

Making the Team Work

The Nature of Challenges in Public-Private Partnerships, a Case Study

Master thesis

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Table of contents

Table of contents.....	3
Summary	5
Samenvatting.....	7
Abstract	9
List of abbreviations	10
List of figures and tables.....	11
1. Introduction.....	13
2. Literature review	15
2.1 Hybrid organizations	15
2.1.1 Internal and external conflict	15
2.1.2 Governance challenges	16
2.2 Conclusion	17
3. Method.....	19
3.1 Data collection.....	19
3.2 Data analysis.....	20
4. Empirical setting.....	23
4.1.1 PPP initiation phase.....	23
4.2 Description of the contractual partners.....	24
4.2.1 Municipality of Lightgarden.....	24
4.2.2 LightX	24
4.2.3 DBFM	25
4.3 Relationship between the contractual partners	25
5. Results	27
5.1 The fix that fails	28
5.2 Shifting the burden.....	30
5.3 Eroding goals	32
5.4 Overall dynamic.....	32
6. Discussion	35
6.1 Limitations and avenues for future research	36
6.2 Practical implications.....	37
7. Conclusion	39
References.....	41
Appendices	47
Appendix A – Project organigram.....	47
Appendix B – Interview guideline.....	48

Appendix C – The three archetypes	49
Appendix D – Quotes.....	50

Summary

The world's entire population faces challenges, also known as 'Grand Challenges', that require social value creation. Literature indicates how innovations through Smart Cities can provide solutions in some cases. The grand challenges are moreover characterized by their highly integral nature, which means that at least some of them require effort from both the public and the private domain simultaneously. One way in which this can be organized is through a Public Private Partnership (PPP). A PPP is a particular type of hybrid organization that, due to the diverging logics and governance modes of both public and private, faces major challenges. Previous research has pointed out *what* challenges arise, but not *why* PPPs face them, whereas in-depth understanding has been called for. Therefore, this study set out to investigate why these tensions arise through a process research, guided by the following research question.

Why do public private partnerships that aim to create social value through innovation face difficulties?

Recent research has indicated how PPPs face challenges both internal as well as external. Internally, the diverging nature of the characteristics resulting from both logics often leads to conflict. Externally, PPPs often struggle with finding the right legitimacy structure, because they diverge from the logics that are present at the societal level. On top of this, whether a PPP can successfully create social value depends on the partnership's level of relational embeddedness. Moreover, this is even more important as social value cannot be captured in strict contractual agreements, but requires the use of outcome-based contracts due to its innovative character. Also, a clear defined social problem and business model have shown to be important for successful social value creation, as it motivates the partners of the PPP and provides guidance.

This knowledge has been the basis for the current research. Due to the little knowledge on why these difficulties arise, an exploratory case study has been conducted that has therefore resulted in new and in-depth insights. New insights were obtained through semi structured interviews among the people involved in the case's PPP. The literature examined in turn provided the necessary guidance for the interview guideline. Being a process study, the transcribed interview data has been analyzed using the grounded theory methodology, which provided a narrative of how the difficulties took their effect. This narrative had took the shape of a causal loop diagram, indicating the causal relationships of the different elements identified using grounded theory.

The case under study was an example of a PPP in the field of social value creation that aimed to create this value through innovations in smart cities, initiated by the municipality of Lightgarden. Together with a consortium consisting of an (urban) lighting company and a contractor they formed the PPP. The aim of the PPP was to increase quality of life for the users of the city of lightgarden, by means of innovations on a smart lightgrid, which would also be designed and realized by the PPP. These innovations were guided by a vision and roadmap from the municipality, rather than predefined.

The data revealed how three separate, though intertwined, processes took their effect in the PPP simultaneously. These processes were each induced by the diverging logics of the partners, making that the public actor mainly acted to defend social value creation, while the private actor's main interest appeared to be economic value creation – despite the fact that this was not defined as the main goal of the project. The three processes are characterized as follows.

- *The fix that fails*: The public actor tries to enhance social performance by strictly managing the contract. Since this eventually reduces the private actor's efforts, this results in the opposite effect.

- *Shifting the burden*: The private actor tries to enlarge their economic benefits by negotiating for a higher remuneration from the public actor. The long term solution however lies in putting more effort in, which the act of negotiating has shown to pressurize.
- *Eroding goals*: A lack of economic value creation will make the private party inclined to reduce efforts in order to keep costs down and require less economic value creation.

Initially, the PPP knew a lot of, external, management support and enthusiasm while these processes resulted in declining levels of both. Internal to the PPP these processes resulted in increasingly decreased levels of relational embeddedness. Both phenomenon hampered social as well as economic value creation as the private actor was motivated to decrease its effort.

Combined with existing literature the results first of all indicate how the PPP struggles to balance the level of rigidity – i.e. clear-defined goals, a prior business model and European contract law – and flexibility – i.e. innovation processes – coming forward in *the fix that fails*. Moreover, being guided by a vision instead of a clearly defined societal problem the partnership lacked direction and the partners did not appear sufficiently motivated to achieve the common goal in addition to their organization's goals. These goals also remain to be important, due to the temporary nature of a PPP that create a lasting strong bond between the PPP's members and their respective host organizations. Finally, the diverging logics of each of the partners made that they did not fully understand one another, without realizing it.

Future research could try to continue this storyline, by investigating how these undermining processes can be ended and how a hybrid situation comes to be. It would also be interesting to research a case where a clear social goal has been defined in order to discover if this could sufficiently motivate the partners to pursue the collective goal. Another interesting avenue would be the relationship with the host organizations, as the hosts remain to be important in the PPP. Their goals heavily influence the PPP's goals, so changes either of them would be likely to effect the other.

Samenvatting

De mensheid heeft op dit moment te maken met uitdagingen, ook bekend als '*Grand challenges*', die enkel opgelost kunnen worden door het creëren van sociale waarde. Literatuur ons hoe innovaties in *smart cities* oplossingen kunnen bieden. Daarnaast worden deze uitdaging gekarakteriseerd door een hoge mate van integraliteit, wat betekent dat, in ieder geval een deel van de uitdagingen, enkel opgelost kunnen worden als publieke en private partijen samenwerken. Een manier waarop dit georganiseerd kan worden is in een Publiek Private Samenwerking (PPP). Een PPP is een bijzondere vorm van een hybride organisatie die grote uitdagingen kent door de uiteenlopende logica en bestuursvormen van publiek en privaat. Bestaande literatuur heeft reeds aangeduid *welke* uitdagingen er zijn, maar niet *waarom* deze naar voren komen. Meer begrip hiervan is echter wel gewenst. Deze studie heeft daarom onderzocht waarom deze uitdagingen er zijn door middel van een processtudie, aan de hand van de volgende onderzoeksvraag:

Waarom kennen publiek private samenwerkingen die erop gericht zijn om sociale waarde te creëren moeilijkheden?

Recente literatuur geeft aan dat PPPs uitdagingen kennen die zowel intern als extern zijn. Intern zorgt het uiteenlopende karakter van hun logica vaak voor conflicten. Extern is het voor PPPs vaak moeilijk om legitimiteit te vinden omdat ze afwijken van de heersende logica, die aanwezig zijn op het niveau van de samenleving. Bovendien hangt een PPPs succes op het gebied van sociale waarde af van hoe goed de relatie is tussen de partijen. Dit is zelfs specifiek van belang voor PPPs, aangezien sociale waarde typisch niet gevangen kan worden in contracten door het innovatieve karakter. Dit resulteert in resultaat-gebaseerde contracten die een grotere mate van interpretatiemogelijkheden met zich meebrengen. Tot slot is het belangrijk gebleken om een duidelijk sociaal probleem te definiëren als men sociale waarde wil creëren. Dit motiveert de partners en geeft sturing aan het partnerschap.

Deze kennis heeft de basis gevormd voor de huidige studie. Aangezien er maar weinig bekend is over waarom de uitdagingen er zijn is er een exploratieve case studie uitgevoerd, om zo nieuwe en verdiepte inzichten te verkrijgen. Deze inzichten zijn vergaard door middel van semigestructureerde interviews, gehouden onder de betrokkenen bij de case. Als leidraad is daarbij de beschreven literatuur gebruikt. Omdat het een processtudie is, zijn de interviews getranscribeerd en vervolgens geanalyseerd door middel van de *grounded theory* methodologie. Dit heeft een narratief opgeleverd over de veranderde situatie in de PPP, in de vorm van een causaal diagram die de relaties weergeeft tussen de geïdentificeerde constructen.

De gekozen casus was een voorbeeld van een PPP die zich richt op het creëren van sociale waarde door middel van innovaties in smart cities, op initiatief van de gemeente Lightgarden. Samen met een consortium, bestaande uit een (stedelijk) verlichtingsbedrijf en een aannemer, hebben zij een PPP gevormd. Het doel van deze samenwerking was om de kwaliteit van leven van de gebruikers van de stad Lightgarden te verhogen door middel van innovaties op een slim lichtgrid. Dit lichtgrid werd bovendien ook nog bedacht en gerealiseerd door de PPP. De innovaties werden richting gegeven door een visie en roadmap die de gemeente eerder had opgesteld en niet vooraf precies gedefinieerd.

De data liet zien hoe drie verschillende, maar verweven, processen tegelijkertijd tot uiting kwamen in de PPP. Deze processen werden ieder voor zich veroorzaakt door de uiteenlopende logica van de partners. Dit leidde er toe dat de publieke partij vooral handelde in het belang van de sociale waarde, terwijl de private partij vooral handelde in het belang van economische waarde, ondanks dat dit niet was gedefinieerd als één van de hoofddoelen van het project. Deze drie processen zijn als volgt te karakteriseren:

- *De mislukte oplossing*: de publieke partij probeert de sociale waarde omhoog te brengen door het contract strikt te beheren. Omdat dit uiteindelijk er toe leidt dat de private partij minder moeite gaat doen voor het project, wordt hiermee het omgekeerde effect bereikt.
- *Het verplaatsen van het probleem*: De private partij probeert zijn economische waarde te vergroten door opnieuw financiële vergoedingen te onderhandelen bij de publieke partij. Op de lange termijn zou het echter voordelig zijn om méér moeite in het project te stoppen, maar dit wordt ondermijnd door de onderhandelingen.
- *Doelerosie*: Het gebrek aan economische waarde maakt dat de private partij geneigd is zijn investeringen omlaag te brengen en dus minder moeite in het project te steken, opdat er minder economische waarde nodig is.

Initieel kende de PPP extern veel ondersteuning en enthousiasme van het management, terwijl deze processen er toe leidden dat beide steeds minder worden. Intern leidden deze processen er toe dat de relatie steeds slechter werd. Beide zitten zowel economische als sociale waarde creatie in de weg, aangezien de private partij wordt gemotiveerd om minder te investeren.

Gecombineerd met bestaande literatuur geven de resultaten in de eerste plaats aan hoe PPPs het moeilijk hebben met het vinden van een balans tussen starheid (vooraf gedefinieerde doelen en verdienmodellen en de Europese aanbestedingswetgeving) en flexibiliteit (innovatieprocessen), die zich vertalen in *de mislukte oplossing*. Bovendien zorgt de visie ervoor, in tegenstelling tot een duidelijk sociaal probleem, dat er onvoldoende motivatie leek te zijn voor de private partij om het algemene doel na te streven, naast hun eigen doel. Daarnaast blijven de individuele doelen überhaupt erg belangrijk, doordat de leden van de PPP een stevige band blijven hebben met hun eigen organisaties door het tijdelijke karakter ervan. Tot slot zorgde de uiteenlopende logica ervoor dat de partners elkaar niet volledig begrepen zonder dat zelf door te hebben.

Toekomstig onderzoek zou zich er op kunnen richten deze narratief voort te zetten, door te onderzoeken hoe deze ondermijnende processen zouden kunnen worden doorbroken en er mogelijk een hybride zou kunnen ontstaan. Het zou ook interessant kunnen zijn om een casus te onderzoeken waar een duidelijker sociaal doel aan ten grondslag ligt, om te kijken of dit inderdaad de partners méér motiveert. Een andere interessante inslag kan zijn om de relatie te onderzoeken met de eigen organisaties, aangezien deze erg belangrijk blijven in het functioneren van de PPP. Veranderingen binnen de één, zullen dus waarschijnlijk een grote invloed hebben op de ander.

Abstract

Researchers indicate how the current societal challenges can be solved through Public Private Partnerships (PPPs) that aim to create social value. One of the examples is social value creation through innovation in smart cities. Due to the diverging logics and governance modes between public and private organizations, PPPs however face major challenges, already largely identified in literature. As deeper understanding of these difficulties is called for, this research set out to investigate *why* they arise through an in depth case study. Building on the insights already gained by scholars, this study conducted a process research, resulting in a causal loop diagram providing a narrative of how three processes made the initial managerial enthusiasm and high relational embeddedness to decrease. The results indicate a paradoxical situation internal to the PPP, as well as a remaining high involvement of the host organizations and the goals associated with their logics: social and economic value creation. The three processes are intertwined and motivate the private actor to decrease its efforts, through which it hampers social value creation.

List of abbreviations

Causal loop diagram

A graphical representation of real world processes in the shape of causal relationships. This diagram tells a simplified story of these processes in order to reveal underlying patterns.

Hybrid organization

An organization combining two or more distinct logics and/or governance modes.

Public Private Partnership (PPP)

A collaboration form used in public procurement, generally characterized by a long term relationship in which the responsibility for the project outcome is shared as well as (some) of the (financial) risks associated with a project. It has, for example, been used in complex infrastructure projects.

Smart cities

Smart cities aim to save energy and increase the quality of life of its citizens in a user friendly way through the use of adaptable ICT services.

List of figures and tables	
Figure 3.1 – The nature of process research. After Langley (1999).	19
Figure 3.2 – Conceptual model of the research process.	21
Figure 4.1 – Timeline of the project’s main events during the project initiation phase.	23
Table 4.1 – Features of public and private logics. Categories based on (Jay, 2013; Matinheikki et al., n.d.; Thornton, 2002; York et al., 2016)	24
Figure 4.2 – Conceptualization of each party’s relationships, traditional (left) v.s. PPP (right).	25
Table 5.1 – Summary of diverging anticipations regarding social value and economic value creation.	27
Figure 5.1 – Causal loop diagram depicting the underlying dynamics of a PPP aiming to create social value.	28
Figure 5.2 – Systems archetype of ‘the fix that fails’ in the causal loop diagram.	28
Figure 5.3 – Systems archetype of ‘shifting the burden’ in the causal loop diagram.	30
Figure 5.4 – Systems archetype of ‘eroding goals’ in the causal loop diagram.	32
Figure A.1 – The case’s organigram.	47
Figure C.1 – Systems archetype of ‘The fix that fails’ (Senge, 1990).....	49
Figure C.2 – Systems archetype of ‘Shifting the burden’ (Senge, 1990).	49
Figure C.3 – Systems archetype of ‘Eroding goals’ (Senge, 1990).	49

1. Introduction

World-wide governments are facing increasingly complex grand challenges. Maybe the most well-known and widely adopted list of challenges and associated goals is given by the United Nations' 17 Sustainable Development Goals (SDG) (George, Howard-Grenville, Joshi, & Tihanyi, 2016). These thematic social development goals, like *Affordable and clean energy* (SDG7) or *Sustainable cities and communities* (SDG11), envision a world in which all forms of life can prosper. One way to address some of those grand challenges and to achieve the associated goals is through innovation in so-called *Smart Cities*. Smart cities aim to save energy and increase the quality of life of its citizens (Dameri, 2016; Moser, Wendel, & Carabias-hütter, 2014) in a user friendly way (Nam & Pardo, 2011). Specifically, they do this with the use of adaptable ICT services (Moser et al., 2014; Washburn & Sindhu, 2010) – IoT¹.

However, the path towards innovation – and thus addressing social challenges – is uncertain and requires efforts from both public and private organizations (Batty et al., 2012; George et al., 2016; Lam & Yang, 2017; Voegtlin, Scherer, & Hawn, 2018). Such efforts, also known as public-private partnerships (PPP) (Khanom, 2010), are however not without any challenges. Whereas social challenges exist on the interface between the public and private organizations both types of organizations differ significantly. Their complex nature stems from a natural misalignment between the actors, because individual goals, missions and values diverge – i.e. social and commercial – making them a unique type of hybrid organization (Battilana & Lee, 2014; Jay, 2013; Villani, Greco, & Phillips, 2017).

In order to tackle these social challenges, public and private partners thus have to increase their mutual cooperative capabilities (Cabral et al., 2016). Currently, however, in depth understanding of how public and private partners can achieve this, is lacking (Battilana, Besharov, & Mitzinn, 2017; Cabral et al., 2016; George et al., 2016). More specifically, increased understanding of how public and private partners should manage their relationship, in both contractual and social terms, is called for (Cabral et al., 2016), implying the difficulties they face.

In order to increase insight in the challenges for relationship management, this study examines the dynamics underlying a PPP as a result of tensions stemming from their diverging characteristics. This was done by investigating the tensions arising within a public-private arrangement in its early period, before partners have found a way to mitigate them – i.e. the organization has become hybridized (Jay, 2013). Being a type of hybrid organization, the knowledge already generated by this research area will be used to guide this research. This research is therefore guided by the following research question.

Why to public private partnerships that aim to create social value through innovation face difficulties?

¹ "An Internet of Things (IoT) ecosystem consists of web-enabled smart devices that use embedded processors, sensors and communication hardware to collect, send and act on data they acquire from their environments." (Rouse, Rosencrance, Shea, & Wigmore, 2016)

2. Literature review

The fact that organizations' goals, missions and values differ stems from the different institutional logics existent in society. Institutional logics are defined as *'the socially constructed, historical patterns of material practices, assumptions, values, beliefs and rules by which individuals [and organizations (Thornton & Ocasio, 2008)] produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality'* (Thornton & Ocasio, 1999, p. 804). Therefore, logics are the rationale behind behavior, while each provides a different source of rationality (Thornton & Ocasio, 2008). More specifically, Friedland and Alford (1991) identified five main logics to exist in society: the capitalist market, the bureaucratic state, religion, democracy and families. Each of them has a distinct value and belief structure. For example, behaving opportunistically is accepted within the market sphere, but it is commonly less appreciated in a familial setting. Hence, within PPPs typically two different logics are involved: that of the market and that of the state (Jay, 2013; Quélin, Kivleniece, & Lazzarini, 2017; Thornton & Ocasio, 1999). As each has a distinct as well as diverging structure of values beliefs and norms. On the one hand this makes that PPPs have the potential to create value beyond their individual capacity (Quélin et al., 2017). On the other, this results in alignment challenges within PPPs (Ebrahim, Battilana, & Mair, 2014), making it a type of hybrid organization (Battilana & Lee, 2014; Jay, 2013; Villani et al., 2017).

2.1 Hybrid organizations

In general, researchers have long denoted the existence of multiple logics within organizations (Albert & Whetten, 1985; Friedland & Alford, 1991). It has striking examples in health and education (Battilana et al., 2017) and more recently the social enterprise has gained attention. A social enterprise combines elements of non-profit organizations and business – i.e. civil society logic and market logic (Battilana & Lee, 2014; Di Domenico, Haugh, & Tracey, 2010; Pache & Santos, 2013; Smith, Gonin, & Besharov, 2013), like micro-finance organizations do (Battilana & Dorado, 2010). Hybrid organizations may however similarly integrate any of the aspects of the state, market or civil society logic (Vurro, Dacin, & Perrini, 2010).

The creation of social value is the common denominator in all types of hybrid partnerships (Quélin et al., 2017). The creation of social value is aimed at creating benefits for society or reducing societal costs beyond economic value creation (Kivleniece & Quélin, 2012; Phills, Deiglmeier, & Miller, 2008). More specifically, differences are discernable in how different types of hybrids seek to create social value. Whereas the civil society's motives are empathic, the state's foci are rules and regulations and their public accountability (Jay, 2013). When comparing PPPs and social enterprises, this difference reflects in their respective goals: social enterprises typically create social value by pursuing environmental or social goals (Di Domenico et al., 2010), while PPPs typically create social value through increased efficiency or innovative capacity (Fernandes, Costa, & Lahdenperä, 2018; Matinheikki, Aaltonen, & Walker, n.d.).

Hybrids thus by definition addresses a certain societal problem – i.e. an area where the market or state currently falls short – with the social value they create (Quélin et al., 2017). Moreover, the societal challenges have to give sufficient sense of purpose to the hybrid organization in order to confirm that the members need one another in addressing the challenge (Bryson, Crosby, & Middleton Stone, 2006), and adequately motivate them to pursue the common goal in addition to their individual one(s) (George et al., 2016; Hollensbe, Wookey, Hickey, & George, 2014; Quélin et al., 2017).

2.1.1 Internal and external conflict

Within PPPs, the confrontation between two (or more) distinct logics inherently causes conflict, both internal and external (Battilana & Dorado, 2010; Zilber, 2002), because each logic prescribes a different

course of action. The necessity to align – i.e. hybridize (Battilana & Lee, 2014) – the conflicting logics varies, depending on the extent to which their demands reflect in the core features of a PPP (Besharov & Smith, 2014), like its means and ends. Similarly, if working towards the goal of one logic undermines the other goal, a stable hybrid situation is not easily achieved (Pache & Santos, 2013).

When confronted with multiple logics, hybrid organizations have shown different responses. First of all, one response is characterized by compromise (Greenwood, Raynard, Kodeih, Micelotta, & Loonsbury, 2011), meaning the organization conforms partially to its logics and not fully resolve their tensions (York, Hargrave, & Pacheco, 2016). Secondly, a situation of conflict may arise, whereby an attempt is made to replace the dominant logic with a new one (Hargrave & Van De Ven, 2006). Finally, organizations have adopted a strategy called hybrid organizing, which is characterized by combining two incompatible logics into a new and coherent one, while remaining compatible with the old ones (Battilana & Lee, 2014).

Within PPPs, achieving a hybrid situation is hampered by the strong ties that a PPP's member remains to have with their host organization (Greenwood et al., 2011), due to its temporary nature (Matinheikki et al., n.d.). This makes it difficult for them to let their previous adherence go within the hybrid organization (Battilana et al., 2017), despite a probable realization of the necessity.

Hybrid organizing is a complex process (York et al., 2016), for which existent literature has indicated the two different hybridization strategies. Either organizations adopt a strategy of *integration* or *differentiation*, whereby logic elements are merged into one coherent set or separated into distinct organizational parts respectively (Battilana et al., 2017). Regarding integration, one challenge lies in aligning and/or prioritizing of the diverging interests present in the hybrid organization through appropriate governance (Ebrahim et al., 2014). Regarding differentiation, the presence of good coordination structures were found to play a role in situations of conflict, with providing a prescription for action and offer guidance (Battilana et al., 2017; Bechky, 2003; Christiansen & Lounsbury, 2013). Another strategy is to recruit new and unexperienced who can be educated to accept both logics (Battilana & Dorado, 2010).

Apart from internal conflict, hybrid organizations face external – i.e. outside the hybrid organization – legitimacy problems. Non-hybrid organizations conform to a single logic and therefore meet societal expectations (Boxenbaum & Jonsson, 2008) and fit within the existing regulatory system (Battilana & Lee, 2014; Williamson, 1999). This ensures legitimacy, whereas hybrid organizations often do not conform to either of these (Battilana & Lee, 2014). This then leads to problems when it comes to societal acceptance (Quélin et al., 2017), for which a solution lies in the hands of entrepreneurial change advocates who are able to bridge the logics involved. They have the power to create new logics by combining intact elements of the previous incompatible ones (Baum & Oliver, 1992; Pache & Santos, 2013) through so-called *boundary work* (Zietsma & Lawrence, 2010), eventually creating new sources of legitimacy (Purdy & Gray, 2009).

2.1.2 Governance challenges

In essence, governance is one of the ways in which logics take shape (Kraatz & Block, 2008), in the form of the system used to control and direct organizations (Tihanyi, Graffin, & George, 2014). This means that distinct logics create distinct organizational forms (Battilana & Lee, 2014) and in turn distinct governance modes. These two both have to be supported by the governance structure of a PPP (Quélin et al., 2017). Indeed, the challenge of finding the right coordination structures for PPPs have been acknowledged (Oliveira & Lumineau, 2017; Opara & Rouse, 2018). Nonetheless, for “traditional” PPPs – i.e. governed by a contract of a well delineated subject where economic and efficiency considerations predominate (de Bettignies & Ross, 2004) – a workable situation seems to have been found, as

supported by the long history of the use of PPPs (Linder, 1999). However, in the case of PPPs that aim to create social value, this governance mode needs to be redefined, as it needs to support both social and economic value creation – the latter as a prerequisite for private organizations (Quélin et al., 2017).

In finding a solution for this challenge, the nature of social value creation plays an important role. Social value is typically created through innovation (George et al., 2016), for which the actual outcome is unknown up front. Also, it is often not possible to determine the amount of social value that will be created. These two things combined make social value rather challenging (i.e. impossible) to formally capture, e.g. in a contract. Knowing that European legislation requires PPPs to be based on a contract (European Parliament, 2014), the nature of social value makes that only incomplete, or outcome based, contracts can be devised for this type of PPP (Quélin et al., 2017; Sumo, van der Valk, van Weele, & Duysters, 2016; Tirole, 1999). In the past, private actors have then received financial remuneration based on the social impact they created (Aghion & Tirole, 1994; Quélin et al., 2017). The appreciation of the different notions of value however varies with each logic, making remuneration sometimes problematic (Kivleniece & Quélin, 2012).

Being incomplete, this type of contract leaves room for interpretation and creates a necessity to renegotiate during the period the contract is valid, which leaves room for the contract partners to behave opportunistically and potentially threaten value creation (Anderson & Dekker, 2005; Christensen, Nikolaev, & Wittenberg-Moerman, 2016). In this context mutual trust has shown to play an important role, as it is likely to mitigate this threat and the incomplete contract can consequently function as a “soft” coordination structure (Klein-Woolthuis, Hillebrand, & Nooteboom, 2005).

However, public actors may not show any signs of favoritism and thus are obliged to give an equal treatment to equal cases (principle of equality) (European Court, 1993). For procurement law, this means that only very limited modification of the contract are allowed when it has been assigned, not *‘alter the overall nature of the contract’* at the very least (European Parliament, 2014 Art. 72). But as explained previously, the exact outcome of social value creation is difficult to oversee, making the necessity of alterations more likely. On top of this, when a contract is actively used and maintained, it has been shown to decrease trust levels (Lyons & Mehta, 1997). These decreased trust levels can in turn inhibit defensive behavior (Zand, 1972), opportunism and even conflict (Klein-Woolthuis et al., 2005). This means that regarding PPPs, the use of incomplete contracts poses challenges.

Finally, on top of issues stemming from hybridity, a PPP is regarded a form of network that requires its own form of governance (Bryson et al., 2006; Provan & Kenis, 2008). Since the partners aim to achieve a common goal in addition to their organizational interests, a PPP is a form of network (Provan & Kenis, 2008). Within a network, sufficient levels of *relational* and *structural embeddedness* (Jones, Hesterly, & Borgatti, 1997) need to be present to make collaboration possible. Relational embeddedness reflects the partners’ need to take one another’s goals into account (Granovetter, 1992) and display mutual trust and openness (Driessen, Dieperink, van Laerhoven, Runhaar, & Vermeulen, 2012; Uzzi, 1997), while structural embeddedness reflects the need for coordinated social control mechanisms within a partnership (Jones et al., 1997).

2.2 Conclusion

A PPP is shown to be a particular type of hybrid organization. This study focusses on PPPs that are aimed at the creation of social value through the pursuit of social goals through innovation, whereas PPPs typically focus on social value creation by increasing economic efficiency. As the literature review has indicated, and suggested by the research question, this results in some challenges for PPPs aimed

at social value creation. More specifically, these complex collaborations i) typically have to operate in divergent institutional patterns which affect the current structure of beliefs and norms (i.e., hybridity in logics) and ii) are comprised of entities with distinct legal boundaries and authority structures (i.e., hybridity in governance) (Quélin et al., 2017), resulting in both internal and external pressures.

Additionally, a contract, being prescribed, puts the innovation process under pressure due to the prohibition to alter it in a public context (European Parliament, 2014). On the one hand this has shown to hamper the development of trust, while trust also showed to play a role in (innovation) partnerships (Bryson et al., 2006; Klein-Woolthuis et al., 2005). On the other, it is extremely complex to oversee the extent and nature of the actual social value creation, making the necessity of alterations more probable.

3. Method

Keeping in mind the challenges as identified in literature, the next step in this research is to identify the extent to which these challenges play a role and *how* exactly they take their effect. In order to be able to examine this more closely than in previous studies, one needs to examine the principle “in action” (Mintzberg, 1979). Moreover, the examination of current events will minimize the effect of recall bias, as is the case in research of historical events (Raphael, 1987), which is beneficial for the accurate achievement of in-depth insights. As this research wants to examine emerging interactions within the PPP, control over events is not needed nor desired. These facts combined – a *how*-question that focusses on *contemporary* events without the need for *control* – make a case study the appropriate method (Yin, 2014).

Little research has provided in-depth insights in the actual collaboration process within a PPP aimed at social value creation (Battilana et al., 2017; Cabral et al., 2016; George et al., 2016). Therefore, this study aims to *explore* relevant concepts, rather than to *explain* them (Yin, 2014). The relevant literature identified in the previous section – i.e. hybrid organizing and its underlying concepts of logics and governance – give the guidance necessary in explorative research (Yin, 2014).

Within the field of exploratory case studies, both qualitative as well as quantitative methods have been used in literature (Van Aken, Berends, & Van der Bij, 2007; Yin, 2014). A general distinction between quantitative and qualitative research is that quantitative research mainly aims to test theory, while qualitative research mainly aims to generate theory (Bryman, 2012). Since this research aims to develop new insights about a phenomenon that has not been researched in detail thus far, qualitative research methods are appropriate.

In order to determine exactly how the challenges take their effect the story of how the case evolved over time should be examined. This will reveal the underlying processes that influence the case, revealing the tension mechanisms. Therefore, this is a *process study*, as a process study is used to examine how events, activities and choices influence a case over time (Langley, 1999), as depicted in Figure 3.1. Using the grounded theory methodology – appropriate for explorative case studies (Strauss & Corbin, 1990) – this will result in a narrative in the shape of a causal loop diagram.

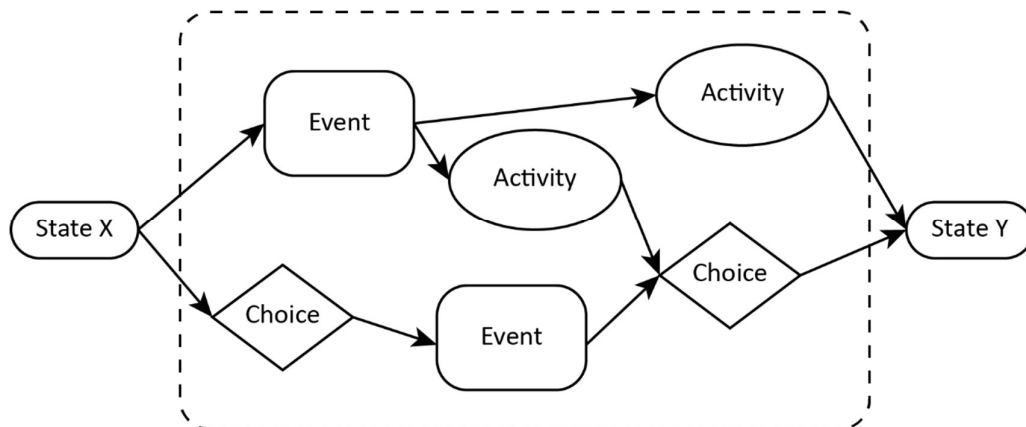


Figure 3.1 – The nature of process research. After Langley (1999).

3.1 Data collection

Due to the lack of knowledge in this field and the resulting open-ended nature of the research question, the research method of choice is the semi-structured interview, which will enable patterns to emerge from the data (Bryman, 2012). They will have the nature of a conversation while being based

on a guideline to ensure the same topics are covered by each interview, providing the interviews, and resulting data, with some focus (Turner, 2010).

In order to determine how the collaboration within a PPP is influenced by each of the partner's, the unit of analysis is the interaction between the public- and private organizations constituting the PPP. This interaction is the topic of research for the semi-structured interviews. For the case a PPP is selected that specifically aims to create social value, found in the city of Lightgarden². Within all organizational tiers of this PPP both public and private actors are represented. Decisions are jointly made and both parties are responsible for the success of the project on both economic and social aspects.

The nature of the underlying mechanisms is researched through semi-structured interviews. In total, 15 interviews have been performed, covering all organizational tiers of every organization involved in the PPP. Appendix A gives an overview of these tiers. An equal distribution of respondents among the different organizations involved has made different perceptions clear and helped reveal the underlying tension mechanisms. The interviews have been recorded, with the respondent's permission, and subsequently transcribed.

The interview guideline used for this interview is based on the main research question and guided by previous literature by covering aspects related to logics and governance and how the partners experience the collaboration. Also, they were asked about which events they found influential and how they thought the project could improve. The interview guideline has been given in Appendix B. The general nature of this guideline allowed for follow-up questions and to integrate knowledge from previous interviews.

I triangulated the interview data in order to increase the reliability of the research and to corroborate the findings. More specifically, observational data was collected during project meetings. Also, advisors to the PPP have been consulted, being valuable in their more distant reflection of events. Finally, archival data from companies and public sources related to the PPP have been collected.

3.2 Data analysis

Following the structure of similar researches – see for example Van Oorschot (2013) and Walrave (2011) – the understanding of real-world processes can be increased through system dynamics. This is a method whereby processes are abstracted and molded into a comprehensive process model (Stermann, 2000). Since this study aims to *explore* a process within a PPP, this research is limited to the development of a causal loop diagram, rather than a fully developed system dynamics model, depicting first hypotheses about the nature of the process within the PPP and the factors at play (Stermann, 2000).

This causal loop diagram in turn will provide a narrative for the process research. In general, a narrative strategy is used to construct a detailed story about the studied process (Lincoln & Guba, 1985). The aim of this strategy is to provide a narrative that will invoke a feeling of recognition among its readers and thereby create external validity (Langley, 1999). Causal loop diagrams are rather similar, since its aim is to tell a story that will reveal hidden patterns (Senge, 1990; Stermann, 2000). However, it differs in the fact that it tells a story in abstract terms, rather than a full narrative.

Therefore, in addition, the strategy of grounded theory is used in order to derive these abstract concept. Grounded theory is used in qualitative research to build new theoretical structures as they emerge from the data (Langley, 1999), which is done by dividing the data into categories and aggregated dimensions (Strauss & Corbin, 1990). For this study, this means that the relevant factors

² For matters of confidentiality, all names of cities and companies involved in this study are fictive.

are derived using open coding. In doing so, previous literature has been used as a theoretical lens that provided meaning and direction. Herein, the strategy of constant comparison ensured that the eventual result matched the entirety of the data (Charmaz, 2006; Glaser & Strauss, 1967).

All the steps taken in this research are summarized in the conceptual model as shown in Figure 3.2. As this model shows the research has a converging character, matching its exploratory nature.

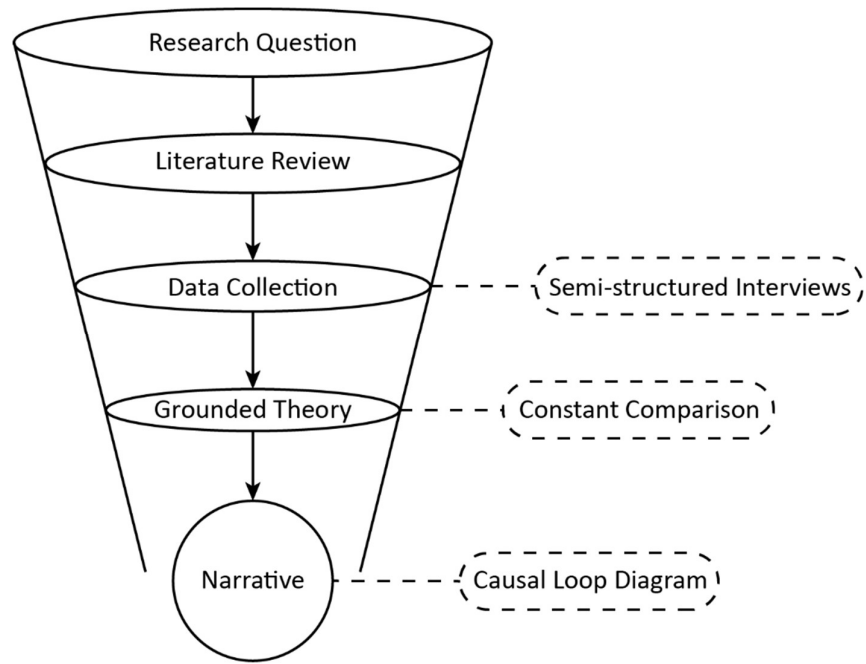


Figure 3.2 – Conceptual model of the research process.

4. Empirical setting

The city of Lightgarden has grown to be a highly innovative region. Already in 2006, its municipality decided that it needed a vision for public lighting in order to be able to remain front runner in this area. With this background in mind it is not surprising that, when the lighting company LightX offered to replace 21.000 luminaires with LED lighting in 2011, an internal discussion was triggered among the deputy mayors responsible for public lighting, spatial planning and innovation. Their main concern lay in the fact that the average lifespan of LED luminaires is 25 years: a timeframe in which many technological innovations in this field would happen that Lightgarden then no longer could afford. A decision was reached to create a new vision for 2030 accompanied by a roadmap, both commissioned to Beacon – a company that aims to bridge the gap between research and practice.

The created vision and roadmap described a smart grid to be the necessary enabler of future continuous improvements with respect to the quality of life within the city (Den Ouden & Valkenburg, 2012) – ‘smart’ in this sense referring to IoT. Because the light grid is a fine-grained network, already present throughout the city, it was deemed ideal for all kinds of future smart city services. Think, for instance, of a 5G city-wide network or electric vehicle charging. This created the idea of a smart light grid that should be rolled out in the entire city, working as an enabler of future smart city services. What these services would entail was deemed unimaginable – similar as to when the smartphone was first introduced – which is why the vision and roadmap aim to guide rather than prescribe action.

4.1.1 PPP initiation phase

The roadmap was adopted as official policy document by the city council in 2012. Because it describes a process instead of an outcome, the municipality needed a new procurement strategy. Contracts were normally geared towards the execution of one single project, with a clear goal, but this contract should cover a period in time in which multiple projects should be executed with unknown outcomes. On top of this, the vision and roadmap envisioned integral solutions to societal problems, for which a PPP was deemed most suitable.

In total, the tendering process had a duration of about 2.5 years, after which the contract negotiation phase started. Because it proved difficult to capture an innovation process in contractual terms – by means of Key Performance Indicators (KPIs) – this was another time consuming process. Eventually, the contract was signed only in October 2016, after which the project started on November 1st, 2016. The timeline in Figure 4.1 summarizes the events taking place during the initiation phase.

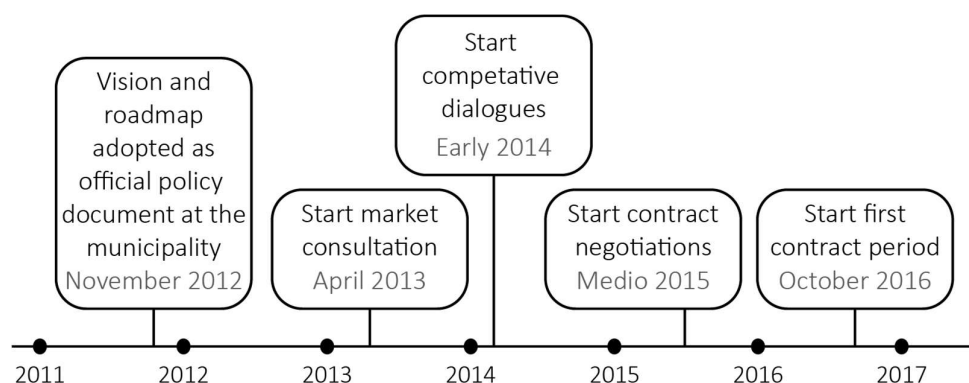


Figure 4.1 – Timeline of the project's main events during the project initiation phase.

4.2 Description of the contractual partners

The partnership is made up of two parties: the municipality of Lightgarden and a consortium between LightX and the building company DBFM. Both partners stem from distinct logics, as indicated in the literature review. These features are summarized in Table 4.1 and explained in the subsequent sections.

Table 4.1 – Features of public and private logics. Categories based on (Jay, 2013; Matinheikki et al., n.d.; Thornton, 2002; York et al., 2016)

	State Logic	Market Logic
Example type of organization	Municipality (public organization)	Business firm (private organization)
Normativity	Public service	Client service
Goal	Increase quality of life	Maximize profit
Means	Tax payments	Deliver goods/services, increase efficiency, increase competitive advantage
Focus of attention	Serve civil society	Serve client and stay ahead of competition
Accountability	Publicly accountable	Accountable to shareholders

4.2.1 Municipality of Lightgarden

The primary aim for the municipality of Lightgarden is to improve the quality of life the users of the city, i.e. live, work, visit. They believe that a smart light grid will improve this. On the other hand, they consider smart cities to have the future and want to facilitate and attract this new market to stimulate the business in the region, which will eventually be beneficial for the city as well. Secondly, this vision and roadmap are of course in line with upholding their reputation of Lightgarden being ‘City of Light’.

The eventual goal is to improve the quality of life, which we related to what we want for the city.

- Municipality

Their primary means are the tax payments allocated to them by the State, of which the municipality creates budgets for all their expenses. Since this is public money, they need, and want, to spend this money responsibly. Things like the 4 yearly elections and free press are examples of social control mechanisms for their public accountability.

4.2.2 LightX

LightX is a product developer and manufacturer who earns money by selling armatures and lights, by and large. On top of this they recently started to engage in the ‘smart’-market with network solutions for, among other things, cities.

Being a business firm, their primary aim is to perform projects that will maximize their profit in both short and long term. They do this by gearing their products towards their potential clients as well as possible. In principle they want to make a profit for every single product they sell. However, R&D investments are made whenever they expect this will increase their competitive advantage.

We prefer an even project, but [...] we are willing to invest in projects with strategic value.

- LightX

LightX is a listed company, which means that they are held accountable for their profits by their shareholders.

4.2.3 DBFM

DBFM, although a business firm, has slightly different features than LightX, because they are a contractor instead of a manufacturer. This means their core business is a service instead of a product and they have less experience in R&D, as compared to LightX. However, they are also a listed company aimed at increasing their profits and competitive advantage.

We are a listed company, so in the end money needs to be made.

- DBFM

4.3 Relationship between the contractual partners

The parties involved in this project are no strangers to one another. On the contrary, they have a long history of collaboration within the field of civil engineering: contractors like DBFM build roads for public bodies on a daily basis, while product developers like LightX sell their products to contractors as their core business, while being in close consultation with public bodies.

When one looks at this relationship in more abstract terms, this traditional type of collaboration can be conceptualized as shown in Figure 4.2, left side: the contractor delivers a good and gets financial compensation from the public body, while itself receiving goods from the product developer and paying for them. Finally, the relationship between the public body and product developer is limited to consultation of the product developer. Overall, this is a relationship where the contractor is in the lead and where a minimal of alterations is made after the contract has been agreed upon.

However, a very different situation is that of the PPP, illustrated in Figure 4.2, right side. In this situation both public and private actively contribute to all phases of the project with their knowledge. This creates a situation characterized by equality and continuous information sharing. Then, similar as to the traditional model, each of the two brings in their assets and retrieves the compensation they desire: the public body pays and receives the benefits of the goods and services in return, while the private actors put in their efforts in terms of goods and services, and receives financial remuneration.

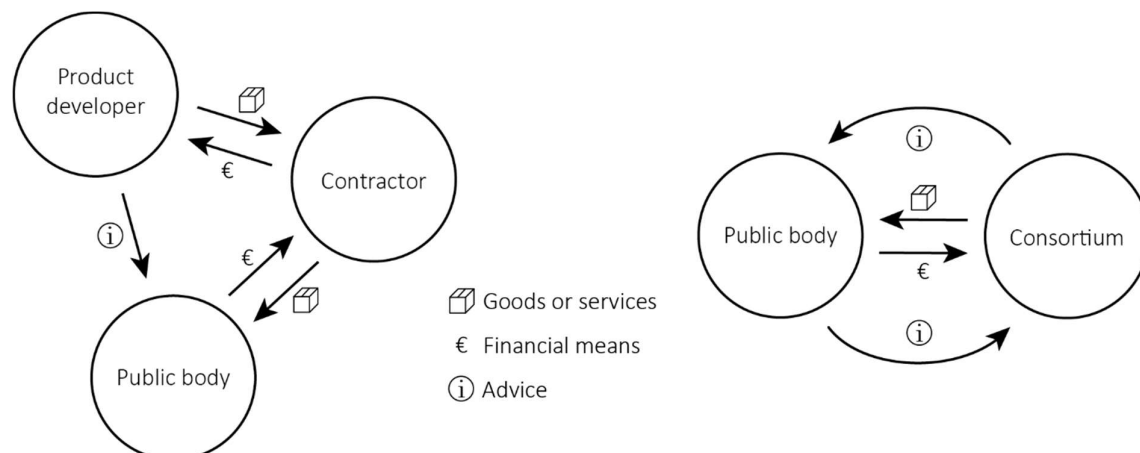


Figure 4.2 – Conceptualization of each party's relationships, traditional (left) v.s. PPP (right).

5. Results

In contrast to the main goal – social value creation – the two logics involved in the project made the project's aim twofold. Firstly, the state logic demanded an increase in quality of life through social value creation, while the market logic prescribed to maximize profits through economic value creation. When the project started it soon became apparent that both parties had understood the results of the project differently due to their diverging logics, despite the long tender phase, as a result of the incomplete contract. The public actor's focus on economic value led to a higher expectation of financial benefits from their part than the private party anticipated, resulting in an economic value gap. Likewise, the private actor's focus on social value led to an overestimation of social value creation at their part, compared to what the private party thought they would be delivering, resulting in a social value gap. How the partners noticed this difference is supported by the following quotes.

The contract [...] leaves room for interpretation, which means that the expectations at both sides diverging strongly: about what the consortium will deliver [according to the municipality], or what we think we will deliver.
- LightX

[The budget] has been calculated based on the consortium's offer. I am convinced of the fact that both parties consider it to be correct at that point in time, but from a different point of view.
- Municipality

The substantiation of how the partners envisioned both social and economic value creation is given in Table 5.1.

Table 5.1 – Summary of diverging anticipations regarding social value and economic value creation

Anticipated	Public	Private
Social value	New-to-the-world innovations that will create an unprecedented amount of social value	Implement and further develop proven concepts of their own
Economic value	Substantial investments by private parties that will return to them on the long term	Small R&D investment is acceptable, else full remuneration from public party for the executed work

Both parties have taken action to minimize the social and economic value gaps. As expected based on their logic, the municipality has initially acted to minimize the social value gap while the private actors have initially acted to minimize the economic value gap. Their measures induced a dynamic within the project as depicted in the causal loop diagram given in Figure 5.1, where social and economic value are depicted as SV and EV respectively. Hence, this causal loop diagram depicts the underlying and undermining dynamic of an innovation project where public and private bodies aim to create social value through a PPP.

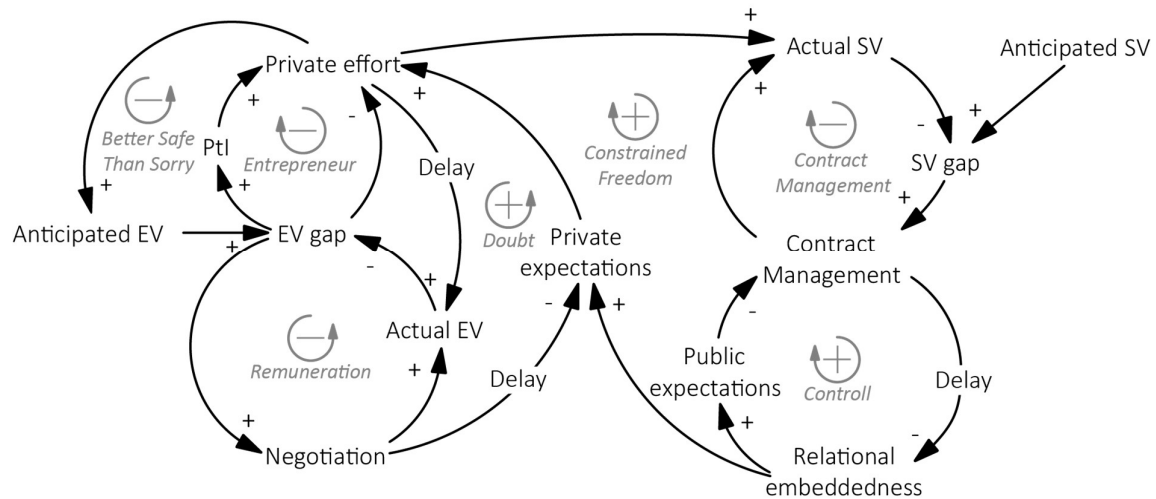


Figure 5.1 – Causal loop diagram depicting the underlying dynamics of a PPP aiming to create social value.

The data therefore showed that three of Senge’s (1990) archetypal dynamics – out of a total number of 10 – took their effect concurrently in this PPP during the period under examination. Namely, *the fix that fails*, *shifting the burden* and *eroding goals*. The subsequent sections are structured according to these archetypes. The archetypal structure is given alongside the conceptual model presented by this study, while the typologies as such are also given in Appendix C. Each of the conclusions is rooted in the interview sessions and thus supported by quotes in this text. An extensive list of quotes supporting the model is given in Appendix D.

5.1 The fix that fails

The first typology discernible in the model is that of *the fix that fails*, explained in Figure 5.2.

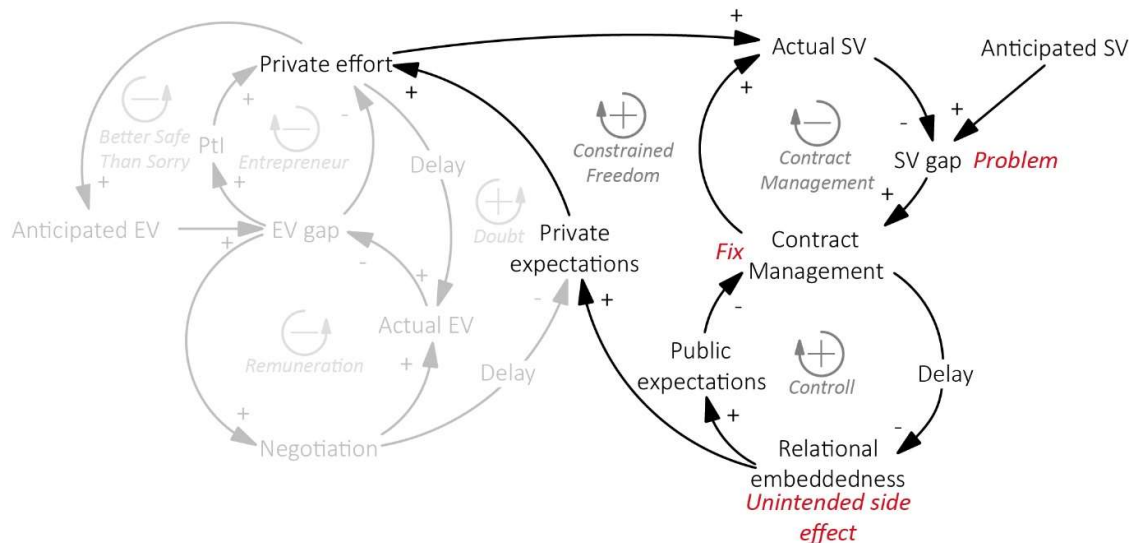


Figure 5.2 – Systems archetype of ‘the fix that fails’ in the causal loop diagram.

Traditionally, the primary measure by which a certain result can be enforced is the contract. So, in case of a social value gap, the public party will be inclined to fall back on the contract. This is depicted in the conceptual model as the contract management loop.

The municipality oftentimes refers to the contract [...]: whether we comply and whether everything is still going well.
- DBFM

Contract management has to a certain extent kept the contract partners on track, therefore the contract management loop is balancing. The contract at hand is, in contrast with traditional contracts, multi interpretable to a large extent and the partners need to deal with this ambivalence through co-operation for which a sufficient level of relational embeddedness is required, as one of the respondents clearly pointed out.

The problem is that we are all used to working according to a contract, while this contract requires to let this go and operate based on togetherness and equality.
- DBFM

However, whenever contract management prevails, this has shown to decrease relational embeddedness, gradually making the constrained freedom loop dominant – as illustrated by the following quote.

It is sometimes confusing: are we strictly looking at the details of the contract or do we want to work together [...] based on trust. Those two are difficult to combine, but people tend to switch between them. [In the first case] you will see [the consortium] acting more defensively.
- LightX

The case has shown that contract management decreased the level of relational embeddedness by decreasing levels of openness, trust and conformity between the public and private actors. This in turn resulted in decreased expectations for both the private as well as the public organizations. This implies that both organizations start to doubt whether the other can live up to their own a priori project standards. In the case of this PPP the public party started to think that the private party was not be able to deliver the desired / agreed social value, since they do not comply with the contract.

I sometimes wonder if we have the right party at the table.
- Municipality

On the other hand, the public party felt constrained to engage in the innovation process, as contracts worked counterproductive for innovation.

[The municipality] was forced to put the contract to tender, which resulted in [a contract with] frames and KPI's. This is a shame, because you don't want that for [an innovation] process.
- DBFM

The private actors' expectations showed a direct positive relationship with their efforts. Hence, if expectations were high, the financially driven organization showed the will to invest their assets – i.e. people and financial means – because they expected the revenues of the project to be worth it. However, whenever expectations go down regarding these revenues, they will be less willing to invest because they need these revenues in order to continue their existence, as the following quotes made clear.

We are no philanthropic institution.
- DBFM

There is an end to the amount of people we can deploy for innovation if there is no prospect of being able to roll out these [concepts] outside of Lightgarden.
- LightX

Finally, the private actor's efforts were related to the actual social value created, since more effort increases chances of success in a logical relationship.

The public actor's expectations in turn negatively influenced their inclination to manage the contract, meaning that the lower their expectations, the stronger their inclination towards contract management. This has to do with the fact that, for a public actor, contract management is the most familiar way to keep contracts on track whenever they perceive it to be amiss, as observed by one of the respondents.

If people experience difficulties they are inclined to relapse in old behavior.
-Beacon

Since contract management directly influenced embeddedness this is a self-reinforcing effect, making the system highly unstable.

The overall effect of this *fix that fails* is as follows: a social value gap is noticed by the public actor, who reacts by increasing its contract management. This works on the short term, but whenever contract management prevails, relational embeddedness is decreased. This then decreases the private actor's expectations regarding the overall outcome of the project, decreasing their efforts and eventually decreasing the actual social value created. This then increases the gap, resulting in even more contract management, less embeddedness... and so on. All of which being amplified by the self-reinforcing effect on contract management.

5.2 Shifting the burden

The second typology present in this collaboration is that of *shifting the burden*, which is substantiated in Figure 5.3. It is the effect of the private actor's behavior whenever they discerned a gap in economic value.

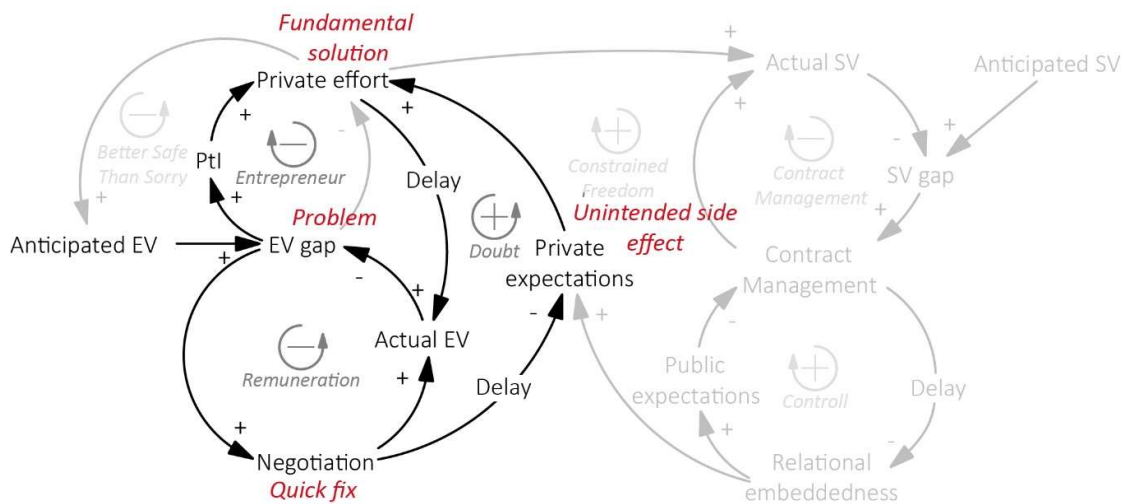


Figure 5.3 – Systems archetype of 'shifting the burden' in the causal loop diagram.

Economic value creation is a prerequisite for the public parties involved is the co-creation process. However, for this type of contract applies that it doesn't specify what exactly constituted this economic value creation. In case of a gap, the consortium then had two choices: either they increased their efforts in order to increase their chances of economic value creation (the loop of the entrepreneur) or they tried to negotiate additional remuneration from the public actor (remuneration loop).

In the first case, the actual value creation would be increased because increased efforts results in higher chances of a successful project in a logical way. In the model, the pressure to intervene (Ptl) depicts the private parties' perception of the necessity to increase their efforts. A higher pressure to intervene then thus results in more private effort. Because they had to deal with an innovation process, the results of increased efforts would only become noticeable in the more distant future. When combining the latter with a high uncertainty regarding the outcome of the innovation process, the private actors have shown not to be keen on increasing their efforts – as illustrated by the following quotes.

Within the municipality they think that [the consortium] can make up a business model through new business development and innovation, which will generate future financial revenues. This is however way too uncertain.

- LightX

[They] are still searching for the right revenue models.

- Beacon

They have therefore initially been inclined to negotiate additional remuneration from the public actor. These negotiations have in this case been open and honest – preventing a negative influence on the partner's alignment – but the problem proved difficult to solve. Hence, the economic value was not easily increased and negotiations continued to be needed.

Many things have not been detailed in the contract, [...] so then you need to sit down again which is sometimes time-consuming.

- Municipality

We have our relationship [with the municipality] in order, but that doesn't solve the problem.

- DBFM

The problem's continued existence has shown to over time reduce the private actor's expectations, creating a dominance for the doubt loop plus a reinforcement of the constrained freedom loop 4.

Similar as to relational embeddedness, negotiations have shown to bring the private actor's efforts down when not successful. Viewed from the private actor's perspective, this in turn even further decreases the actual economic value created, increasing their problem.

Concluding, the consortium could choose two possible solutions when it comes to solving the problem of an economic value gap. The obvious and short term solution is to negotiate extra remuneration from the public body. Whenever this doesn't succeed it will in the long term however undermine the fundamental solution – that of the private party increasing their efforts – and even worsen the problem.

5.3 Eroding goals

The final typology discernible in this project is that of *eroding goals*. How this is incorporated in the model is shown in Figure 5.4.

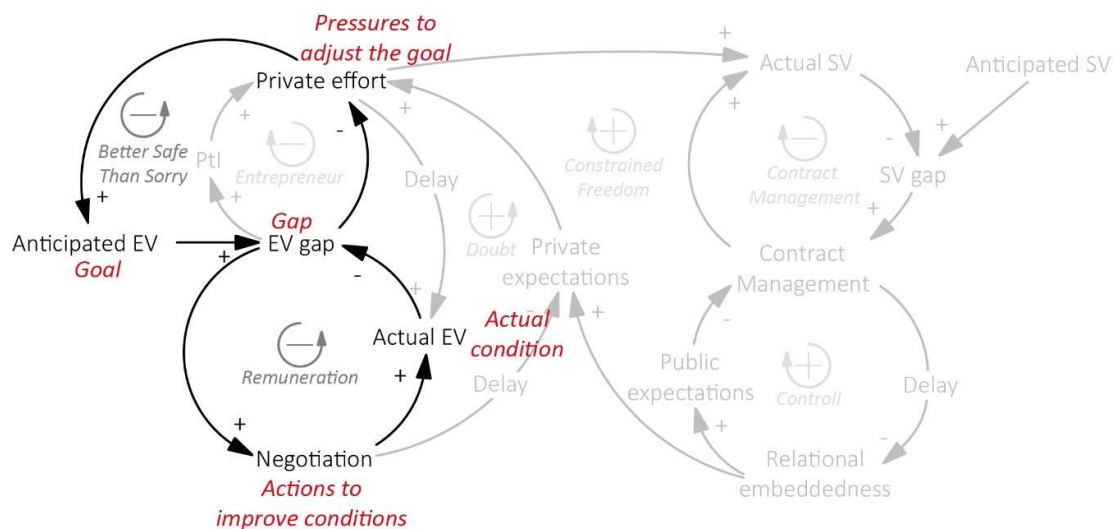


Figure 5.4 – Systems archetype of ‘eroding goals’ in the causal loop diagram.

This typology too starts with the remuneration loop, whereby the private actor attempted to reduce their economic value gap by negotiating more financial remuneration. On the other hand, however, a pressure to adjust the goal, and thereby diminishing the gap, is present in the system through the better safe than sorry loop. The previous section described a positive relationship between the economic value gap and private effort. Even so, a negative relationship between the two existed as well.

Whenever the economic value gap is small, the private actor would have had the financial means to increase their efforts and vice versa. Private effort in turn positively influenced the amount of financial means needed for the project – i.e. anticipated economic value – since more effort is more costly. Whenever an economic value gap is present, this means that the private actor had the means to directly diminish this gap through the better safe than sorry loop. Indeed, they have felt the necessity to do so under top management’s pressure to have a financially equal project as these two respondents pointed out.

[Because of] the financial situation the available manpower is insufficient for the project to succeed.
- Municipality

I think that the capacity for the project team cannot increase [...], which has to do with the expected revenues and [...] the costs of the project organization.
- DBFM

5.4 Overall dynamic

The private parties needed to put in effort in order to make the project successful on both the social and economic aspect. However, pressure was put in this effort from three sides:

1. Contract management decreases alignment, which in turn decreases the private parties’ expectations, finally resulting in less private effort;

2. Financial negotiations likewise bring down the private parties' expectations, reducing the private effort;
3. The economic value gap negatively influences private effort, meaning that a lack of financial means reduces the effort dedicated to the project

This meant that whenever the contract management loop and the remuneration loop did not have their envisioned effect, private effort was going down.

The initial state of the system was characterized by enthusiasm at the private as well as the public actor's side. This enthusiasm resulted in high expectations and a high relational embeddedness. However, the narrative in this section described how this situation has evolved in one characterized by increasingly low expectations and diminishing levels of relational embeddedness, as these two respondents pointed out.

[Within the board] enthusiasm and curiosity prevailed at the beginning [...], right now I think [the board of] DBFM keep a watchful eye on our success.
- DBFM

Internally, this project is a top priority [...], but if we don't receive any orders... I cannot tell the board I sold 10 armatures [not literally] in the city of Lightgarden. Compared to Jakarta, Buenos Aires and New York I would be in 575th place [as a matter of speaking].
- LightX

The effect of the system is that the private actor carries out the contract with minimal effort, while the public actor is stuck with a large social value gap.

6. Discussion

Existing literature underlines the important role for PPPs in the grand societal challenges of the present time (Batty et al., 2012; George et al., 2016; Lam & Yang, 2017; Voegtlin et al., 2018). If they would manage to combine the strengths of both the state and market logic, they have the potential to become greater than the sum of their individual parts. However, reality proves to be obstinate, as PPPs often face major challenges (Cabral et al., 2016). Hence, this field of research currently calls for increased understanding of these arrangements through a deeper analysis of the challenges they face (Battilana et al., 2017; Cabral et al., 2016; George et al., 2016), which this research has contributed to. It has revealed how the diverging logics of both public and private actors induced a process that changed the initial high expectations and relational embeddedness into increasingly decreased levels of both, hampering social value creation. Strikingly, this process consisted of three separate but interrelated dynamics that took their effect simultaneously.

- *The fix that fails*: The public actor tries to enhance social performance by strictly managing the contract. Since this eventually reduces the private actor's efforts, this results in the opposite effect.
- *Shifting the burden*: The private actor tries to enlarge their economic benefits by negotiating for a higher remuneration from the public actor. The long term solution however lies in putting more effort in, which the act of negotiating has shown to pressurize.
- *Eroding goals*: A lack of economic value creation will make the private party inclined to reduce efforts in order to keep costs down and require less economic value creation.

When compared with existent knowledge a few things stand out. First of all, current research points out the importance of a clear defined goal for PPPs. It does so from different angles: Villani et al. (2017) indicate the importance of a predefined business model, while George et al. (2016) indicate how a PPP should be guided by a clear social problem. On the other hand, the extent of social value creation is difficult to determine at the project's outset, due to its innovative character, typically and necessarily resulting in open-ended contracts (Lyons & Mehta, 1997; Quélin et al., 2017; Sumo et al., 2016; Tirole, 1999), while remuneration is sometimes problematic due to the different notions of value related to each logic (Kivleniece & Quélin, 2012). This creates a paradoxical situation in which a trade-off needs to be made between defining a project's outcome at the outset, or not defining this at all. The PPP in this case deployed the latter strategy and chose to define only evaluation criteria and a certain innovation quota. It thereby clearly showed how the absence of both a business model (related to a specific innovation) and a particular social problem hampered the social value creation process by leaving room for interpretation. Without a clear goal to guide the partnership, relational embeddedness – vital for social value creation (Uzzi, 1997) – increasingly declined and a clear motivation for the private actor to invest their effort lacked. This adds another source of paradox to the *paradox of outcomes* already identified by Jay (2013).

On top of this, literature has indicated how PPPs often struggle with finding the right legitimacy structure, because they diverge from the logics that are present at the societal level (Battilana & Lee, 2014). In this case, this has shown its effect through the relationship of the PPP's members with their host organizations that remains strong due to the temporary nature of a PPP (Matinheikki et al., n.d.). This study indicates that, as a result, institutional logics create a situation in which the private actor is inclined to act on economic incentives and under-appreciate social benefits and vice versa. Despite the fact that was already known to hamper hybridization (Battilana et al., 2017), this study adds by showing in what way this problem is kept alive. Namely, both public and private are heavily involved, over all organizational tiers. Top-management is more a part of their business than they are of the hybrid organization, making that strongly adhere market and state logics respectively and keeping these

incentives alive within the PPP. Indeed the data has shown a decrease in management enthusiasm and an increase in skepticism over time, as their respective gaps do not cease to exist. The complexity of the issues is underlined by the fact that both parties realize what is going on, but are nevertheless unable to solve the problem. This study therefore also underlines the necessity of hybridization processes to keep all partners on board by showing how a non-hybridized situation leads to a decreased engagement of the private actor through a decrease of their effort and an increase in top-management's skepticism. This is especially important, since the private actor's effort is crucial in the success of the project on both the social and economic aspect. What this study then describes how pressures lead to a situation of conflict: the private actor puts in less effort than the public actor desires and they themselves anticipated.

This PPP chose a form in which the public actor actively participates in the social value creation process. This in contrast with their usual role, where they have a rather normative role: judging solutions and keep the contract on track. This is directly connected to their logic, and related societal role. Striking is the fact that indeed the municipality took on this normative role right at the project start, despite different intentions. One could argue that the municipality, as a result of the normative role related to their logic, is not the right type of partner when it comes to creating the innovative solutions needed for social value creation (George et al., 2016). It could be interesting to research different forms of collaboration in the public-private context and their effect on the outcome of the project.

6.1 Limitations and avenues for future research

This study has been performed using a single case, which indicates that one needs to be careful with generalizing the findings. However, the type of PPP in combination with the representative actor characteristics of the case at hand indicate that this behavior could generally apply. Also, the dynamics appeared to be largely stemming from diverging logics. As logics are regarded to be present at the societal level (Thornton & Ocasio, 2008), this indicates that a similar dynamic could appear in PPPs within societies similar to the Netherlands. Future research is however necessary to verify my findings.

On top of this, the case took place in a social environment where living standards are already quite high. For the case, this meant that no particular societal problem was addressed, while prior research indicates how a societal problem is needed to give the PPP purpose and thus keep the partnership together (George et al., 2016). If PPPs that aim to tackle a specific societal face the same challenges therefore remains to be found out.

Another threat to case studies, as well as system dynamics, is the possible existence of factors that have not been taken into account in this study, while they do play an important role (Stermann, 2000; Yin, 2014). I have tried to minimize this effect by repeatedly consulting experts. However, the influence of the particular choice of literature probably had an influence. For example, research on value creation or business model development could deliver valuable insights for PPPs of this category.

On top of this, my research focused on the tensions that resulted from the organizations' diverging characteristics. Future research could continue the storyline by examining how exactly the hybridization process takes place. For example, this study shows how tensions rise over time, while private involvement decreases inversely proportional. Future research could show at what point these tensions start leading to change in the project organization.

Moreover, this study treated every member of an organization to have the same source of rationality. However, reality indicates a much more complex interaction that is also strongly dependent on the characteristics of the individual. Future research could focus on the role of the individual in the overall prosperity of the project.

Also, this study only researched the underlying managerial tensions present in the project. However, the data shows diverging evaluation criteria, depending on the logic one adheres. On top of this, the power of decision is distributed differently within the underlying organizations due to their differences in governance. Combined, these factors constitute an interesting avenue for future research, by focusing on the decision-making process within the project team itself when it comes to choosing the project outcome or courses of action.

Finally, the relationship between the hybridization process within the PPP and the prerequisite facilitating processes within the underlying organizations would be an interesting area of future research. After all, the members of the PPP remain to have strong ties with their host organizations, indicating that something should be changed there too. Indeed, respondents have pointed out the existence of “*two timelines*”: one within the PPP and one within their original organizations, which proved difficult to match.

6.2 Practical implications

PPPs that aim to create social value can learn lessons from the dynamics coming forth in this study. First and foremost, members of these types of PPPs need to realize that hybridization doesn’t happen on its own accord. The current paradoxical situation between degrees of freedom and rigidity asks for new and creative ways to design the PPPs governance structure. Also, it would be helpful to better align the demands on social and economic value creation, instead of treating them as different aspects. Hybridization as shown to be a time-consuming process – many studies on this topic cover a period of about 20 years – which indicates that the members of a PPP should not despair whenever this problem continues to exist.

As long as the partners have not fully understood one another logics, gaps in both economic and social value creation appear to be inevitable. Both contract management and negotiation work to decrease these gaps, but the model shows this should be done with caution. Most importantly, the members of the PPP should try to uphold relational embeddedness to mitigate the negative effects of both mechanisms. This is done by displaying trust, openness (Uzzi, 1997) on primary and secondary aims and maybe also patience regarding the other actor’s ignorance. This will then enable the partners to fully understand each other’s goals and create the opportunity to take them into account (Granovetter, 1992). Also, it might be important to invest in a good informal relationship to inhibit trust and openness. This then doesn’t trigger hybridization by itself, but at least creates the right boundary conditions.

Previous work in social value creation has emphasized the importance of a common goal that gives sufficient purpose to the collaboration in order to motivate the partners to deploy their means and pursue the common goal in addition to their individual ones (George et al., 2016). The partners therefore need to keep in mind or formulate the exact problem they want to solve in order to motivate them and also confirm they need one another (Bryson et al., 2006). During this process, the interests of both actors should be taken into account in order to motivate the private actor to put in effort, possibly without direct financial remuneration.

7. Conclusion

This research set out to generate more in-depth insights in how the diverging characteristics of public and private actors, as a result of their diverging logics, influenced the dynamics within a PPP that aims to create social value. The research question was addressed by first exploring the literature on hybrid organization, which was deemed relevant as a social PPP is a form of hybrid organization. Then, a case was selected in order to research the exact dynamics through an in-depth case study.

In total, 15 interviews have been performed, equally distributed over the PPP's members that were most actively involved. Different methods were used to extract information from the data, of which grounded theory formed the main contribution. Together with the advice from experts, who have been consulted repeatedly, this resulted in a causal loop diagram. This diagram depicted first hypotheses regarding the nature of influences on the PPP during the phase in which hybridization has not taken place. As a result, tensions stemming from the diverging characteristics can take full effect.

The research objective was to find out how the diverging actor characteristics influence the dynamics within a PPP that aims to create social value. This study shows how the diverging actor characteristics mainly manifest themselves through the public actor's focus on social value and the private actor's focus on economic value, while under-appreciating economic and social value respectively. This induces a dynamic that will motivate the private partner to bring their efforts down, despite the fact that these efforts are vital for the project's success.

Linking these findings to previous literature, the absence of both a pre-defined business model related to the actual outcome and a well-articulated societal problem indeed seem likely to help maintain the problem. On top of this, the individuals that constitute the PPP not easily let go of their logic, as they remain involved in their host organizations. This hampers evolution of the partnership in terms of hybridization, while hybridizations seems to play an important role in continuing management's support for the PPP.

Finally, some advice to this type of PPPs was provided. In this, mainly the vital role of relational embeddedness was emphasized, as it played a crucial role in dynamics that resulted from this study. Relational embeddedness could then provide the right conditions for hybridization processes to take place.

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Appendices

Appendix A – Project organigram

The way in which the partners (used to) work together is depicted in an organigram, Figure 4.4.

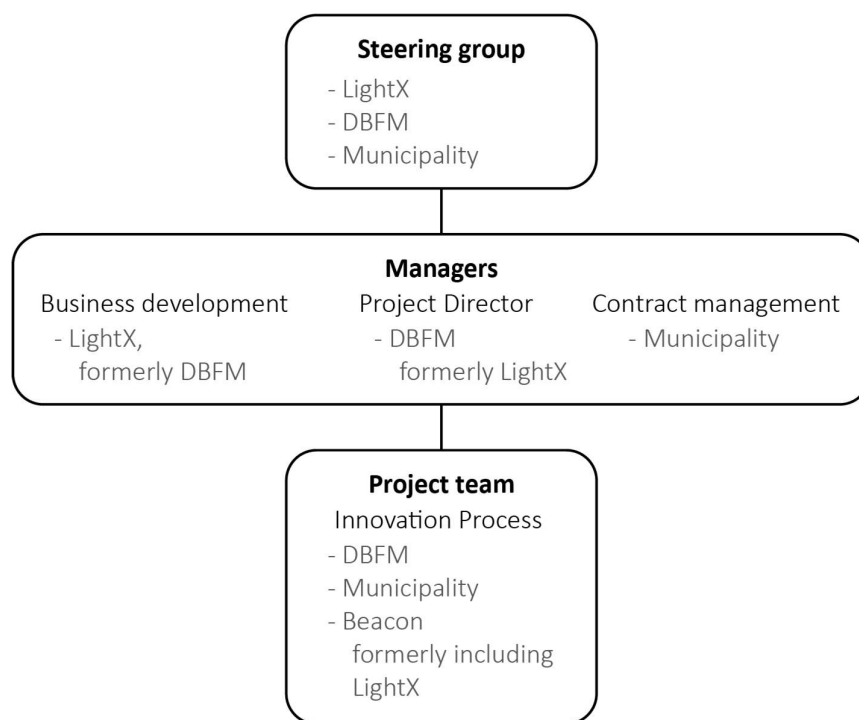


Figure A.1 – The case's organigram.

The steering group consists of the senior managers of the contractual partners, which shows the commitment of the actors involved in this project. This senior level group keeps track of the project in trunk lines and has the decision-making authority whenever a subject is not covered by the contract. They have little to do with the daily operations, but are informed by the management team.

Within the management layer the different heads of the contract elements are positioned and keep track of the project on headlines. Two substantial changes in this layer have taken place, whereby the roles of business development and project director have been swapped between the consortium's members.

Finally, the project team manages and executes the contract. At the start of the project LightX was a member of the project team, but as from their reorganisation they did not take part anymore. Moreover, Beacon participates in the project team, due to their experience with innovation processes and their role in the validation process of the innovations. The dynamics at the level of the project team are of main interest to this study.

Appendix B – Interview guideline

The guideline as given below is given in the form of concrete questions. However, these questions cover topics that were mentioned during the interviews and have not been used in precisely this way. The introduction is used to warm up the interviewee and get to know more about someone's background and potential logics at play. Also, the timeframe in which someone has been involved might influence their perception of the project.

Secondly, more detail about the important stakes of the underlying organizations are asked. Why does an organization contribute and has this reason stayed the same over time? This will help understand their motives and the dynamics resulting from them. Thirdly, internal influences on the collaboration are investigated. Finally, the personal experience and opinion about the project are inquired. Also, respondents have likely identified strengths and weaknesses of the project and their causes and possible solutions.

Introduction

- Could you shortly introduce yourself?
 - o Extent of experience within the built environment
- What is your role in the project?
- How long have you been involved?

Organization (external influences)

- Why does your organization contribute in this project; with are their stakes? (secondary aim)
- How does your organization('s management) regard this project?
 - o Changes over time?

Collaboration (internal influences)

- To what extent does tender legislation influence the process?
- What is the difference between this and other collaborations?
- To what extent do you experience trust and openness and how?

Project

- What do you think about it?
 - o How did that change over time
- What have been important events and why?
- What do you think of your own contribution?
- What do you think of other people's contribution?
- SWOT and why?
 - o Do you see potential avenues for improvement?

Appendix C – The three archetypes

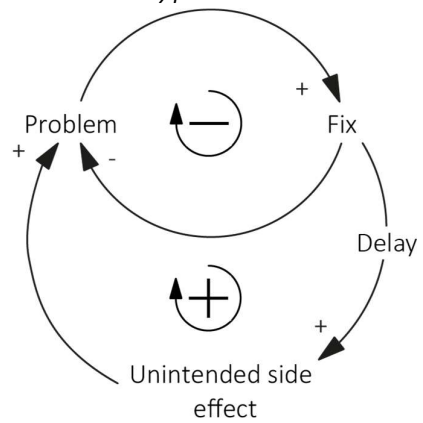


Figure C.1 – Systems archetype of 'The fix that fails' (Senge, 1990).

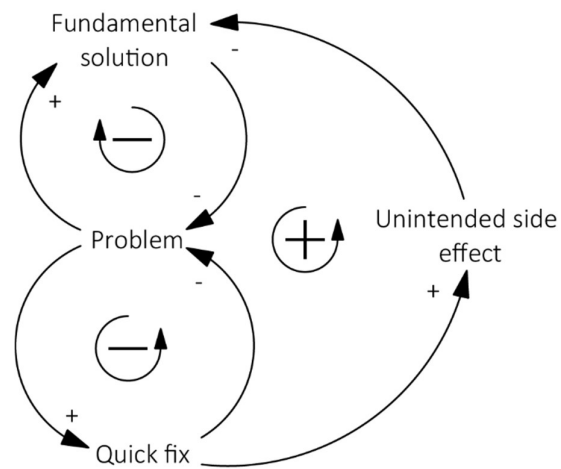


Figure C.2 – Systems archetype of 'Shifting the burden' (Senge, 1990).

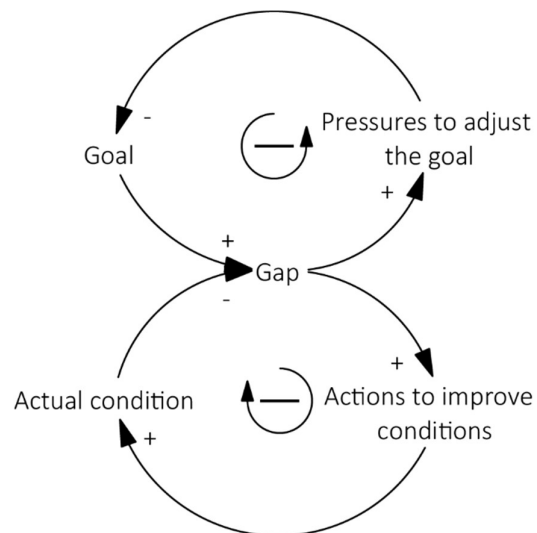


Figure C.3 – Systems archetype of 'Eroding goals' (Senge, 1990).

Appendix D – Quotes

