing, to more general conceptual action such as adapting and struggling (Saldana, 2009). According to Corbin and Strauss (2008, p96), process coding is appropriate for virtually all qualitative studies, but particularly for those that search for "ongoing action, interaction, emotion taken in response to situations, or problems, often to reach a goal or handle a problem".

Table 5-4 Examples of process coding

Sample corints	Process oddes
Sample scripts	Trocess codes
We launch different communication actions, different events, different strategies towards different parts of the world to reach out to our target population.	Differentiating communication actions towards target audiences
We have kind of project reviews together with the team members.	Conducting scheduled reviews
For the project itself, I have the diary/logbook, where I write down each content with each person. What you have said, and what kind of decision has been made. In the logbook, you can see in the last month or so, exactly what I have done, which decision I have made with which guy, etc.	Writing project diary via logbook
Then we decided to speed up the registration process in Japan as soon as possible. It is still in the process.	Speeding up the local patent registration process
We are talking to the end user very closely, and hopefully, the end-user is convinced that [Company Name] has the best technology.	Making influence on end-user
What we are doing now is implementing a new cloud share solution that is accessible from Berlin and Bangkok. Then we can work on documents in real-time.	Implementing new cloud share solution

5.2.3.3 Data analysis

The interviews were recorded with a digital voice recorder and assisted by notes taking during the interviews. In this way, the interviewer could concentrate on the topic and the dynamic of the interviews. The transcription was done word by word, following the interview conversations recorded. As the transcripts are intended to be used for reporting the subject's accounts in a readable story but not for detailed linguistic conversational analysis, only a few emotional expressions such as significant sighing pauses and laughter are noted down. The transcriptions were double-checked after each transcription and reviewed two more times during the data analysis.

The recorded interviews were analyzed by the researcher without assistant of any software, as "computers don't analyze data, people do" (Weitzman and Miles, 1995, p3). The code's reliability and validation were realized by peer and expert review. More than 80% of codes were cross-checked with co-workers in the same research institute. The analysis involves following the meanings and aims of the interviews, bringing interviewees' understanding to light, and incorporating researcher's perspectives.

Gioia data structure (Gioia, 2012) is applied for a systematic presentation of both first-order analysis derived from informant-centric terms or codes, and second-order analysis derived from researcher-centric concepts, themes, and dimensions (Gehman et al., 2018).

6 Research Findings

6.1 Dimensions of institutional (mis)alignments

As Dille and Söderlund (2011, p481 and p487) emphasized, "projects are usually plagued by challenges in terms of both cooperation and coordination, and replete with delays and collaborative failures; project processes unfold in interplay by the institutional affiliations of the project participants, as well as, the detailed project activities". Based on prior discussions, when actors temporarily situate in a project, they are often exposed to incompatible institutional prescriptions that can be in the form of various challenges, tensions or conflicts which are possibly everywhere and sometimes also may not be visible:

"Always conflicts. There are conflicts you can choose to address and not to address." (Head of Function)

"Conflicts between the functions cannot be brought onto the table clearly. So I cannot clearly, very directly talk to my team members and tell them this is the key issue of the project. I can only give them the information on a certain level. " (Project Manager)

Before the actors are able to adapt and reconcile the institutional misalignments jointly, a clear view of the types of institutional (mis)alignments is a premise. During data analysis, all the versus codes from qualitative data are allocated according to their institutional nature based on Scott's (2014) institutional matrix. A set of examples of the versus codes and the corresponding institutional cell is provided in Table 6-1. From the qualitative data, it is noted that: regulative elements are mostly presented in the form of regional and industrial regulations (e.g., labor law,

General Data Protection Regulations), organizational guidelines, project plans, protocols or procedures (e.g., corporate project reporting lines, integrated project information sharing platform, decision-making hierarchy); normative elements are exemplified in terms of project goals and objectives, resource accessibility (e.g., human resource, budget allocation), the obedience of colleagues to specific duties, management and leadership, relationship with customers and team, ethical issues at work, certified project tools or software, etc.; cognitive elements relate more to the knowledge, skills and capability of project participants, cross-functional support, (inter-) personal interaction and team spirit, sense-making or sense-giving activities, and other issues that are based on human understanding, perception and sensation.

Quotes	Sample Codes	Institutional cell
The definition could be better. It's not clear enough. It's not specifically defined.	Project definition (specific vs. unclear)	Regulative/Symbolic Systems
They have a good design. They clearly know what they want to have. But they don't have enough money.	Budget for good design (sufficient vs. insufficient)	Regulative/Relational Systems
In the beginning, we have a very simple one about "who is in charge of what". With the change of the plan, we don't have that anymore. The change of plan is already operational mode, not project mode.	Mode of working for the project (consistent vs. inconsistent)	Regulative/Routines
This business is intended to go outside to work with external customers. For this, they started with the project, but the knowledge in logistics was not complete.	Knowledge required for business expansion (complete vs. incomplete)	Cognitive/Symbolic Systems
If we let pure technical people be onsite, they will have some misunderstanding or have some problems with communication. The technical guy will say "no, it's not possible", and the business guy will say, "Yes, I want it".	Task expectation between technical and business colleagues (conflict vs. non-conflict)	Normative/Symbolic Systems
Some people just don't care. Some just do their jobs. If he likes you, he might be	Impact of Inter-personal attraction on project work	Cognitive/Relational Systems

Table 6-1 Examples of codes in institutional matrix

willing to help do something more even it's out of his scope. For others, no matter who you are, they just do their jobs.	(positive vs. negative)	
As a project manager, when I try to figure out because I have most of the information, I know exactly the root cause of this project which is very difficult. But I do not think they would think the same as I do.	Team's knowledge about project (superficial vs. deep)	Cognitive/Symbolic Systems
It actually did not really fit our consulting project, as it's the first time we are doing this.	Project Tool (fit vs. unfit)	Normative/Artifacts

By further aggregating the set of allocated versus codes, a total of eighteen dimensions of institutional (mis)alignment emerged from the qualitative data. The dimension concerning "team supportiveness" was the most mentioned in the interviews, followed by "clarity ", "standardization, " "boundary", "accessibility", "personal frame of reference", "orientation", "mentality", "fitness", "redundancy", "flexibility", "consistency", "quality", "bureaucracy", "transparency", "uncertainty", "enforcement" and "legitimacy". For example, the higher degree of "clarity" is achieved, the lower degree of institutional misalignment is experienced.

For these dimensions, detailed definitions developed with the assistance of the Cambridge English Dictionary and Oxford Dictionary of English are provided in Table 6-2. A set of sample codes and quotes from interview scripts are presented in Table 6-3. With a dialectical lens, a project as an episode of a service ecosystem can be also seen as a collection of heterogeneous social facts that are constituted of multiple misaligned or contradictory forces working dependently with each other. Each dimension will be explained based on the evidence from the qualitative data of this research.

Table 6-2 Definitions of institutional (mis)alignment dimensions

No.	Conceptual codes	Definitions
1	Team supportiveness	The physical or spiritual engagement of the team members in completing a task
2	Clarity	The state of being clear or easy to see, hear or understand
3	Standardization	The process of making things of the same type all have the same basic features
4	Boundary	A real or imagined line that marks the edge or limit of a subject or principle
5	Accessibility	The fact or object of being able to be reached or obtained easily, the quality of being easy to understand, or the characteristic of something that makes it possible to approach, enter or use
6	Personal frame of reference	A set of ideas or facts accepted by a person that explains and directs his behavior, opinions or decisions
7	Orientation	The particular interests, activities or aims of a person or an organization that give a benchmark or direction of what this person or organization prefers, believes or usually does
8	Mentality	A person's or group's particular way of thinking about things
9	Fitness	The quality of being suitable for someone or something
10	Redundancy	A situation in which an unnecessary use of more than one thing or approach that are functioning the same
11	Flexibility	The ability to change or be changed without much difficulty according to the situation
12	Consistency	Always behaving or happening in a similar way without much deviation from before
13	Quality	An evaluation of a characteristic or feature of someone or something in terms of the degree of excellence
14	Bureaucracy	A system for controlling or managing an organization that is operated by a large number of officials employed, to manage the details of operation carefully, for which complicated rules, processes, and written work are required and make it hard to get something done
15	Transparency	The characteristic or quality of being easy to access and see without secrets
16	Uncertainty	A situation in which something is not known or something that is not known or certain
17	Enforcement	The process or determination to ensure people obey or follow the law, rule, policy, or measure, in order to make a particular situation happen or be accepted
18	Legitimacy	The quality of being reasonable, acknowledgeable and acceptable in its surrounding environment

Team supportiveness

"Team supportiveness" is defined in this research as "the physical or spiritual engagement of the team members in completing a task". This dimension was mentioned the most according to the interview data. The higher level of team supportiveness is given, the less challenges or institutional misalignments are experienced in the project. The normative and cognitive elements carried by symbolic systems, relational systems, and routines dominate this group of misalignments. From the normative perspective, it is notable that, internally, the degree of shared expectation and value within the project team, the alignment of team motivation level, the engagement of colleagues are critical factors. Externally, the relationship with customers and local business partners are important issues. As the institutional elements are acting collectively, it is understandable that if project participants don't care about the project, have low level of willingness and proactiveness to get involved, or have high level of resistance to any potential change or responsibility, they are very likely to have the problems with communications, physical involvements, and team engagements.

Clarity

In terms of "the state of being clear or easy to see, hear or understand", the majority of institutional misalignments result from the low level of shared goals, objectives and expectations, unclear project governance systems and stakeholders, unclear operating procedures (e.g., project plans and schedule), and unspecified obligations. Regulative and normative institutional elements dominate the misalignments in the dimension of clarity. Therefore, it is important for practitioners to make extra efforts on the issue of clarification in terms of regulative and normative aspects of work in temporary organizations.

Standardization

Standardization is about "the process of making things of the same type all have the same basic features". The most misalignments in this group relate to regulative/routines such as corporate or department operating procedures, project execution schedule and process, standard quality survey, etc. Artifacts such as working tools, evaluation indicators, and rewards for task accomplishment were suggested to be standardized. In addition, some interviewees also had problems in having a standard way of working across entities and a standard message delivery in their project.

Boundary

As "a real or imagined line that marks the edge or limit of a subject or principle", boundary issues scatter widely in aspects such as different knowledge and skills sets, various working and technical systems, internal and external affairs, departmental and corporate issues, official and unofficial assignments, and geographical locations. The encountered institutional misalignments range from regulative elements (e.g., corporate rules, project governance, project reporting), normative elements carried by symbolic systems, routines and artifact (e.g., task expectation, task allocation, information sharing platforms) to cognitive elements carried by symbolic systems and routines (e.g., knowledge and understanding, working culture).

Accessibility

Accessibility regards the fact that an object, the quality, or the characteristic of something can easily be reached, obtained, and used. The respective items range from different tangible and intangible resources (e.g., data sets, project tools and software, human resources, financial resources). As accessibility can be either defined by rules, or judged by norms, or perceived cognitively, the misalignments are trackable across all three institutional elements but mostly dominated by normative elements carried by relational systems and routines.

Personal frame of reference

As a set of ideas or facts accepted by a person that explains and directs their behavior, opinions, or decisions, "personal frame of reference" is reflected mostly in actors' values, perceptions, attitudes, intentions, and points of view. According to Snow et al. (1986), frames are "employed by disseminators to distill and sharpen messages and by recipients to capture and interpret them"(Scott, 2008, p142). According to the data, many misalignments encountered by project actors are due to their various personal frames of reference, in terms of the understanding of roles and duties, view of project execution approach, evaluation of peer performance, perception of task priorities, attitudes towards difficult colleagues and situations.

Orientation

Orientation gives the direction of what this person or organization prefers, believes, thinks, or usually does according to their situated condition and resource availability. It is not as narrow as "personal frame of reference" but represents a wider or higher level of reference or benchmark. The data presents a wide range of aspects of this dimension: from the communication issues such as "how to say what to whom", the actors' depth of analyzing a problem, the corporate human resource management approaches, the label of tasks as internal or external, the priority setting among team members, the evaluation against the industrial standard or corporate standard, the distinct task conceptions between managerial and operational level, to even the office set-up as people-oriented or safety-regulation-oriented.

Mentality

Mentality shows a person's or group's particular way of thinking about things. According to the data, it can generally be modern or old thinking, problem-driven or process-driven, change-resistant or risk-taking, or other specific issues such as task assignments on a volunteer-basis, the decision of integrating external staffs, the critical thinking applied to conflict, and managers' measures taken for difficult team members. Normative and cognitive elements carried by symbolic and relational systems dominate in this dimension.

Fitness

Defining as "the quality of being suitable for someone or something", fitness indicates whether the resources are matched well and appropriately. According to the data, it ranges from the matching of members' skills and knowledge with the project, the matching of tools with project requirements, the matching of knowledge, ideas, understanding and expectations among the project members, or the matching of language proficiency with requirements in the project process. Most of the misalignments are related to the differences in cognitive schemas and roles of actors, and tools in projects.

Redundancy

Redundancy shows an unnecessary use of more than one thing or approach that are functioning the same. The duplications are mostly happening in routines and artifacts across three institutional elements, such as duplicate information across platforms, overlapped communication lines, scattered and duplicated systems for information collecting and tracking, or the same corporate function with separate working processes.

Flexibility

If changes can be made without much difficulty in response to the new situations, it reflects the characteristic of flexibility. Some project actors are complaining about the inflexibility in the project schedules, guidelines, and alternative offerings of resources, while others are complaining about too much flexibility, especially when it relates to customer affairs and the chaotic works resulting from the easy-to-change. In the latter case, extraordinary coordination work is required. The misalignments in flexibility mostly concern routines.

Consistency

Consistency is defined in this research as "always behaving or happening in a similar way without much deviation from before". Inconsistency happens in the face of the change of project plan and execution process, the change of project members or focal point, the application of new project tools, the constant emerging of new customer problems, the establishment of new processes to follow in the project, etc. Misalignments in terms of consistency mostly happen to normative elements carried by routines and artifacts.

Quality

Quality is about "an evaluation of a characteristic or feature of someone or something in terms of the degree of excellence". In the project process, quality can relate to onsite infrastructure, facilities,

and working conditions. Quality can also refer to human resources, communication approaches, tools, and the advancement of project corporate supervision structure.

Bureaucracy

Bureaucratic difficulties are often due to the complicated rules, processes, and written work that are required. They make it hard for people to get the job done. In projects, basically, the tedious reporting processes, the sluggish decision-making procedures, the sensitive relationships between officials at higher levels, the complicated measures to balance politics in organizations are all critical instances in project processes. The misalignments are mostly presented in the regulative elements concerning governance and power systems, and operation procedures.

Transparency

Transparency literally means "no secrets and easy to be seen through". According to the interview data, it is often to see a decoupling between what is seen and what is real as the drivers of projects, the partial sharing of information, and the complicated relationship between project members. Since many of the situations in projects can neither be defined obligatory by specific rules and laws nor be perceivable cognitively due to the incomplete information, the misalignments concerning transparency are primarily normative issues.

Uncertainty

The unknown and unpredicted situations are seen as uncertain. For example, an unexpected change of project inputs or the corporate structure, the change of project importance during the project execution, the enormous amount of work that was not plannable in advance, the gradual proceeding with business partners into unknown situations, the condition of being out-of-scope of one's power, or naturally bad weather for project's onsite events, all of these have brought project actors a certain level of uncertainty.

Enforcement

Enforcement is defined as "the process or determination of making sure that people obey or follow a law, rule, policy, or measure in order to make a particular situation happen or be accepted". Successful enforcement relies on the determination of the project owner, the approach of achievement, the support and the commitment of all project participants, including customers, as well as the well-organizing of the workforce, and the restricted scope of the expected outcome. This dimension of misalignments are concentrated in normative elements.

Legitimacy

Legitimacy stands for the quality of being reasonable, widely acknowledgeable, and acceptable in its surrounding environment. In projects, according to the data, legitimacy can be gained by official work allocation or working tile assigned by the management. In this case, it only relates to the normative elements that are carried by routines in the form of jobs, roles, and duties.

Table 6-3 Sample codes and quotes of dimensions

Conceptual codes	Sample codes	Sample quotes
Team Supportiveness	cross-functional teamwork (difficult vs easy)	It should be like this, to really work with them. But it was a little bit difficult through the whole project.
	project partner's attitude (clear v unclear)	Building up this system I thought, would be beneficial for them. When I go to them, they are like "Ok, let's see how you do it". They are quite[silent] It is not very clear on their attitude actually. They are showing their positive attitude on the project, but actually, I don't think they are supporting at all.
Clarity	project definition (specific vs. unclear)	The definition could be better. It's not clear enough. It's not specifically defined.
	project stakeholder (clear vs. confusing)	It was kind of doing this project to two customers. It felt like that. One was the operative team we worked with and planned this out. This is from our customer. The other part was the [company D] management. Also (we) didn't know if he was in the project or not. Sometimes he kicked in, sometimes he was not interested, then another person again wanted to know about this project. And that took us a lot of time.
Standardization	process in the IT department (aligned vs. not aligned)	Some of the other people from the IT department, not part of [name of the new division in IT] said, " [name of the new division in IT], they don't respect the processes, they do this and that. It should not be.
	ways of working between entities (aligned vs. misaligned)	There are different entities. They have different ways of working, so these are the internal conflicts we have.
Boundary	share of responsibility (internal vs. external)	We are external freelancer here, and we are almost the responsible person for this project. (But) the younger manager also has to take responsibility. This is a problem.
	knowledge gap (small vs. huge)	We need someone who can understand the context of the business of the customer. On the other side, they can understand the technical part. Sometimes the technician doesn't understand the requirement. Or the customer can clearly say what I want, but they don't understand the technical side that, maybe we have some constraint to really make it happen.
Accessibility	cross-system information accessibility (fully vs. limited)	The problem is the information about the (working) hours. People are working on the project and that's HR information. They give their information about "working hours" to the system, a different tool, a kind of CIM system for human resources. I have no access to that.

	project knowledge (available vs not available)	In the project, nobody has the knowledge here, but the project was signed here. So the project leader had no right tool to make this project successful.
Personal frame of reference	perception of colleague's performance (subjective vs. objective)	There might be people who believe one person is not up to the job they are asked to do, and that will make the project not work.
	driver of behavior (diverged vs. converged)	Sometimes we have some discussion about why we don't do that. We discuss because we don't have the same understanding or drivers behind our action plan.
Orientation	nature of work (people-based vs. machine- based)	The corporate guidelines for headcounts for staff is that, we have to increase the production of [product] without increasing the number of people working for [company]. In consulting, it does not make sense. If we have more clients, we need more people. Because what we are doing is a human job, so we need more people. So we are disconnected there.
	understanding of the problem of project (superficial vs. deep)	My team members think it may be a technical issue or a budget issue. They didn't realize that the project is with an integration issue.
Mentality	way of thinking (modern vs. old)	They have old thinking, old german thinking. It was not clear what they expect. This is the problem of communication.
	problem-driven mindset (with vs. without)	Some people have the mindset to really try to solve the problem or find a better way to it. But it does not exist for everyone.
Fitness	project leaders' skills for project (right vs. wrong)	The project leader is from [division name], the internal consulting unit. He is a very good workshop leader. But for this project, you need a hands-on consultant, not a trainer.
	resource input for project (messy vs. organized)	We have so many people willing to help in a campaign. Sometimes it is more questions about stopping people from helping. Avoid too much mess and organize the approach.
Redundancy	information source management (duplicated vs. integrated)	There are a lot of overlaps. One employee's (information) can be reported several times.
	work process (lean vs. duplicated)	I can use this tool, but it's limited because I am not part of [name of corporate division]. So it's still my part of the job to archive, etc And many of these things are double or triple, just because we don't use the one platform.
Flexibility	project schedule (strict vs. flexible)	In other cases, you have strict schedules, etc. In this case, we can talk to each other.

	project timeline (strict vs. unstrict)	Originally we have the timeline. We just keep delaying (postponing) them.
Consistency	customer team (stable vs unstable)	There is not one person there. There are different managers at different times.
	project tools (consistent vs. inconsistent)	(After switching to Google software globally) some files in the company may not be opened.
Quality	onsite infrastructure (low level vs. high level)	In Africa and Mexico, there is nothing. Infrastructure is not on the highest level. It's possible that at 11 am in the morning, there is no electricity. (But for) the automobile project, we always have a date, which is the start of production.
	quality of technology-assist communication (effective vs. ineffective)	Face to face communication is always the most efficient way. Otherwise, video conferences and Webex are also used very widely. Calls will miss some information, and if the connection is not good, it will again impact the patience of people.
Bureaucracy	working process (bureaucratic vs. simplified)	That is important for me to reduce the effort from people to do the jobs around them. They have to do more and more bureaucratic work. There should be a more or less simplified process.
	project reporting time (much vs. little)	It makes us a little bit hard to report. We are working on the project, but we are spending a lot of time reporting.
Transparency	depth of project briefing (deep vs. shallow)	We launched the project in January this year. After two or three months, I started to understand better. When I just entered the team, people told me the things on the surface. I had no idea what's behind. I spent the first three months to investigate.
	transparency of conflicts between functions (visible vs. invisible)	The conflicts between the functions cannot be brought onto the table clearly. So I cannot clearly, very directly talk to my team members and tell them this is the key issue of the project. I can only give them the information at a certain level.
Uncertainty	project schedule (plannable vs. unplannable)	We are doing such a big project. There are a lot of things not plannable.
	weight of project during execution (increased vs. unchanged)	If I am working to improve the working excellence of [a customer], suddenly, there is a campaign to sell [number][product] to them. The importance of my project there becomes much higher. Because I can't mess it up. If I mess up my project, I mess up [number] [product] being sold, and that's [number] dollars.

Enforcement	management's determination for the project (sufficient vs. insufficient)	One is that you need to get your sponsor/project owner's determination. The reason why this project is not quite working within my team is that he does not have the determination. Every time we talk about the project in front of people or even in private, he is not showing enough determination that he would like to really put up something like that. So that's the key factor.
	enforcement for deliverables (sufficient vs. insufficient)	Lack of clear deliverables and lack of enforcement to produce the deliverables. This is the core of such an environment.
Legitimacy	project role assignment (legitimate vs. illegitimate)	To convince this person's real boss. I mean the functional boss. 20% (of time) of this guy will be working on this project. When I do the performance evaluation with him, I would consider your feedback with that 20%. That would work. If you don't actually link that to the performance, with a goodwill, they will volunteer something, (but) nothing will work.
	working title (legitimated vs. illegitimated)	I have already taken care of this project for 1.5 years, before they appointed a project manager generally, which is [name of the project manager]. Most people already know about the project and know about me, being a project manager without a title.

From the mapping of all the institutional misalignment in the institutional matrix (see Table 6-4), it is notable that normative and cognitive elements are dominating the institutional misalignments in projects, while "routines" carry the most institutional misalignments in projects.

Routines, as the genes of organizations, range from hard activities encoded into technologies to soft organizational routines, and they all involve with repetitive patterns of activities (Winter, 1990). The repetitive activity patterns could extend from standard operating procedures, organizational activity bundles such as jobs, to skill sets of individual employees (Miner, 1991). These activities entail "little or no conscious choice and behavior governed by tacit knowledge and skills of which the actor may be unaware" (Scott, 2014, p101). When actors are very much used to their routines framed either by fixed procedure or job descriptions, they may unconsciously bring their routines into the new temporary setting. Therefore, it is notable that actors encounter misalignments with each other mostly in terms of operating procedures, jobs and roles, and scripts.

Carriers	Pillars				
	Regulative	Normative	Cultural-cognitive		
Symbolic	Rules/Laws	Values/Expectations	<u>Categories/Schema</u>		
systems					
	Team Supportiveness	Team Supportiveness	Team Supportiveness		
	Boundary	Clarity	Clarity		
	Uncertainty	Standardization	Standardization		
		Boundary	Boundary		
		Personal frame of reference	Accessibility		
		Orientation	Personal frame of reference		
		Mentality	Orientation		
		Quality	Mentality		
		Transparency	Fitness		
		Uncertainty			
		Enforcement			
Relational	Governance systems/Power	Regimes/Authority systems	<u>Structural</u>		
systems	systems		isomorphism/Identity		

Table 6-4 Dimensions of institutional (mis)alignment in institutional matrix

	Clarity Boundary Accessibility Orientation Bureaucracy Transparency	Team Supportiveness Accessibility Personal frame of reference Orientation Mentality Flexibility Bureaucracy Transparency	Team Supportiveness Personal frame of reference Orientation Transparency
Routines	Protocols/Standard operating procedures Team Supportiveness Clarity Standardization Boundary Personal frame of reference Orientation Redundancy Flexibility Consistency Quality Bureaucracy Uncertainty	Jobs/Roles/Obedience to duty Team Supportiveness Clarity Standardization Boundary Accessibility Personal frame of reference Orientation Fitness Redundancy Flexibility Consistency Quality Transparency Uncertainty Enforcement Legitimacy	Scripts Team Supportiveness Clarity Boundary Accessibility Personal frame of reference Orientation Mentality Redundancy Quality Bureaucracy Transparency Uncertainty
Artifacts	Objectscomplyingwithmandated specificationsStandardizationBoundaryOrientationRedundancy	Objectsmeetingconventions,standardsTeam SupportivenessStandardizationBoundaryFitnessRedundancyConsistencyQuality	Objects possessing symbolic value Standardization

6.2 Practices for reconciling institutional misalignments

6.2.1 Agency in temporary settings

Traditional institutional theorists have focused on how organizational actions are restricted by different kinds of institutional elements that constrain and guide organizational behavior (Scott, 2008). With this traditional view of the relationship between institutions and action, the

"institutional work" (Lawrence and Suddaby, 2006) mainly addresses how actors create, maintain, and disrupt the institutions in which they are embedded. However, from a system perspective, the system is constraining but also can "be made and unmade through human action and interaction" (Ortner, 1984, p159). With a more dynamic view of institutions, Lawrence et al. (2011, p52) noted that the agency is not only associated with successful instances of institutional change, such as "institutional entrepreneurship that produce new structures, practices or regimes, social transformations that spawn new logics, or innovations that affect a new taken-for-granted status quo". And the huge amount of various day-to-day equivocal instances of agency, which may aim at altering the institutional order, no matter successful or not, are still missing from the ground accounts of institutions and agency (Lawrence et al., 2011).

Emirbayer and Mische (1998) proposed three dimensions of agency: iterative, projective, practical-evaluative agency. The iterative dimension underpins the reproduction of established and taken-for-granted practices and institutions (DiMaggio and Powell, 1991), with which the institutionalists especially the neo-institutionalists, tend to address institutional change and stability as not necessarily due to intentional action. However, practice theorists such as Giddens (1984) holds the notion of "duality of structure", which expresses the mutual dependence of structure and agency, and maintains that actors are knowledgeable and reflexive agents who draw on rules (codes and norms) and resources (material and symbolic) for their situated conducts, whereby produce practices knowing as "regularized types of acts" (Giddens, 1976, p75). The notion of habituated actions (Berger and Luckmann, 1966) and Bourdieu's (1977) habitus which was seen as a way of being in the world also drew the tacit knowledge in habitual interaction of individuals as a cause of institutional creation and transformation. These intentional but
regularized types of the agency were described as "projective agency" by Emirbayer and Mische (1998).

However, in temporary organizational settings, due to its limitation in time and resources, actors tend to exercise judgment and "get things done" in the here and now (Tsoukas and Cummings, 1997). This needs to be enabled by the "practical-evaluative dimension of agency", which is defined as "the capacity of actors to make practical and normative judgments among possible alternative trajectories of actions, in response to the emerging demands, dilemmas, and ambiguities of presently evolving situations" (Emirbayer and Mische, 1998, p971). Smets and Jarzabkowski (2013, p1281) also agreed that practical-evaluative agency is "the most relevant dimension for studying how actors respond to and construct institutional complexity". However, in the recent articles, there is "a lack of empirical work that looks beyond field-level actors to takes seriously the role of individuals" (Smets and Jarzabkowski, 2013, p1282) and see them as the "carriers of institutions" (Zilber, 2002, p234). As Friedland and Alford (1991) claimed, without actors and subjectivity, there is no way to account for the change. Therefore, it is the individuals as agencies, who are capable of making practical and normative judgments in the face of institutional complexity, and enabling the reconciliation of misalignments to get things done and move things forward in temporary settings.

6.2.2 Practices as situated mirrors

Institutions are "encoded in actors' stocks of practical knowledge", and they influence how people "communicate, enact power, and determine what behaviors to sanction and reward" (Barley and Tolbert, 1997, p98). How the multidimensional institutions manifest themselves in the daily conduct of actors is mirrored in what Giddens (1984) called "practices". Practices are "constitutive of the field" and connect the intra-organizational with the extra-organizational (Skalen and Hackley, 2011, p190). They are basically the "coordinated activities of individuals and groups in doing their real work as it is informed by a particular organization or group context" (Cook and Brown, 1999, p60). Therefore, what did actors do on a daily basis and why they happened, according to Schatzki et al. (2001), is the primary concern of the practice approach. According to practice theorists, agents are "body and minds that carry and carry out social practices" (Skalen and Hackley, 2011, p190). Therefore, the object of inquiry of the practice-based approach is the activities and practices rather than actors and practitioners to capture what people do in reality (Nicolini, 2012). This idea goes in line with the processual perspective that consider phenomena processual is to understand and explain the phenomena in terms of interlinked events, activity, temporality, and flow (Langley et al., 2013; Gehman et al., 2016).

Despite various practice idioms, practice standpoint, practice lens, the practice-based approach describes important features of the world as something that is made and re-made (Nicolini, 2012) in practice with "a particular routinized mode of intentionality" to want or to avoid (Reckwitz, 2002, p254). Practices are "always temporally, spatially, and paradigmatically situated" (Giddens, 1979, p5384) and inherently "contingent, materially mediated", and highly situated in "place, time, and historical context"(Nicolini, 2012, p214). In the face of new circumstances, practices are always generated and adapted. Nicolini (2012, p102) described practices specifically as "molar units", meaning they are "complex wholes composed of other smaller elements", ranging from a single action (e.g., shaking hands), short series of activities (e.g., performing) to durable activities or habit (e.g., Vegetarianism; Scientific Practicing "neither Research). is mindless repetition complete nor invention" (Nicolini, 2012, p5).

Though all practices imply "some level of durability and carry traces, no matter how weak of institutionalization" (Nicolini, 2009, p19), only the practices that "have the greatest time-space extension" can be referred to as institutions (Giddens, 1984, p17). The new practices that are narrowly diffused and weakly entrenched but have the potential to become institutionalized are called proto-institutions (Lawrence et al., 2002). The emergency of the proto-institutions will result in further changes in the institutional arrangement (Kleinaltenkamp et al., 2018). The practices that are applied and created in temporary settings are only intended for situations with time-limitation. Therefore, they may not reach the greatest time-space extension and be widely acknowledged as institutions. In this research, a temporary organization is seen as an episode of the service ecosystem in which actors engage in the process of resource integration. The practices that are applied for reconciling institutional misalignments, coordinating, enabling and resources integration activities are regarded as the "resource integration enabling practices (RIEP)".

6.2.3 A toolkit of enabling practices

As practices continuously change, expand and evolve, "an appreciation of differences and combination opportunities are the two principles of in naming, defining, and exemplifying practices", or in other words, theorizing practices (Nicolini, 2012, p10). In temporary organizing forms such as projects, since every project is unique, a set of practices that is effective in one project in particular contexts for reconciling institutional misalignments can not ensure its effectiveness for another project in another situation. In view of this, a toolkit approach is considered as a suitable solution for this dynamic and multi-dimensional phenomenon. How much use of each type of practice depends on the characteristics and the situation of each project.

In this research, four categories with 27 practices are distilled as a set of the toolkit for reconciling institutional misalignments in temporary organization to ensure better coordination during resource integration. The four categories of resource integration enabling practices are presented according to the Gioia data structure (Gioia et al., 2012): task-oriented enabling practices (Figure 6-1), procedure-oriented enabling practices (Figure 6-2), information-oriented enabling practices (Figure 6-3) and interpersonal-oriented enabling practices (Figure 6-4). The four categories of practices are aggregated from 27 sub-categories of basic practices, which are distilled from 376 original actions reported by the practitioners participated in this research according to their project experiences. The definitions of the practices are provided in Table 6-5. The following discussion is based on the qualitative data of this research.

6.2.3.1 Task-oriented enabling practices

This set of enabling practices includes five basic practices: identifying, matching, reviewing, grooming, and eliminating. By identifying, the scope of the project, resource planning for the project, the obligations of each project team member, and the project working mode are clarified. To ensure the supply of project execution, practitioners match the project requirements and available resources both internally and externally. With regular reviewing of project outcomes at each project stage, project members' performance and team spirit are evaluated against benchmarks to ensure improvement and final outcome. The practice of grooming is to ensure the running of the project in cases of uncertainty or difficulty, for example, back-up plans have to be made upfront, back-up persons have to be appointed in advance, and intermediate solutions have to be developed. Sometimes, due to the unsatisfactory performance, solutions with a similar outcome, non-core or extra tasks, objects, (un-)written rules, or a team member have to be eliminated or moved.

1st Order Concepts	2nd Order Concepts	Aggregate Dimensions
 Identifying the amount of involvement in project Allocating extra budget for new IT project Identifying the most important project deliveries Understanding stakeholders' preference Precisely defining each person' role at the beginning Identifying capabilities for tasks Defining communication patterns Defining focal points for specific issues Creating digital check list and to-do list Putting coordinator contact info in project books Arranging tasks with to-do-list and schedule Checking potential member's availability for project planning Understanding customer's expectations Making emergency plan upfront before the show in case of crisis Identifying to identify action for the next step after each meeting Offering product not exclusively to a customer Being not fully customer-oriented in view of time needed for product development Aligning the specific target of project Identifying upfront a common understanding of project content Negotiating time frame base on product complexity 		
 Making choice of one over another software platform Kicking out the less important components due to their physical conflict Outsourcing non-core project tasks Skipping if possible the non-written rules within team Kicking out the sales partner with bad performance Switching to team support in case of extra project tasks Shifting the project pressure to the sales team 	Eliminating	
 Differentiating communication actions towards target audience Using internal resource with zero cost Applying behavior-driven team hiring approach Requiring PM skills for project manager Planning all resource to fulfil target Having necessary professional core team Acquiring external resource for project Pairing up parties for direct communication Looking for member who does not panic in face of problems Asking different departments for resources Looking for people with good soft skills and open-mind 	→ Matching	Task-oriented enabling practices
 Measuring performance by customer satisfaction survey and NPS regula Reviewing objectives one-to-one Conducting scheduled reviews Assessing team spirit, clarifying and solving the issues Linking personal objectives, performance, evaluations with performance the project Changing the scheme of performance review of team member Manager doing regular performance review with team Taking chance of internal problems for improvement Assessing member's fitness to project Doing "lessons learned" meeting with team Double checking the data with customers before publishing Reviewing at each gate in process with shareholder's signature Reviewing performance index with line manager 	e in Reviewing	
 Dividing project packages Delivering result in steps Breaking down project tasks for big project Looking for backup person for each task Doing instalment payment in project Having back-up plans 	/ → Grooming	

6.2.3.2 Procedure-oriented enabling practices

Six basic practices "documenting, tracking, monitoring, accelerating, standardizing, optimizing" constitute the set of procedure-oriented enabling practices. To ensure reliable project execution, team members are supposed to keep proper documenting. For example, taking meeting minutes, writing and organizing project logbook about detailed activities, creating material sourcing lists, fixing written agreements to prevent any potential disputation. By tracking the project procedures with the application of various tools, the project flow is more transparent, and the tendency of cost and material consumption is more predictable. If tracking with more caution, intention and readiness to take actions whenever necessary, it is understood as monitoring in this case. Proper monitoring can be realized with relevant knowledge-base, tracking tools, and also project goals bearing in mind to be able to direct the flow of the process. Accelerating can be achieved through communication via social media, using professional project methodology, developing new software or program, or acquiring additional human resources inputs, such as hiring freelancers, interim workforces, or taking advantage of personal connections. By standardizing the project procedures, it makes clear how the project team is formed, how a new product is developed, which templates to use, who is the leader for which task, and what to do in case of urgency. And optimizing is realized through improving the current utilization of resources and working process, acquiring external resources, and developing new systems or functions.

6.2.3.3 Information-oriented enabling practices

This set of enabling practices includes informing and synchronizing. Informing is to deliver information proactively (e.g., releasing press, formulating case studies) and also receive information to get informed. It concerns the approach, as well as the timing of obtaining information and delivering information. For example, team leaders are more likely to know how to address customers in an appropriate way during the project. Some project managers proactively inform or communicate with the related project entities even before a project is officially kicked off to help the involved parties get a better understanding of the project background and prepared for any upcoming issues in the project. Synchronizing is about keeping pace with others in terms of knowledge of the project's current status. According to the data, practitioners have developed a new cloud solution to receive timely updates, made extensively and timely "alignment calls" or had regular updates from working partners to ensure the outcome.

Figure 6-2 Procedure-oriented enabling practices



Figure 6-3 Information-oriented enabling practices

1st Order Concepts

2nd Order Concepts

Aggregate Dimensions



6.2.3.4 Interpersonal-oriented enabling practices

This set of enabling practices includes fourteen basic practices: customer-orienting, influencing, supporting, engaging, committing, sharing, bridging, connecting, adapting, articulating, appreciating, respecting, cultivating, and entitling.

Customer-orienting, with a relatively broad view, is to place customers' requests or wishes into the center in offering products or services. According to practitioners' experiences, customer-orienting in actions can range from relocating to customer site, co-developing with customers, to adapting working language to customer needs. Influencing concerns any action that may lead to changes in other people's opinions or reactions. From clarifying, consulting, explaining, recommending to making-sense and giving-sense, the actions in general aim to reconcile the institutional misalignments between parties in order to smooth the resource coordination and integration process, though sometimes financial rewarding mechanism are involved. Supporting shows a certain level of willingness to do something positive towards co-working team members and customers, either emotionally or practically. From keeping cooperative, giving extra help, offering on-the-job coaching or after-sale training, to providing professional suggestions, these actions intend to ensure the final positive outcome of the project. While supporting is mainly towards others, engaging is bilateral. Not only the project members themselves proactively become involved in tasks, process, and teamwork, they also make efforts (e.g., showing enthusiasm) to interest, encourage, involve others with the resources of demand to contribute to the project. Engaging can be in forms of proactively look for people with different competencies to add on the current project or coordinating meetings among parties to clarify issues whenever necessary. Committing indicates that actors show consistency and determination in their choices or being responsible for their obligations and actions. It usually contributed to a focal matter. As actors can bring in and also ask for the resources they need, sharing is often about actions or measures that give others access to the same or similar resources based on mutualization. The sharing of tasks, knowledge, experiences, or appliances for the project can be realized by creating a communication platform or intra-pool, using project tools or advanced technologies, or setting task rotation mechanism, etc. The purpose of bridging is to reconcile the differences or gaps in terms of profession, knowledge, understanding, cultural background between two parties, through creating a "business relationship role" helping to connect to the right people, moderating behaviors, or providing new insights compromising divergent ideas. Bridging makes tasks, processes, or interactions easier among people with different backgrounds or entities in different situations. Adapting is conducted in the face of changes or unexpected situations. It can be in the form of altering time allocation for the project, adjusting project design or goals, delivering intermediate solutions, prioritizing urgent tasks, changing communication approach with different parties, staying flexible and keeping learning for deeper involvement. Connecting happens when there is a need to access resources or people, maintain relationships, clarify issues, report status, or escalate disputations. Articulating intends to clarify and make ideas clear to understanding. For example, management draws lines for unacceptable behaviors in case of disputation among team members or the project team asks for specific assistance from the customer. Appreciating takes place when teamwork is to be thanked, recognized, or rewarded. It can be in forms of team recreational events, thank-you-letters, nomination of rewards, or high score at annual review. Respecting intends to show respect to others' professions and roles, expertise and specializations, personal preferences and opinions, and to show trust and fairness to the work others have done, as well as to keep equal communication with each other. Cultivating is to foster good feelings, relationships, or trust with other people for current and future development. For examples, manager tends to use "more the

carrots than the sticks" which means to give more rewards than punishments to the team members, and also show his care for the team to create a good working atmosphere. The project team also tries to maintain and develop a good relationship with the customer by providing extra consultancy. Entitling is mainly about granting someone the rights officially or legitimacy to have certain accessibilities or decisions-making for certain tasks or at certain stages in the project.

Figure 6-4 Interpersonal-oriented enabling practices



Table 6-5 Category of resource integration enabling practices

No.	Themes	Description/Definition	
	Task-oriented practice		
1	Identifying	Recognizing or making clear of a fact, need, problem or approach	
2	Matching	Searching for or acquiring objects or people with characteristics of interest and demand	
3	Reviewing	Checking, thinking or communicating again to ensure expected outcome	
4	Eliminating	Making a choice of one over another due to its quality, performance or necessity	
5	Grooming	Taking actions to be ready for a negative outcome	
	Procedure-oriented practice		
6	Documenting	Taking notes of detailed activities, experiences or agreements in both official and unofficial way	
7	Tracking	Keeping the flow of procedure or process transparent and updated	
8	Monitoring	Watching and supervising a situation or a process carefully with the assistance of tools, knowledge or people, and take actions whenever needed	
9	Accelerating	Applying tools or forms of human resources to make things happen sooner or faster	
10	Standardizing	Making the process of the same type follow the same features or procedures	
11	Optimizing	Improving the condition or quality of a tool, a function, or a process	
	Information-oriented practice		
12	Informing	A proactive action or a mechanism to deliver information or receive information	
13	Synchronizing	Keeping pace with others in terms of process or keep updated with others in terms of information	
	Interpersonal-oriented practice		
14	Customer-orienting	Placing customer's requirements or wishes into the center in making or changing product or service offerings	
15	Influencing	Any action or mechanism that may lead to changes of other people's opinions or reactions	
16	Supporting	Willing to involve or do something positive towards co-working team members and customers, either emotionally or practically	
17	Engaging	A status, a measure or an action showing proactive involvement in tasks, processes and with people, or making efforts to interest, encourage and involve others	

18	Committing	A status, an action or a measure taken to show consistency, loyalty and determination in one's choices and being responsible for their obligations and actions
19	Sharing	Actions or measures to give others access to the same or similar resources based on mutualization
20	Bridging	Making tasks, processes or interactions easier among people with different backgrounds or entities with different situations
21	Adapting	Making a possible change to suit conditions or achieve better outcome
22	Connecting	Joining or linking people for resources, solutions, etc.
23	Articulating	Actions or measures taken to express thoughts and ideas in a clear or easy way
24	Appreciating	Showing thankfulness or recognition to people
25	Respecting	Politeness, fairness or trust shown to people for their profession, expertise or personal choice and opinion
26	Cultivating	Fostering good feeling, relationship or trust with other people for current and future development
27	Entitling	Granting someone the official right or legitimacy to have certain accessibilities, or make decisions for certain tasks or at certain stages in project

7 Conclusion and discussion

7.1 Answer to research questions

Temporary organizations such as projects are playing a significant role in navigating changing and integrating resources for value co-creation among heterogenous entities for new assignments. Project actors usually have different institutional affiliations. Due to the inherent tensions between the temporariness of temporary organizations and the stability of institutions, this research takes projects as empirical focus and intends to explore 1. What are the institutional misalignments in temporary organizations such as projects? 2. How can institutional misalignments be reconciled?

7.1.1 Answer to research question 1

Taking a dialectical lens, this research approaches the phenomena of interests "the interior project interactions" qualitatively to understand the challenges, tensions, and conflicts that project actors are often encountered at the micro-level of interactions. In total, 255 sets of misaligned interactions are identified and further categorized into 18 dimensions of institutional (mis)alignment. The result provides a clear frame of major obstacles that may hinder the on-time, on-quality, and on-budget project deliveries.

7.1.2 Answer to research question 2

Misalignments are inevitable in temporary organizing, due to the inherent tension between the temporariness and stability. In order to ensure the performance of projects, measures are required to reconcile the institutional misalignments. Four categories of resource integration enabling practices are aggregated from 27 sub-categories of practices, which are based on a total number of

376 actions taken by practitioners. They are presented as a toolkit to solve the situational institutional misalignments in terms of challenges, tensions, and conflicts. The four categories of enabling practices are "information-oriented enabling practices", "procedure-oriented enabling practices", "task-oriented enabling practices", and "interpersonal-oriented enabling practices".

7.2 Theoretical contributions

7.2.1 Contributions to project research literature

This research provides an integrated framework (see Figure 2-1) of project research based on a review of the sophisticated and fragmented expansion of project research in both theory and practices. The framework provides a clear overview of evolution from the traditional task perspective seeing projects as tools and aiming at task completion, to the recent organizational perspective seeing projects as temporary organizations and aiming at value co-creation, and the shift of ontology from the "being" to the "becoming". With the rising soft paradigms in project research, the interrelationship between projects and environments in different aspects has gained increasing attention. In response to the call for the actuality of projects (Cicmil et al., 2006) and micro-process of organizing in temporary organizations (Sanderson, 2012), this research applies an internal perspective to empirically examine how project actors decode broader systems, construct meanings and take actions accordingly.

The temporary organization is a conceptual category. This research is unique as it provides a new ontology of temporary organization by integrating the theoretical implication from the service-dominant logic and the institutional theory into project management literature as a realization

of the cross-domain fertilization. The temporary organization is seen as an episode of a service ecosystem, in which institutions coordinate the interactions among the resourceintegrating actors. This new ontology of temporary organizations sets a conceptual base to explore the project's multilevel embeddedness.

Given the increasing calls for more appreciation of the tensions, inconsistencies, and permanent and synergies emerging at the interfaces between the temporary organizations in project literature, this research anchored on the institutional misalignments based on business practitioners' project experiences. With a dialectical approach, which would "leave aside any monist expectations" (de Rond and Bouchikhi, 2004, p67) and take the dynamic phenomenon facts, this research, according to the as author's knowledge, is the first empirical study that specifically reveals the institutional misalignments in temporary organizations with a practice toolkit solution.

7.2.2 Contributions to service-dominant logic literature

The coordinating role of institutions and institutional arrangements was recently introduced as one of the axioms in service-dominant logic (Vargo and Lusch, 2016). However, institutions' coordinating role in the service ecosystem is so far only conceptually formulated in the service-dominant logic literature. The new ontology of temporary organizations proposed in this research brings in a dynamic and fluid empirical setting to zoom in and enlarge the role of institutions in coordinating resourceintegrating interactions in service ecosystems. It is assumed that the multi-level embeddedness of institutions is exemplified in the behaviors and interactions of actors' day-to-day operations.

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Despite the conceptually noted institutional complexity in the service ecosystems, no research has empirically explored the institutional tensions in the process of resource This research empirically situates in integration. temporary organizational settings institutional (mis)alignment dimensions that occurred during and reveals а set of In addition, a toolkit solution the resource integrating process. comprising four categories of resource integration enabling practices are distilled from the empirical reconciliation of misalignments. This data for the occurred institutional research responds the often emphasized importance of using practice to perspective in understanding the real-life situation (Blomquist al., 2010; et 2017) Svdow contributes to understanding how institutional and Braun. and also arrangements become shared in service ecosystems (Koskela-Huotari and Vargo, 2016).

7.2.3 Contributions to institutional theory literature

Projects have not been particularly prominent objects of study among institutional theorists (Dille and Söderlund, 2011). Due to an inherent tension between the stability of institutions and the temporariness of projects, this research manifests the different institutional forces in project interior process and presents a set of institutional (mis)alignments dimensions based on the empirical data. It enriches the understanding of "temporary enactments of stable institutions" (Kadefors, 1995). By applying a practical approach for reconciling institutional misalignments, this research contributes to the reported inadequacy of studying the practical use of institutions, and institutional perspective in practitioner-oriented literature (David and Bitektine, 2009). This research may also be a pioneer in empirically responding to the emerging conceptualization of "practice-driven institutionalism" (Smet et al., 2017).

7.3 Managerial implications

This research considers both inter-organizational and intra-organizational projects and examines the interactions of the project actors with different backgrounds and in multiple contexts.

The eighteen dimensions of institutional misalignments identified from this research provide a framework for practitioners to orient the core issues in temporary organizations. With a detailed allocation of the dimensions to the corresponding institutional elements and carriers, it is clear for practitioners to focus on the primary types of institutional misalignments in the respective functional domains.

This research acknowledges the "practical-evaluative dimension of agency" aiming at getting things done in the here and now, which particularly fit in the temporary situations. In total, four sets of resource integration enabling practices are aggregated from 27 sub-categories of basic practices and 376 actions reported by practitioners in reconciling the institutional misalignments. The four sets of practices are distilled firstly by zooming in to understand the actual mundane practices taken by different practitioners in specific space, time, and context, then zooming out to expand the scope of observation and discern their relationships in space and time. The result reveals an effort in overcoming the often criticized disconnection between academic and practical use of institutions.

The practices are formulated with a toolkit approach. As each project is unique in time and space, and with different combinations of resources, this toolkit assists practitioners in selecting the most appropriate practices according to the situational problems encountered in certain space, time, and context.

7.4 Limitation

There are a few limitations concerning the aspects of conceptualization, methodology, and data collection of this research.

1. Limitations of conceptualization. This research takes projects as the main empirical context to examine institutional misalignments. Other minority types of temporary organizations may also be considered for the identification of dimensions of institutional (mis)alignments.

2. Limitations of data collection. Due to the restriction of data accessibility and constraints of funding, only individual practitioners through personal connections are approachable for in-depth interviews as data collection. The intended examination of a few complete interior project processes was not able to be realized as planned.

3. Limitations of the methodological approach. The qualitative methodology applied in this research is only limited to in-depth qualitative interviews. A real process study supported with a longitudinal data set, onsite project observations, or process tracking would be desirable to identify further patterns between the particular type of institutional misalignments and the corresponding practices as solutions for reconciliation.

7.5 Future research opportunities

The concept of practices captures what project actors do in reality. This research considers the uniqueness of each project, therefore, offers a set of practices as a toolkit. For future research, scholars may consider testing the effect of the "time-space extension" of these practices based on a larger sample.

With a rich set of the longitudinal moment by moment data, a real process study can further capture the detailed processes as they occur to produce a visual mapping or patterns of how events are connected over time and space. As the project process is extremely dynamic, the heterogeneous types of interfaces connecting the project temporariness with the outside environment are to be explored both in depth and breadth.

Industries such as energy, healthcare, the government in the public sector can be further incorporated. In the face of the project economy (PMI 2020), it is promising to obtain a comprehensive understanding of the obstacles that hinder successful project performance in both the public and private sectors. A fundamental temporary organizational theory or a project management theory can be developed based on further empirical studies with a bottom-up approach.

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Appendix A- Dimensions in versus codes

Team Supportiveness		
Level of motivation (low vs high)	Normative/Symbolic	1.
Involvement of partners manager (positive vs negative)	Cognitive/Relational	2.
Team involvement (high vs low)	Cognitive/Relational	3.
Impact of inter-personal attraction on project work	Cognitive/Relational	4.
(positive vs negative)	_	
Team commitment to meeting schedule (high vs low)	Regulative/Routines	5.
Project partner's attitude (clear v unclear)	Cognitive/Symbolic	6.
Partners motivation for the project (high vs low)	Normative/Symbolic	7.
The driver of team effectiveness (authority-driven vs	Normative/Relational	8.
task-driven)		
Team motivation during execution (increased vs	Normative/Symbolic	9.
decreased)		
Effect of team's low supportiveness (short-term vs	Normative/Routines	10.
long-term)		
Team supportiveness (low vs high)	Cognitive /Symbolic	11.
Expatriate information disclosure (full vs partially)	Cognitive/Symbolic	12.
Impact of volunteer-based work allocation (positive vs	Normative/Symbolic	13.
negative)		
The motivation of team member (low vs high)Cognitive/Relationa		14.
Cross-functional teamwork (difficult vs easy)	Normative/Routines	15.
Customer engagement (supportive vs not supportive)	Normative/Relational	16.
Customer relationship (support vs confrontation)	Normative/Relational	17.
Project member collaboration attitude (active vs passive)	Cognitive/Routines	18.
Cross-team member (collaborative vs uncollaborative)	Cognitive/Relational	19.
Operational disputation (evasive vs collaborative)	Cognitive/Routines	20.
Team Communication (smooth vs problematic)	Cognitive/Relational	21.
Cross-department support (project-related vs non- project related)	Normative/Routines	22.
Cross-department support (active vs evasive)	Cognitive/Symbolic	23.
The use of email as a communication tool (active vs passive)	Normative/Artifacts	24.
Influence of local labor law on difficult team member (positive vs negative)	Regulative/Symbolic	25.

Working mode (procedure-driven vs experience-	Regulative/Routines	26.	
driven)			
Engagement of local sales partner (high vs low)	Normative/Relational	27.	
Motivate local sales partner (easy vs hard)	Cognitive/Relational	28.	
Data sharing from R&D department (difficult vs easy)	Normative/Routines	29.	
Decisive factors for team commitment (by pressure vs	Normative/Relational	30.	
Conflict level (small team vs big team)	Cognitive/Relational	31	
Clarity	Cognitive/Relational	51.	
Clarity			
Internal customer requests (clear vs unclear)	Normative/Routines	32.	
Delivery of requirement (clear vs unclear)	Cognitive/Symbolic	33.	
The goal of doing the project (common vs diversified)	Normative/Symbolic	34.	
Corporate structure (clear vs unclear)	Regulative/Relational	35.	
Project segments/goals (clear vs unclear)	Normative/Symbolic	36.	
$T = 1 = 11^{1} + 1^{$		27	
l ask obligation setting (early vs late)	Regulative/Routines	37.	
Project manager position (clear vs unclear)	Normative/Routines	38.	
Colleagues' understanding of the process (sufficient vs	Cognitive/Routines	39.	
insufficient)			
Project responsibility taker (clear vs unclear)	Regulative/Relational	40.	
Process supervision responsibility (cross-functional vs project internal)	Normative/Routines	41.	
Understanding of project goal (output-driven vs Normative/Symbolic		42.	
process-driven)			
Organization of the customer (clear vs confusing)	Regulative/Relational	43.	
	0		
Project stakeholder (clear vs confusing) Regulative/Re		44.	
Project schedule (clear vs unclear)	Regulative/Routines	45.	
	-		
Understanding of customer expectation (clear	Normative/Symbolic	46.	
understanding vs misunderstanding)	N_{1} (° (° 1 1)	47	
Customer requirement delivery (clear vs unclear)	Normative/Symbolic	4/.	
Purpose of meeting (clear vs unclear)	Normative/Symbolic	48.	
Project definition (clear vs unclear)	Regulative/Symbolic	49.	
Project Content (clear vs unclear)	Normative/Routines	50.	
Project plan (with agreement vs without)	Regulative/Routines	51.	
Language with customers (single-cultural vs multi- Cognitive/Symbol		52.	
cultural)			
Task allocation for new team member (clear vs unclear)	Normative/Routines	53.	
Project time planning (clear vs unclear) Regulative/Routines		54.	
Perception of the market (right vs wrong) Cognitive/Symbolic		55.	

Understanding of customer needs (accurate vs	Normative/Symbolic	56.
inaccurate)	•	
Understanding of project approach (aligned vs	Normative/Routines	57.
misaligned)		
Project plan (on-time vs delayed)	Regulative/Routines	58.
Estimation of actual project workload and	Normative/Routines	59.
timeline (correct vs incorrect)		
Standardization		
$\mathbf{D}_{\mathbf{r}} = \mathbf{r} = \mathbf{r} + $	D1-+/D+	
Process in the 11 department (aligned vs not aligned)	Regulative/Routines	<u> </u>
Exact and a second a linear (new law is the second and the second a linear sec	Regulative/Routines	<u> </u>
reprised	Cognitive/Symbolic	62.
Ways of working between entities (aligned vs	Normative/Symbolic	63
misaligned)	Normative/Symbolic	05.
Corporate working tools (global vs local)	Regulative/Artifacts	64.
Procedure for project type (manufacturing vs	Regulative/Routines	65.
coordinating)	C	
Performance evaluation indicator (standard vs non-	Normative/Artifacts	66.
standard/case-by-case)		
Corporate schedule for change (global vs local)	Regulative/Routines	67.
Annual bonus reward (individual objectives vs	Cognitive/Artifacts	68.
collective objectives)		
Quality survey (with vs without)	Regulative/Routines	69.
Process supervision (good vs bad)	Normative/Routines	70.
Project procedure (standardized vs improvised)	Regulative/Routines	71.
Informing purpose of the meeting (in advance vs not)	Normative/Symbolic	72.
Project process (standardization vs. pop	Pagulativa/Pautinas	72
standardization)	Regulative/Routilles	75.
Project execution (standard vs special)	Regulative/Routines	74.
New project management tool (corporate vs functional)	Normative/Artifacts	75.
Boundary		
U U		
Understanding and analyzing project requirements	Cognitive/Symbolic	76.
(hard vs easy)		
Knowledge gap (small vs huge)	Cognitive/Symbolic	77.
Task expectation between technical and business	Normative/Symbolic	78.
colleagues (conflict vs non-conflict)		
Project work (extra vs regular) Normative/Routines		79.
Penalty for mission incomplete (internal vs external)	Regulative/Symbolic	80.
Payment condition for internal cross-functional projects	Regulative/Symbolic	81.
(strict vs loose)		
Time allocation for project (internal vs external work) Regulative/Relational		82.
The boundary of tasks (expanded vs unexpanded)	Normative/Routines	83.

Working culture (team culture vs corporate culture)	Cognitive/Routines	84.
Share of responsibility (internal vs external)	Normative/Routines	85.
Project reporting (internal vs external)	Regulative/Routines	86.
Team capability (internal vs external)	Normative/Routines	87.
Project information drive/folder sharing (internal vs	Normative/Artifactss	88.
external)		
Corporate IT solution for information sharing (internal	Normative/Artifacts	89.
vs external)		
Project knowledge (functional vs cross-functional)	Cognitive/Symbolic	90.
Cross-system information sharing (scattered vs	Normative/Routines	91.
collective)		
Ticket shop system designed for the fair (global vs	Regulative/Artifacts	92.
local)		
Different national working regulations influence onsite	Regulative/Routines	93.
international team relationship (positive vs negative)		
Patent registration (world vs local)	Regulative/Symbolic	94.
Project tasks in related to the job description (within vs	Normative/Routines	95.
outside)		0.6
Time allocation for project tasks (within JD vs outside	Normative/Routines	96.
Accessibility		
Dudant limitation (internal antion we external antion)	Deculative /Deletienel	07
Budget limitation (internal option vs external option)	Regulative/Relational	97.
Budget for good design (sufficient vs insufficient) Regulative/Relational		98.
Human resource for the project (sufficient vs Normative/Routines		99.
Descurse allocation (task based vs. non task/resource	Normative/Poutines	100
hased)	Normative/Koutines	100.
Availability of resource set (big group vs small group)	Normative/Routines	101
Availability of resource set (org group vs small group) Normative/Routh		101.
Cross-system Information accessibility (fully vs	Normative/Routines	102.
limited)	Normative/Routines	105.
On-site project resource/people (shortage vs	Normative/Routines	104
sufficiency)	1 tormative, Routines	101.
Cross-departmental resource (accessible vs not	Normative/Routines	105.
accessible)		1001
Knowledge required for business expansion (complete	Cognitive/Symbolic	106.
vs incomplete)	cognitive symbolic	100.
Project knowledge (available vs not available)	Cognitive/Symbolic	107.
Cross-function resource feeding (difficult vs easy)	Normative/Routines	108.
Cross-departmental support (easy vs difficult)	Cognitive/Routines	109.
Data accessibility to the target company in the merger	Normative/Routines	110.
(open vs resistant)		
Knowledge for certain tasks (team-wise vs individual-	Cognitive/Symbolic	111.
wise)		

Dependence on local sales partner for fair ticket selling	Normative/Relational	112
(high vs low)	i vormati v e, reclationar	112.
The patience of the R&D department on your project	Normative/Routines	113
result sharing (sufficient vs insufficient)	1 tormative, Roatmes	115.
Interference of other projects on this project timeline	Normative/Routines	114
(weak vs strong)	r tormati v e, r to utilies	
Loose of freelanced resource (sufficient vs insufficient)	Normative/Routines	115
Personal frame of reference		1101
reisonal frame of reference		
The driver of behavior (diverged vs converged)	Normative/Symbolic	116.
Team's confidence in the project (high vs low)	Normative/Symbolic	117.
Team's integration intension (diverge vs converge)	Normative/Relational	118.
Action in face of a mist (proactive vs non-proactive)	Normative/Symbolic	119.
Project manager aggressive approach (early-stage vs	Cognitive/Symbolic	120.
later stage)		
Perception of colleague's performance (subjective vs	Normative/Symbolic	121.
objective)		
Priority management (by arbitration vs by	Regulative/Routines	122.
communication)		
Perception of colleagues' performance (fair vs not fair)	Cognitive/Symbolic	123.
Team task sharing (balanced vs imbalanced)	Normative/Routines	124.
Members image perceived as a co-worker (positive vs	Cognitive/Relational	125.
negative)		
Team member' attitude towards difficult member	Cognitive/Relational	126.
(approach vs avoidance)		
Meeting style (long report vs quick review) Cognitive/Routines		127.
Project meeting time (brief vs lengthy) Cognitive/Routines		128.
Influence of top management personal preference (big	Normative/Relational	129.
vs small)		
Perception of final deliveries (extensive vs shallow)	Normative/Symbolic	130.
Taking project tasks outside job description	Normative/Routines	131.
(challenging vs not challenging)		
The working approach of people (technology-driven vs	Normative/Routines	132.
not)		
Orientation		
Level of understanding of mainet and (high valow)	Normative/Symphalia	122
Level of understanding of project goal (nigh vs low)	Normative/Symbolic	133.
(superficiel vs. doon)	Normative/Symbolic	134.
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Fitness		
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Degree of a shared understanding (low vs high)	Cognitive/Symbolic	173.
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Project-related business understanding (matched vs	Cognitive/Symbolic	175.
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Project tool (fit vs unfit)	Normative/Artifacts	178.
Onsite training language (single-culture/language vs	Cognitive/Symbolic	179.
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Information source management (duplicated vs.	Regulative/Artifacts	102.
integrated)	Regulative/Altilacts	165.
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(easy vs difficult)		
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Work organizing (spontaneous vs organized)	Normative/Routines	197.
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negotiable)		
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Consistency		
Mode of working for the project (consistent vs	Regulative/Routines	200.
inconsistent)		
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Process execution (closely obedient vs loosely	Normative/Routines	202.
obedient)		
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Corporate project guideline (corporate vs sectional)	Regulative/Routines	204.
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Influence of the change of people in the middle of the	Normative/Routines	209.
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Sharing documents (single channel vs multi-channel)	Normative/Artifacts	210.
Turnover of the team member (before the fair vs after	Normative/Routines	211.
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vs chaotic)		
Focal contact at customer site (consistent vs	Normative/Routines	213.
inconsistent		
Quality		
Team member capability identification (easy vs	Normative/Symbolic	214.
difficult)		
Quality of technology-assist communication (effective	Normative/Artifacts	215.
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Decision for project termination (project-centric vs not	Normative/Symbolic	222.
project-centric)		
Task fulfillment by suppliers (expected vs unexpected)	Normative/Symbolic	223.
Bureaucracy		
Relationship between project partner leaders	Normative/Relational	224.
(harmonized vs in conflict)		
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Problem-solving (operational level vs managerial level)	Regualtive/Relational	226.
Working process (bureaucratic vs simplified)	Regulative/Routines	227.
Project decision making (hierarchy vs flat)	Regulative/Routines	228.
Project reporting time (much vs little)	Cognitive/Routines	229.
Decision making from management (on-time vs	Regulative/Routines	230.
delayed)	0	
Transparency		
Corporate integration approach (direct vs indirect)	Normative/Relational	231.
Depth of project briefing (deep vs shallow)	Normative/Symbolic	232.
Communication level (superficial vs deep) Cognitive/Relational		233.
Transparency of conflicts between functions (visible vs invisible)	Normative/Symbolic	234.
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Project schedule (plannable vs unplannable)	Regulative/Routines	240.
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Visa issue of colleagues traveling to fair overseas (often	Regulative/Symbolic	244.
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Investment need for the temporary employee (much vs Normative/Routines		245.
little)		
Impact of the change of corporate structure (big vs	Normative/Routines	246.
small)		
Change of project margin due to the upgrading of the	Normative/Symbolic	247.
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Enforcement		
Commitment to an agreed decision (low vs high)	Normative/Routines	248.
Management's determination for the project (sufficient	Normative/Symbolic	249.
vs insufficient)		
HR Information acquirement (timely vs delayed)	Normative/Routines	250.
Enforcement for deliverables (sufficient vs insufficient)	Normative/Routines	251.
The style of acquirement (aggressive vs moderate)	Normative/Routines	252.
Customer's time utilization (effective vs ineffective) Normative/Routines		253.
Legitimacy		
Project role assignment (legitimate vs illegitimate) Normative/Routine		254.
Working title (legitimate vs illegitimate)	Normative/Routines	255.

Appendix B- List of practices

Task-oriented	enabling practices
Identifying	 Identifying the amount of involvement in project Allocating extra budget for new IT project Identifying the most important project deliveries Understanding stakeholders' preference Precisely defining each person' role at the beginning Identifying capabilities for tasks Defining communication patterns Defining focal points for specific issues Creating digital checklist and to-do list Putting coordinator contact info in project books Arranging tasks with to-do-list and schedule Checking potential member's availability for project planning Understanding customer's expectations Making emergency plan upfront before the show in case of crisis Identifying to identify action for the next step after each meeting Offering product not exclusively to a customer Being not fully customer-oriented in view of time needed for product development Aligning internally about scope of project before reaching out to supplier Aligning the specific target of project Identifying upfront a common understanding of project content Negotiating time frame base on product complexity
Matching	 Differentiating communication actions towards target audience Using internal resource with zero cost Applying behavior-driven team hiring approach Requiring PM skills for project manager Planning all resource to fulfil target Having necessary professional core team Acquiring external resource for project Pairing up parties for direct communication Looking for member who does not panic in face of problems Asking different departments for resources Looking for people with good soft skills and open-mind

Reviewing	 Measuring performance by customer satisfaction survey and NPS regularly Reviewing objectives one-to-one Conducting scheduled reviews Assessing team spirit, clarifying and solving the issues Linking personal objectives, performance, evaluations with performance in the project Changing the scheme of performance review of team member Manager doing regular performance review with team
	• Taking chance of internal problems for improvement
	 Assessing member's fitness to project Doing "leaseng learned" meeting with team
	 Doing "lessons learned" meeting with learn Double checking the data with customers before publishing
	 Bouble-checking the data with customers before publishing Reviewing at each gate in process with shareholder's signature
	 Reviewing performance index with line manager
	The second between the second s
Grooming	 Dividing project packages
	• Delivering result in steps
	Breaking down project tasks for big project
	• Looking for back-up person for each task
	Having back-up plans
	• Doing instalment payment in project
Eliminating	Making choice of one over another software platform
	 Kicking out the less important components due to their physical conflict
	Outsourcing non-core project tasks
	• Skipping if possible the non-written rules within team
	 Kicking out the sales partner with bad performance
	 Switching to team support in case of extra project tasks
	 Shifting the project pressure to the sales team
Procedure-orio	onted anabling practices
110000010-0110	ented enabling practices
Documenting	Keeping meeting minutes for later team reference
_	Creating sourcing list for project
	 Writing logbook as way to keep team work closely
	Writing project diary via logbook
	Onsite managers writing his own logbook about technical
	 Sorting logbook items by chronological time or names
	 Placing written form of agreement of target

	 Following project book for the mutual agreement about products Managing order by project number Creating internal contract for cross-country project Making clear of task sharing in logbook Using project book with dedicated info of products for customer Signing product patent agreement with customer during "customer feeding" process Fixing terms in written agreement with customer Fixing terms regarding of data correctness in contract
Tracking	 Making project flow transparent Applying various project tools for status tracking and risk management Keeping track of the tendency in project (cost, hours, etc.) Keeping records of consumption for spare parts Checking monthly cost tendency Tracking project process Trying to stick to standard timeline for project Keeping track with your project via logbook
Monitoring	 Signing NDA agreement Manager asking team for well preparation for every meeting Setting weekly meeting to control team moral PMO monitoring all projects Monitoring with focus Expanding knowledge-base for project monitoring Supervising via logbook Pushing by project manager from PMO
Accelerating	 Using freelancers as the main part of external resources Communicating via Whatsapp a lot Applying professional project methodology Choosing the most efficient communication methods Having interim workforce input Closing contract sooner with difficult customer Using connections to accelerate contract process Developing online ordering systems for customers Using Whatsapp in need of quick response Speeding up local patent registration process Creating group chat with new software to save time Using personal connection ease problem solving

Standardizing	 Appointing engagement leader for his own project team forming Replicating corporate top templates Requiring shared knowledge of corporate standard procedures and documents Installing standards for improvement Creating a PM position for overall management Making emergency plan upfront before the show in case of crisis Having clear internal program to follow for each product development project
Optimizing	 Establishing exemplified process with experts Building upon current best database for further integration Assigning team as customer-dedicated and supplier-dedicated Managing time based on experience Using various PM tools Dedicating a function for internal optimization Establishing small internal logistic consulting team for customer support Minimizing risk Placing an onsite service manager Managing risk Improving corporate PM software Using logbook to save time of meeting Hiring self-organizing freelancers PMO coordinating issues from colleagues Developing new systems for communication internally Developing internal process program by PMO
Information-or	riented enabling practices
Informing	 Putting in place a multi-functional meeting for info sharing Appointing engagement leaders who knows the right way to address customer Asking corporate deal committee with changes of project for approval Informing member of projects early before kick-off meeting Releasing press to share successful merge information Creating a case study about the successful project Sharing information before, during and even after the fair Asking for the information as much as possible from customer at the beginning

	 Compromising with customer due to technical limits Sending emails to inform the availability of project result to increase awareness
Synchronizing	 Updating working agenda weekly Exchanging info Intensively Tool sharing from peer Updating info of new product with customer Getting overview updates regularly Updating with manager only when necessary Receiving regular cross-functional information Integrating information in calendar Getting earning information updates from controlling every 2/3 weeks Exchanging info constantly within core team Updating regular updates about products ordering related to project Conmunicating timely for solution Getting regular updates about products ordering related to project Connecting directly for first-hand information Keeping other core members in the loop for back-ups Getting reports from package leaders Implementing new cloud share solution Running systems with real-time resource availability Having weekly or monthly telephone conference call for updates Exchanging information constantly with team Meeting weekly to for updates and alignment Arranging the frequency of placing "alignment call" according to project size
Interpersonal-	oriented enabling practices
Customer- orienting	 Increasing project-related colleagues' knowledge about customer Knowing customer well and making customer happy Management getting involved personally to understand customer expectations Co-developing project book with customer Communicating in the language of customer Providing exclusive solution Relocating to customer site for project execution Working with customers on specifications of product

Influencing	Knowing conflict solving skills
6	• Calming down customer first in the face of conflict then finding other
	solutions
	• Enabling customer with consulting
	• Changing good people and lowering margin to ensure project delivery
	• Sense-giving to the tasks
	• Sense-making of the work
	• Making Influence on end-user
	• Finding right arguments to deal with pressure coming from OEMs
	regarding problems
	• Talking to the difficult team member or taking him out of team
	• Explaining the importance of project work
	• Changing the bad project leader
	• Management making sense of the task
	• Recommending the acquirer to adapt to the acquiree's working culture
	• Clarifying the urgency of the requirement
	• Linking salary and bonus to PMP
	• Feeling the passion from colleague for project is encouraging
	• Everybody being aware of the project completion linking with bonus
Supporting	• Co-working with (internal) customer (closely)
	Proactively keeping communication and cooperation
	 Making expression easy to be accepted
	Conducting mutual support
	Redefining customer needs collectively by team
	 Proactively giving extra support to win cross-functional support
	Going out and helping customer in need
	 Management being hands-on and explaining the target
	Coaching team member
	• Supporting with hotline after instalment
	Conducting customer training after-sales
	Conducting PMO training
	Handing work over by coaching
	 Taking increasing responsibility
	• Senior member gradually shifting responsibility to the junior member
	Conducting onsite training for project
	 Sharing project-related knowledge via internal workshop
	Being geographically close to project team member
	Minding for internal Win-Win-Situation
	Taking care of solution for long time
	• Customer supporting in forming a merger project team
	 Providing deep analysis for decision making
	 Giving suggestion based on facts instead of persuading

	 Following the colleague who is responsible for the decision Making efforts to understand the project goal and support if assigned by line manager
Engaging	 Recruiting internally due to people's better knowledge of the corporate context Being willing to engage Keeping external partners involved Team leader setting project expectation collectively with team Ensuring the motivation of team member Trying to solve the problem first on your own Encouraging problem solving at operational level Working together to achieve success Having good people with willingness makes things work Having competences from different people Acquiring colleague willing to support Proactively checking for co-work opportunity in project Organizing meetings for every single function of the two merging companies Taking lead in driving multi-functional team into one direction by marketing people Raising concern in team Clarifying the reason for unsupportive team members Having hard outcome as motivating Keeping flexible for any member to initiate meetings Hiring new team member collectively
Committing	 Working consistently with the same colleague in tasks Combining the key members for close work Concentrating communication with the interface "project manager" PM being focal point for everything in project Appointing project focal contacts in other departments Appointing dedicated engineers for sophisticated work Consultants dedicating full-time at customer site for project
	 Debriefing to team before the person in charge leave Sticking to industrial restrictions Sticking to internal rules that frame your project Prioritizing tasks in JD to ensure performance rating in case of getting extra projects

Sharing	 Creating community communication platform Sharing knowledge and key competence with customer Shifting allocation of the same task Manager to make sure of the sharing the interesting tasks among team members Using corporate repair services in other regions Forming team across department Making logbook accessible to all team member Transmitting knowledge from freelancer for business improvement Looking for Internal trustful experience Sharing personal best practices via internal training session Setting up customer intra-pool Recalling related project experience Working together with customer based on knowledge complementation Publishing white paper to share merge knowledge learned Bringing in prior personal experiences from other projects Experiencing a lot together during the show brings team close Asking for experienced colleagues from other departments Keeping flexible task sharing in team Having deep sharing base on similar knowledge background Telling team or boss about your busy situation Using cloud technology for storing documents and working on the same version Sharing office appliance with project team
Bridging	 Creating a business relationship role for knowledge translation Having cross-functional knowledge Helping out to triggering mutual support Gluing people from different functions in project Keeping good relationship with corporate head Referring further contacts for solutions Bridging knowledge gap actively PM moderating diversified background and behaviors Communicating often directly with management of customer Bridging the cultural understanding of the two merging companies Providing insights from experts for customer regarding challenges Reaching the right person via co-located internal business partner

Adapting	• Keeping close and flexible work with internal-customer
	• Trying new things in project
	• Delivering imperfect intermediate solution
	• Allocating extra time for new project according to level of
	involvement in other works
	 Opening to changes with newer and younger members
	 Adjusting project goal delivery
	• Finding intermediate project solution
	• Manager's clearing budget and objectives for operational team to
	redesign project
	• Staying flexible and adapting communication style
	• Minding communication style with different cultures
	• Adapting working mindset from corporate culture
	Being spontaneous for support
	• Applying special work of contract for special case
	• Signing contract late as an exception
	• Changing communication frequency according to stages/phases
	Changing mindset
	• Changing of project plan in case of no resources
	• Prioritizing customer's opinion in a project for third party
	• Paying special attention needed for special products in solution
	business
	 Increasing knowledge for deeper support
	Being open for new knowledge
	Being flexible for daily work allocation
	• Self-learning via right information channel
	 Communicating problem in appropriate approach
	• Covering the payroll of project onsite manager despite entity
	difference
	 Planning solution content before selling products
	 Making decision on your own without waiting too long
	 Keeping open to better solutions
	 Finding solution to keep the best sales partner
	 Adapting to make change and new player
	 Modifying current available solution in case of time limitation
	 Prioritizing task from senior management with specific timeline
	 Staying creative for problem solution
Connecting	• Escalating to superiors/managers
	Using people from connections
	• Making contact directly with responsible top managers when
	necessary
	Connecting everybody personally

	 Reporting difficulties with customers only within the same division rather than PMO PM communicating with all related project members Asking the potential other functional members first to participate in project, then his boss Referring to previous working partners PM contacting in person with all team members Problem-solving with their direct line manager Reaching management level for solution Communicating with customer management Keeping close connection with customers Escalating to the head of two departments for decision of priority
Articulating	 Manager drawing line on unacceptable behavior in team Improving clarity of job responsibility Project briefing to customer before key step starts Repeating explanation of many things again and again Discussing face to face Gathering people for meetings to solve problem Making specific requirements for customer
Appreciating	 Recognizing achievements at annual review Celebrating achievement at yearly team building event Treating good freelancers better than customer Communicating the importance of people's job Celebrating with a cake Letting people feel their importance Sending thank-you-email Receiving Thank-you-letter from customer management Giving direct feedback about performance recognition at meetings Holding team building event for relaxing and enjoyment Getting nomination from colleagues for rewards Corporate rewarding for trustful behavior Entertaining activities with project team
Respecting	 Allocating extra project workload by volunteering Establishing department internal project team on volunteer-base Management trusting in team leaders Trusting in colleagues' expertise Respecting colleagues' technical specialization Acknowledging professional knowledge from freelancer
	 Being confident in having project-related knowledge and customer expectations Applying rich knowledge and experience from the past Keeping communication direct and on the same corporate level Having experts with the knowledge driving project as the opinion leader Manager listening to team's opinion Telling personal opinion but letting go decision making to senior level of colleague Keeping open to critical observation equally from everybody in project
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Cultivating	 Keeping high motivation to make things happen Doing more rewarding than punishing Doing biennial growth session with team for their development plan Showing your care for the team (by improving office set-up) Keeping good contact with customer management Working with leaders in the industry helps access to the latest technology Connecting with strong industrial partners Project leader connecting well with other important people Helping project new hires get good connection with local office Project experience sharing with new customer Providing consultancy to sell business package Taking challenges as personal development Hanging out with colleagues in free time
Entitling	 Project key stakeholder making the final decision Granting team member enough work autonomy for daily agenda Trusting on delegated team member for decision making Big bosses relying on proper task sharing between team members for complex project Not caring about doing the work with or without an official job title Getting mandate from manager about human resource for project tasks Making sure if the person is officially work for the project and has the capacity Getting Management's mandate will ease project execution Granting full flexibility to sales people

Summary

Projects as the most tangible manifestation of temporary organizations are playing a significant role in mobilizing resources and navigating constant changes and disruptions in the business environment. Project actors with different institutional affiliations usually join together to accomplish tasks within a limited period of time. Due to the inherent tension between projects' temporariness and the institutions' stability, actors with their heterogeneous institutional prescriptions often encounter institutional misalignments, which may be the obstacles in ensuring on-time, on-quality, and on-budget project deliveries.

Given the theoretical sophistication and fragmentation in project literature, an integrated framework of project research is provided in this work. In response to the weakness in current theorizing about how institutional forces manifest themselves in projects and how project processes interact with the wider institutional context, this research proposes a new ontology of temporary organizations by drawing implications from institutional theory and service-dominant logic. The micro-level interactions in both intra- and inter-organizational projects are examined with the qualitative methodology. This research reveals the actuality of projects' multilevel embeddedness and provides a framework of 18 dimensions of institutional (mis)alignments. A toolkit solution comprising four categories of 27 resource integration enabling practices (RIEP) aggregated from 376 actions taken by practitioners is also presented for the reconciliation of the institutional misalignments in practice.

Zusammenfassung

Projekte als die repräsentativste Form temporärer Organisationen spielen eine wichtige Rolle bei der Bewältigung der ständigen Veränderungen und Störungen im Geschäftsumfeld. Projektakteure mit unterschiedlichen institutionellen Zugehörigkeiten schließen sich üblicherweise zusammen, um komplexe oder neuartige Aufgaben innerhalb eines begrenzten Zeitraums zu erfüllen. Aufgrund der natürlichen Spannung zwischen der zeitlichen Begrenztheit von Projekten und der Beständigkeit der Institutionen begegnen heterogene Akteure mit ihren institutionellen Vorschriften häufig institutionellen Fehlausrichtungen. Diese institutionellen Fehlausrichtungen können Hindernisse sein, die einer termingerechten, qualitätsgerechten und budgetgerechten Projektdurchführung im Wege stehen.

Angesichts der theoretischen Komplexität und Fragmentierung der Projektliteratur wird in dieser Arbeit ein integrierter Rahmen für die Projektforschung geboten. Als Reaktion auf die Schwäche gegenwärtiger Theorien darüber, wie sich institutionelle Kräfte in Projekten manifestieren und wie Projektprozesse im breiten institutionellen Kontext interagieren, schlägt diese Arbeit eine neue Ontologie temporärer Organisationen vor, die Implikationen aus der Theorie der Institutionen und dienstleistungsdominanter Logik zieht. Die Mikrolevel-Interaktionen von sowohl inner- als auch zwischen-organisatorischen Projekten werden mit qualitativer Methodologie untersucht. Diese Forschung zeigt die Aktualität von Multi-Level-Einbettung von Projekten und liefert einen Rahmen von 18 Dimensionen institutioneller Fehlausrichtungen. Ebenso wird eine Toolkit-Lösung vorgestellt, die vier Kategorien von Praktiken der Ressourcen-Integration umfasst, zusammengestellt aus 27 Unterkategorien grundlegender Praktiken auf Basis von 376 Aktionen, die durchgeführt wurden um institutionelle Fehlausrichtungen in der Praxis auszugleichen.

Erklärung gem. § 4 Abs. 2

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Berlin, 20.07.2020

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